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74th INTERNATIONAL ASTRONAUTICAL CONGRESS

2-6 OCTOBER 2023

BAKU, AZERBAIJAN

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FINAL PROGRAMME

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Contents

1 Information

1.1 Information for Authors

All authors are asked to upload their manuscripts and multimedia presentations prior to the Congress in order to make them available to all participants on the online Proceedings of the 74th IAC.

You can still update your manuscripts through the IAF platform: https://iafastro.directory/iac/account/login/. Multimedia presentations can be uploaded in the Speaker Preparation Room. Your presentation will be automatically preloaded on the computer in the Technical Session Room. Please note that speakers are not allowed to insert USB memory sticks into the computers in the Technical Session rooms. Therefore, all updates need to be uploaded before the Technical Session takes place. Our help desk team will assist you in uploading presentations during operating hours. Speakers are requested to report to their allocated Technical Session room 20 minutes prior to the start of their session to meet with their Session Chair and to check their presentation. Do not forget to bring two printed courtesy copies of your manuscript and a backup-copy of your presentation. Some Session Chairs might also ask you for a short biography to introduce you at the session.

1.2 Congress Proceedings and Virtual Technical Gallery

The IAC 2023 Proceedings are available on a password protected site. The Congress participants will be provided with a link and online password to login and access the Congress Proceedings. If you did not receive the password, please contact: digital.library@iafastro.org. IAC papers will be indexed in the largest cited reference enhanced multidisciplinary databases: Elsevier's SCOPUS and Compendex.

The materials published as part of the Technical Programme (Lightning Talks, Video Lectures and Papers) will be made available to the Congress Delegates through the IAC 2023 Virtual Technical Gallery.

1.3 Speaker Preparation Room

Authors who missed the deadline for presentation submission or who wish to update/review their presentation can do so in the Speaker Preparation Room. Authors are required to bring a back-up copy of their presentation on a USB Memory Stick. Video content should be saved as separate files.

Location: BCC Winter Garden C, Baku Convention Center

Opening hours:
Sunday 1 October, 14:00-18:00
Monday 2 October - Thursday 5 October, 08:30-18:00
Friday 6 October, 08:30-16:30

1.4 IAF App

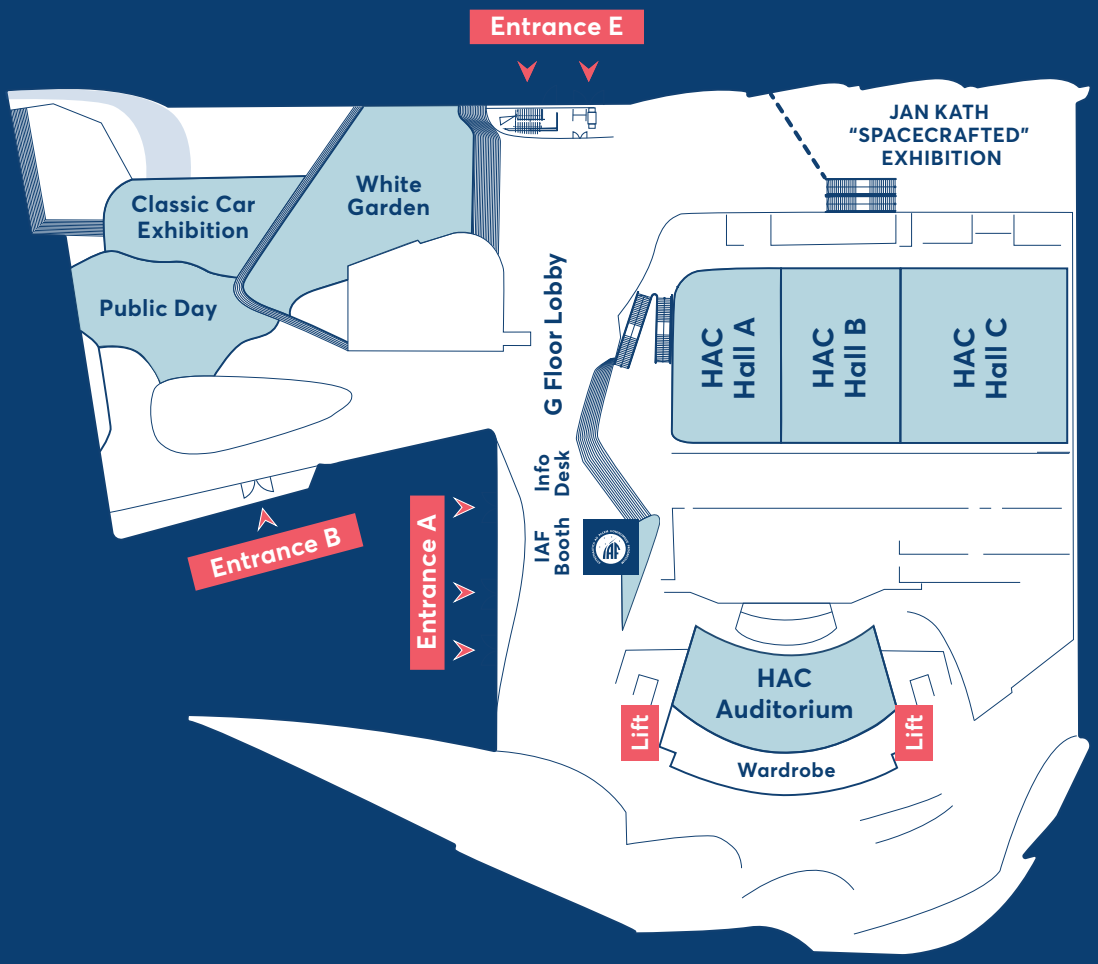
The full Technical Programme is also incorporated within the IAF App, which will make it easier to follow the entire content and enable you to best plan your participation and choose the events from the Technical Programme to attend.

1.5 Certificates of Attendance and Presentation

Certificates of Attendance and Presentation are available on request at the IAF Secretariat Office. Claims of hours of applicability toward professional education requirements are the responsibility of the participant.

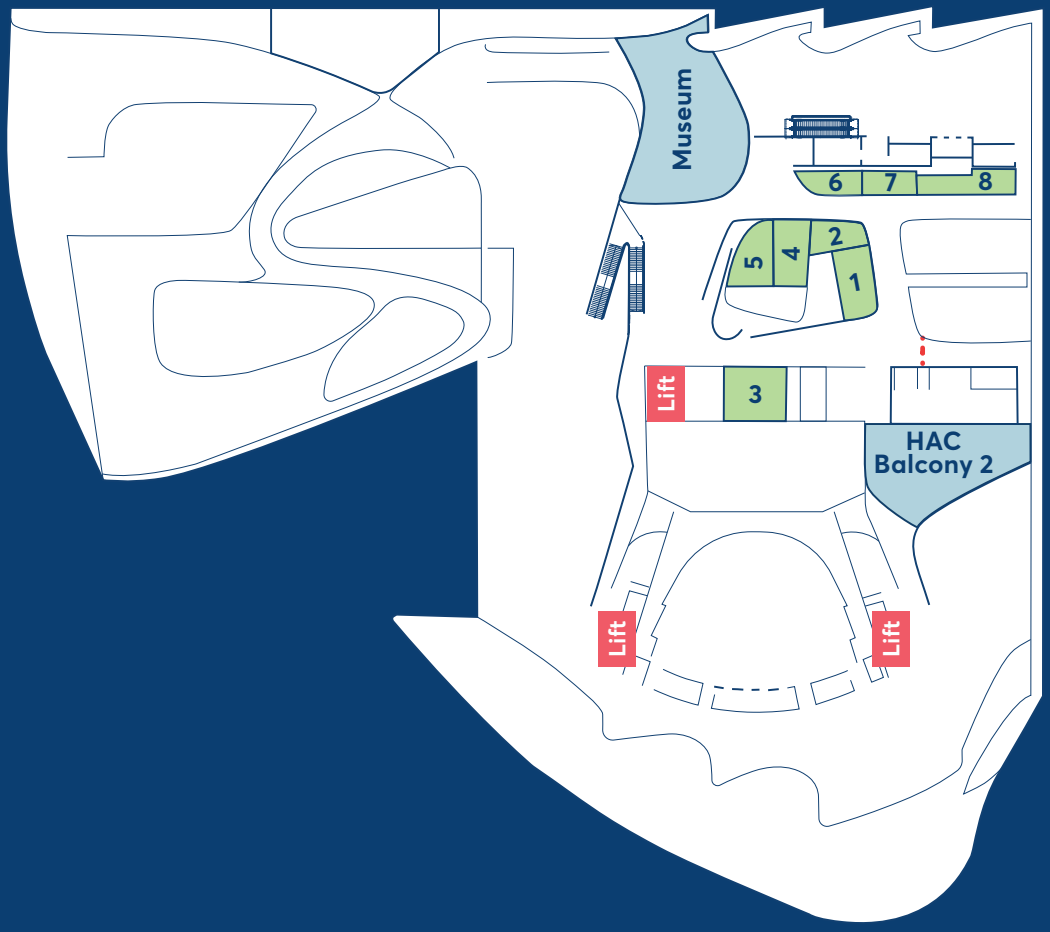
1.6 Floor Plans

Heydar Aliyev Center (HAC)



Ground floor

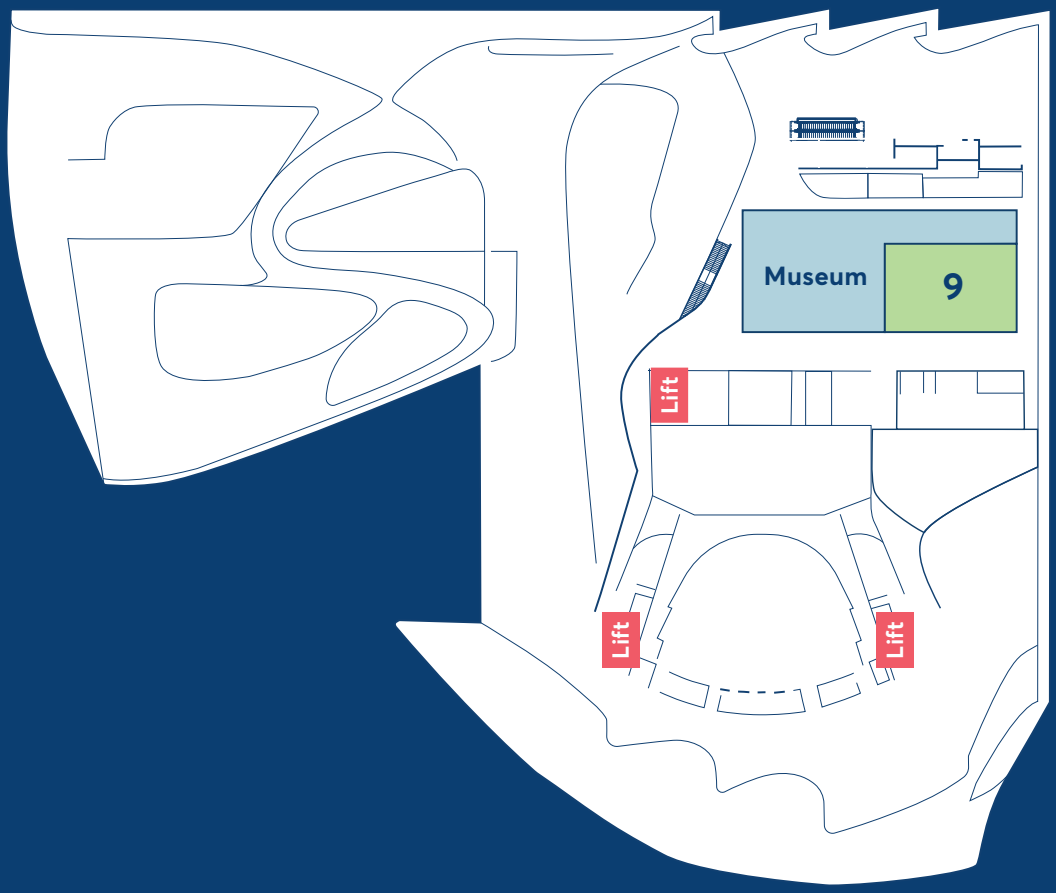
Heydar Aliyev Center (HAC)



2nd floor

Room numbers

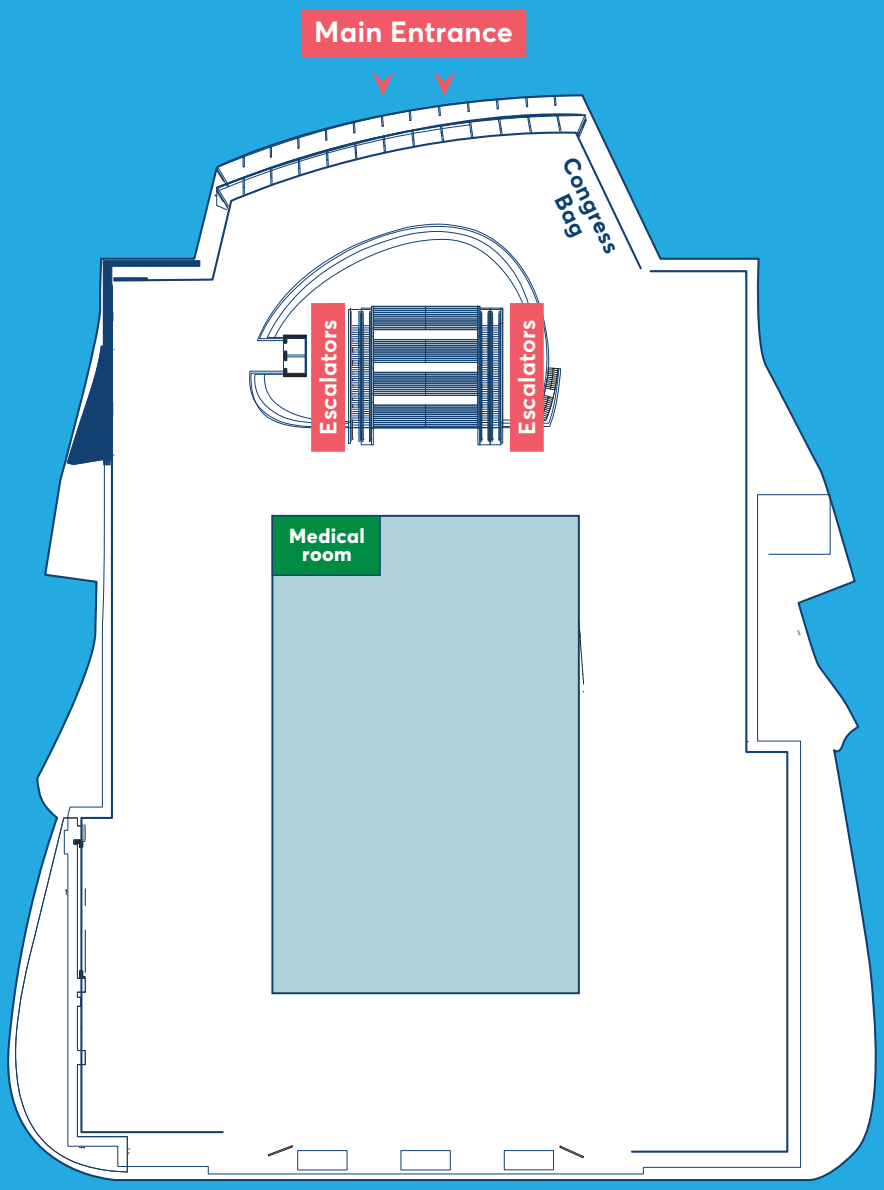
Heydar Aliyev Center (HAC)



3rd floor

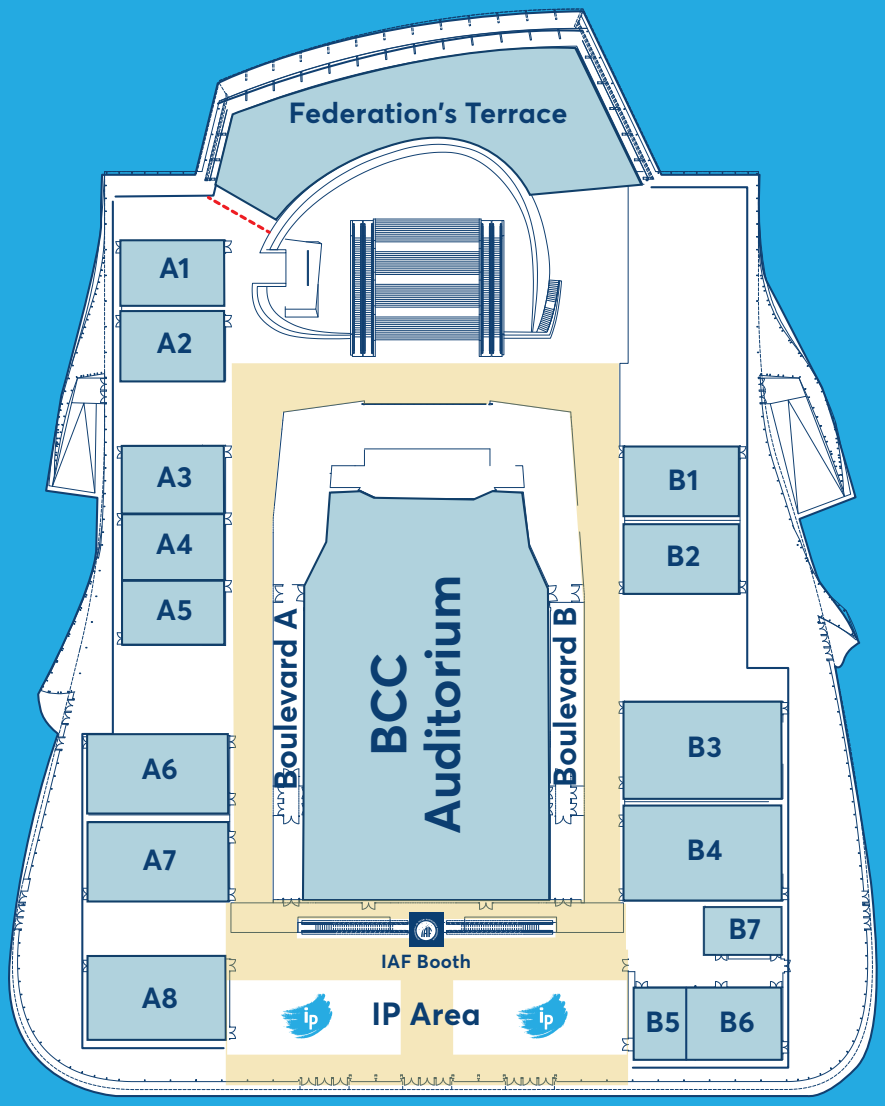
Room numbers

Baku Convention Center (BCC)



Ground floor

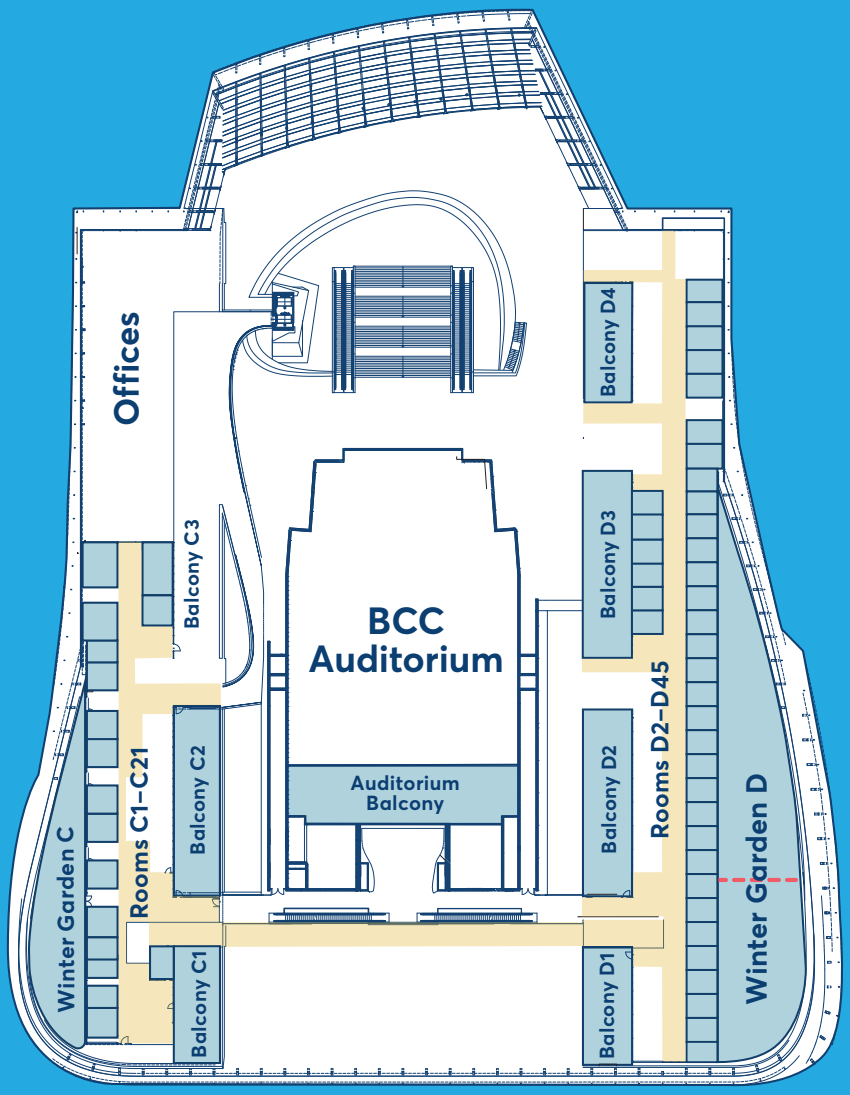
Baku Convention Center (BCC)



2nd floor

Room numbers

Baku Convention Center (BCC)



3rd floor

Room numbers

2 Technical Sessions

2.1 Technical Sessions at a Glance

Date	02/10/2023	03/10/2023	03/10/2023	04/10/2023	04/10/2023	05/10/2023	05/10/2023	06/10/2023	06/10/2023
Time / Room Number	15:15-17:45	10:15-12:45	15:00-17:30	10:15-12:45	15:00-17:30	10:15-12:45	15:00-17:30	10:15-12:45	13:45-16:15
BCC B3	A3.1	A3.2A	A3.2B	A3.3A	A3.3B	A3.4A	A3.5	A3.4B	A3.2C
BCC A3	D2.1	D2.3	D2.2	D2.4	D2.5	D2.6	D2.7	D2.8	D2.9/D6.2
BCC B4	C1.8	C1.9	C1.1	C1.2	C1.3	C1.4	C1.5	C1.6	C1.7
BCC A6	A6.7	A6.9	A6.4	A6.3	A6.2	A6.5	A6.6	A6.8/E9.1	A6.1
BCC A7	B3.1	B3.2	B3.3	B3.4/B6.4	B3.5	B3.6/A5.3	B3.7	B3.8	E10.2
BCC A2	B4.2	B4.1	B4.3	B4.4	B4.5	B4.6B	B4.7	B4.8	B4.6A
HAC Hall B	E7.1	E7.2	E7.3	E7.4	E7.5	E9.3	E10.1	E7.6/E3.5	E7.7
BCC A8	C4.1	C4.3	C4.5	C4.2	C4.6	C4.7	C4.8/B4.5A	C4.9	C4.10/C3.5
BCC A1	C2.1	C2.2	C2.3	C2.4	C2.5	C2.6	C2.7	C2.8	C2.9
BCC B6	A1.1	A1.2	A1.3	C4.4	A1.4	A1.5	A1.6	A1.7	A1.8
BCC B7	A2.1	A4.1	A4.2	A2.2	A2.3	A2.4	A2.5	A2.6	A2.7
HAC Hall A	D1.1	D1.2	D1.3	A5.1	A5.2	D1.4A	D1.4B	D1.5	D1.6
BCC B1	B1.1	C3.1	B1.2	B1.3	B1.4	B1.5	B1.6	C3.3	C3.4
BCC Auditorium Balcony	E9.2	E3.1	E3.2	E3.3	E3.4	A7.1	E3.6	A7.2	A7.3
BCC A4	E5.1	D5.1	E5.2	D5.2	E5.3	D5.3	E5.4	E5.5	E5.6
BCC B2	B5.1	B2.7	B2.1	B2.2	B2.3	B2.4	B2.5	B2.6	E8.1
HAC Museum GA	E1.1	E1.2	E1.3	E1.4	E1.5	E1.6	E1.7	B1.7	E1.9
BCC Balcony C2	D4.1	D4.2	D4.3	D3.1	D3.2A	D4.4	D4.5	D3.2B	D3.3
BCC A5	E2.1	E2.2	B6.3	E2.4	B5.2	B5.3	B6.1	B6.2	B6.5
BCC B5	B2.8/GTS.3	D6.1	E2.3/GTS.4	D6.3	E6.5/GTS.1	C3.2	B4.9/GTS.5	D5.4	B3.9/GTS.2
HAC Balcony 2	A5.4	E6.4	E6.3	E6.2	E4.1	E4.2	E6.1	E4.3	
ISZ								E1.8	

BCC: Baku Congress Center
HAC: Heydar Aliyev Center

Category A: Science & Exploration	A1--> A7	Category C: Technology	C1--> C4	Category E: Space & Society	E1--> E10
Category B: Applications & Operations	B1--> B6	Category D: Infrastructure	D1--> D6		

TS

2.2 Technical Sessions by Day

Monday, 2 October 2023

15:15 Technical Sessions

No.	Title	Room
A1.1	Behaviour, Performance and Psychosocial Issues in Space	BCC B6
A2.1	Gravity and Fundamental Physics	BCC B7
A3.1	Space Exploration Overview	BCC B3
A5.4	Deep Space Habitats and Resources	HAC Balcony 2
A6.7	Operations in Space Debris Environment, Situational Awareness - SSA	BCC A6
B1.1	International Cooperation in Earth Observations	BCC B1
B2.8-GTS.3	Space Communications and Navigation Global Technical Session	BCC B5
B3.1	Governmental Human Spaceflight Programmes (Overview)	BCC A7
B4.2	Small Space Science Missions	BCC A2
B5.1	Tools and Technology in Support of Integrated Applications	BCC B2
C1.8	Orbital Dynamics (1)	BCC B4
C2.1	Space Structures I - Development and Verification (Space Vehicles and Components)	BCC A1
C4.1	Liquid Propulsion (1)	BCC A8
D1.1	Innovative and Visionary Space Systems	HAC Hall A
D2.1	Launch Vehicles in Service or in Development	BCC A3
D4.1	Innovative Concepts and Technologies	BCC Balcony C2
E1.1	Ignition - Primary Space Education	HAC Museum GA
E2.1	Student Conference - Part 1	BCC A5
E5.1	Space Architecture: Habitats, Habitability, and Bases	BCC A4
E7.1	Young Scholars Session with Keynote Lecture	HAC Hall B
E9.2	Cyber-based security threats to space missions: establishing the legal, institutional and collaborative framework to counteract them	BCC Auditorium Balcony

Tuesday, 3 October 2023

10:15 Technical Sessions

No.	Title	Room
A1.2	Human Physiology in Space	BCC B6
A3.2A	Moon Exploration – Part 1	BCC B3
A4.1	SETI 1: SETI Science and Technology	BCC B7
A6.9	Orbit Determination and Propagation - SST	BCC A6
B2.7	Advances in Space-based Navigation Systems, Services, and Applications	BCC B2
B3.2	Commercial Human Spaceflight Programmes	BCC A7
B4.1	24th Workshop on Small Satellite Programmes at the Service of Developing Countries	BCC A2
C1.9	Orbital Dynamics (2)	BCC B4
C2.2	Space Structures II - Development and Verification (Deployable and Dimensionally Stable Structures)	BCC A1
C3.1	Solar Power Satellite	BCC B1

No.	Title	Room
C4.3	Solid and Hybrid Propulsion (1)	BCC A8
D1.2	Space Systems Architectures	HAC Hall A
D2.3	Upper Stages, Space Transfer, Entry & Landing Systems	BCC A3
D4.2	Contribution of Moon Village to Solving Global Societal Issues	BCC Balcony C2
D5.1	For a successful space program : Quality and Safety!	BCC A4
D6.1	Commercial Spaceflight Safety and Emerging Issues	BCC B5
E1.2	Lift Off - Secondary Space Education	HAC Museum GA
E2.2	Student Conference - Part 2	BCC A5
E3.1	International cooperation in using space for sustainable development: The “Space2030” agenda	BCC Auditorium Balcony
E6.4	Strategic Risk Management for Successful Space & Defence Programmes	HAC Balcony 2
E7.2	UNCOPUOS and ITU Registration of Large Constellations	HAC Hall B

15:00 Technical Sessions

No.	Title	Room
A1.3	Medical Care for Humans in Space	BCC B6
A3.2B	Moon Exploration – Part 2	BCC B3
A4.2	SETI 2: SETI and Society	BCC B7
A6.4	Mitigation - Tools, Techniques and Challenges - SEM	BCC A6
B1.2	Earth Observation Systems	BCC B1
B2.1	Advances in Space-based Navigation Technologies	BCC B2
B3.3	Utilization & Exploitation of Human Spaceflight Systems	BCC A7
B4.3	Small Satellite Operations	BCC A2
B6.3	Mission Operations, Validation, Simulation and Training	BCC A5
C1.1	Attitude Dynamics (1)	BCC B4
C2.3	Space Structures - Dynamics and Microdynamics	BCC A1
C4.5	Electric Propulsion (1)	BCC A8
D1.3	Technologies to Enable Space Systems	HAC Hall A
D2.2	Launch Services, Missions, Operations, and Facilities	BCC A3
D4.3	Modern Day Space Elevators Customer Design Drivers	BCC Balcony C2
E1.3	On Track - Undergraduate Space Education	HAC Museum GA
E2.3-GTS.4	Student Team Competition	BCC B5
E3.2	The future of space exploration and innovation	BCC Auditorium Balcony
E5.2	Is Space R&D Truly Fostering A Better World For Our Future?	BCC A4
E6.3	Innovation: The Academics’ Perspectives	HAC Balcony 2
E7.3	Legal Issues Relating to Emerging Space Activities on Celestial Bodies	HAC Hall B

Wednesday, 4 October 2023

10:15 Technical Sessions

No.	Title	Room
A2.2	Fluid and Materials Sciences	BCC B7
A3.3A	Mars Exploration – missions current and future	BCC B3
A5.1	Human Exploration of the Moon and Cislunar Space	HAC Hall A
A6.3	Impact-Induced Mission Effects and Risk Assessments	BCC A6
B1.3	Earth Observation Sensors and Technology	BCC B1
B2.2	Advances in Space-based Communication Systems and Services, Part 1	BCC B2
B3.4-B6.4	Flight & Ground Operations aspects of Human Spaceflight - Joint Session of the IAF Human Spaceflight and IAF Space Operations Symposia	BCC A7
B4.4	Small Earth Observation Missions	BCC A2
B6.4-B3.4	Flight & Ground Operations of HSF Systems - A Joint Session of the IAF Human Spaceflight and IAF Space Operations Symposia	BCC A7
C1.2	Attitude Dynamics (2)	BCC B4
C2.4	Advanced Materials and Structures for High Temperature Applications	BCC A1
C4.2	Liquid Propulsion (2)	BCC A8
C4.4	Solid and Hybrid Propulsion (2)	BCC B6
D2.4	Future Space Transportation Systems	BCC A3
D3.1	Strategies & Architectures as the Framework for Future Building Blocks in Space Exploration and Development	BCC Balcony C2
D5.2	Emerging trends of knowledge management in organizations	BCC A4
D6.3	Enabling safe commercial spaceflight: vehicles and spaceports	BCC B5
E1.4	In Orbit - Postgraduate Space Education	HAC Museum GA
E2.4	Educational Pico and Nano Satellites	BCC A5
E3.3	Space Economy Session – A focus on in-space operations and their potential to stimulate economic development	BCC Auditorium Balcony
E6.2	Public-Private Partnerships: Traditional and New Space Applications	HAC Balcony 2
E7.4	Key Governance Issues in the New Space Age	HAC Hall B

15:00 Technical Sessions

No.	Title	Room
A1.4	Medicine in Space and Extreme Environments	BCC B6
A2.3	Microgravity Experiments from Sub-Orbital to Orbital Platforms	BCC B7
A3.3B	Mars Exploration – Science, Instruments and Technologies	BCC B3
A5.2	Human Exploration of Mars	HAC Hall A
A6.2	Modeling and Risk Analysis	BCC A6
B1.4	Earth Observation Data Systems and Technology	BCC B1
B2.3	Advances in Space-based Communication Systems and Services, Part 2	BCC B2
B3.5	Astronaut Training, Accommodation, and Operations in Space	BCC A7
B4.5	Access to Space for Small Satellite Missions	BCC A2
B5.2	Integrated Applications End-to-End Solutions	BCC A5
C1.3	Guidance, Navigation and Control (1)	BCC B4
C2.5	Advancements in Materials Applications and Rapid Prototyping	BCC A1

No.	Title	Room
C4.6	Electric Propulsion (2)	BCC A8
D2.5	Technologies for Future Space Transportation Systems	BCC A3
D3.2A	Systems and Infrastructures to Implement Sustainable Space Development and Settlement - Systems	BCC Balcony C2
E1.5	Enabling the Future - Developing the Space Workforce	HAC Museum GA
E3.4	Assuring a Safe, Secure and Sustainable Environment for Space Activities	BCC Auditorium Balcony
E4.1	Memoirs & Organisational Histories	HAC Balcony 2
E5.3	Contemporary Arts Practice and Outer Space: A Multi-Disciplinary Approach	BCC A4
E6.5-GTS.1	Entrepreneurship Around the World	BCC B5
E7.5	Supervision of Space Activities	HAC Hall B

Thursday, 5 October 2023

10:15 Technical Sessions

No.	Title	Room
A1.5	Radiation Fields, Effects and Risks in Human Space Missions	BCC B6
A2.4	Science Results from Ground Based Research	BCC B7
A3.4A	Small Bodies Missions and Technologies (Part 1)	BCC B3
A5.3-B3.6	Human and Robotic Partnerships in Exploration - Joint session of the IAF Human Spaceflight and IAF Exploration Symposia	BCC A7
A6.5	Post Mission Disposal and Space Debris Removal 1 - SEM	BCC A6
A7.1	Space Astronomy missions, strategies and plans	BCC Auditorium Balcony
B1.5	Earth Observation Societal and Economic Applications, Challenges and Benefits	BCC B1
B2.4	Advances in Space-based Communication Systems and Services, Part 3	BCC B2
B3.6-A5.3	Human and Robotic Partnerships in Exploration - Joint session of the IAF Human Spaceflight and IAF Exploration Symposia	BCC A7
B4.6B	Generic Technologies for Nano/Pico Platforms	BCC A2
B5.3	Satellite Commercial Applications	BCC A5
C1.4	Guidance, Navigation and Control (2)	BCC B4
C2.6	Space Environmental Effects and Spacecraft Protection	BCC A1
C3.2	Wireless Power Transmission Technologies and Application	BCC B5
C4.7	Hypersonic Air-breathing and Combined Cycle Propulsion, and Hypersonic Vehicle	BCC A8
D1.4A	Space Systems Engineering - Methods, Processes and Tools (1)	HAC Hall A
D2.6	Future Space Transportation Systems Verification and In-Flight Experimentation	BCC A3
D4.4	Strategies for Rapid Implementation of Interstellar Missions: Precursors and Beyond	BCC Balcony C2
D5.3	Predicting, testing, and measuring the effects of the space environment on space missions	BCC A4
E1.6	Calling Planet Earth - Space Outreach to the General Public	HAC Museum GA
E4.2	Scientific and Technical Histories	HAC Balcony 2
E9.3	Norms and Standards for Safe and Responsible Behaviour in Space	HAC Hall B

15:00 Technical Sessions

No.	Title	Room
A1.6	Astrobiology and Exploration	BCC B6
A2.5	Facilities and Operations of Microgravity Experiments	BCC B7
A3.5	Solar System Exploration including Ocean Worlds	BCC B3
A6.6	Post Mission Disposal and Space Debris Removal 2 - SEM	BCC A6
B1.6	Assessing and Mitigating the Global Freshwater Crisis	BCC B1
B2.5	Advances in Space-based Communication Technologies, Part 1	BCC B2
B3.7	Advanced Systems, Technologies, and Innovations for Human Spaceflight	BCC A7
B4.5A-C4.8	Joint Session between IAA and IAF for Small Satellite Propulsion Systems	BCC A8
B4.7	Constellations and Distributed Systems	BCC A2
B4.9-GTS.5	Small Satellite Missions Global Technical Session	BCC B5
B6.1	Ground Operations - Systems and Solutions	BCC A5
C1.5	Guidance, Navigation & Control (3)	BCC B4
C2.7	Space Vehicles – Mechanical/Robotic/Thermal/Fluidic Systems	BCC A1
C4.8-B4.5A	Joint Session between IAA and IAF for Small Satellite Propulsion Systems	BCC A8
D1.4B	Space Systems Engineering - Methods, Processes and Tools (2)	HAC Hall A
D2.7	Small Launchers: Concepts and Operations	BCC A3
D4.5	Space Resources, the Enabler of the Earth-Moon Econosphere	BCC Balcony C2
E1.7	New Worlds - Non-Traditional Space Education and Outreach	HAC Museum GA
E3.6	Cost and Procurement impacts on Space Programmes linked to high inflation and world-wide scarcity of components and materials	BCC Auditorium Balcony
E5.4	Space Assets and Disaster Management	BCC A4
E6.1	Space Entrepreneurship and Investment: The Practitioners' Perspectives	HAC Balcony 2
E10.1	Planetary Defense from Asteroids and Comets	HAC Hall B

Friday, 6 October 2023

10:15 Technical Sessions

No.	Title	Room
A1.7	Life Support, habitats and EVA Systems	BCC B6
A2.6	Microgravity Sciences on board of Space stations	BCC B7
A3.4B	Small Bodies Missions and Technologies (Part 2)	BCC B3
A6.8-E9.1	Policy, Legal, Institutional, Economic and Security Aspects of Debris Mitigation, Debris Remediation and STM	BCC A6
A7.2	Science Goals and Drivers for Future Exoplanet, Space Astronomy and Space Physics	BCC Auditorium Balcony
B1.7	Earth Observations to address Earth's Environment and Climate Challenges	HAC Museum GA

No.	Title	Room
B2.6	Advances in Space-based Communication Technologies, Part 2	BCC B2
B3.8	Human Space & Exploration	BCC A7
B4.8	Small Spacecraft for Deep-Space Exploration	BCC A2
B6.2	Innovative Space Operations Concepts and Advanced Systems	BCC A5
C1.6	Mission Design, Operations & Optimization (1)	BCC B4
C2.8	Specialized Technologies, Including Nanotechnology	BCC A1
C3.3	Advanced Space Power Technologies	BCC B1
C4.9	Disruptive Propulsion Concepts for Enabling New Missions	BCC A8
D1.5	Lessons Learned in Space Systems: Achievements, Challenges, Best Practices, Standards.	HAC Hall A
D2.8	Space Transportation Solutions for Deep Space Missions	BCC A3
D3.2B	Systems and Infrastructures to Implement Sustainable Space Development and Settlement - Technologies	BCC Balcony C2
D5.4	Cybersecurity in space systems, risks and countermeasures	BCC B5
E1.8	Hands-on Space Education and Outreach	International Student Zone
E4.3	History of Western Asia Contribution to Astronautics	HAC Balcony 2
E5.5	Sharing space achievements and heritage: space museums and societies	BCC A4
E9.1-A6.8	Policy, Legal, Institutional, Economic and Security Aspects of Debris Mitigation, Debris Remediation and STM	BCC A6

13:45 Technical Sessions

No.	Title	Room
A1.8	Biology in Space	BCC B6
A2.7	Life and Physical Sciences under reduced Gravity	BCC B7
A3.2C	Moon Exploration – Part 3	BCC B3
A6.1	Space Debris Detection, Tracking and Characterization - SST	BCC A6
A7.3	Technology Needs for Future Missions, Systems, and Instruments	BCC Auditorium Balcony
B3.9-GTS.2	Human Spaceflight Global Technical Session	BCC B5
B4.6A	Generic Technologies for Small/Micro Platforms	BCC A2
B6.5	Large Constellations & Fleet Operations	BCC A5
C1.7	Mission Design, Operations & Optimization (2)	BCC B4
C2.9	Smart Materials and Adaptive Structures	BCC A1
C3.4	Space Power System for Ambitious Missions	BCC B1
C3.5-C4.10	Joint Session on Nuclear Power and Propulsion Systems, and Propellantless Propulsion	BCC A8
C4.10-C3.5	Joint Session on Nuclear Power and Propulsion Systems, and Propellantless Propulsion	BCC A8
D1.6	Cooperative and Robotic Space Systems	HAC Hall A
D2.9-D6.2	Emerging Space Ventures, including Space Logistics and Space Safety for Sustainability	BCC A3
D3.3	Space Technology and System Management Practices and Tools	BCC Balcony C2
D6.2-D2.9	Emerging Space Ventures, including Space Logistics and Space Safety for Sustainability	BCC A3
E1.9	Space Culture – Public Engagement in Space through Culture	HAC Museum GA
E5.6	Simulating Space Habitation: Habitats, Design and Simulation Missions	BCC A4
E7.7	Recent Developments in Space Law with Particular Focus on Space Debris Remediation	HAC Hall B
E8.1	Multilingual Astronautical Terminology	BCC B2
E10.2	Informing Planetary Defense	BCC A7
GTS.2-B3.9	Human Spaceflight Global Technical Session	BCC B5

3 Keynote Speakers

Keynotes

Monday 2 October

B1	IAF EARTH OBSERVATION SYMPOSIUM	Date	Time	Room
	**Session:** 1. International Cooperation in Earth Observations	02.10.2023	15:15	BCC B1

Tanita SUEPA
Strategic Alliance Office, Director
Geo-Informatics & Space Technology Development Agency (GISTDA)
Thailand

KEYNOTE: B1.1 Committee on Earth Observation Satellites (CEOS): 2023 Report of Activities to the 74th International Astronautical Congress

Abstract
As the 2023 CEOS Chair, GISTDA is pleased to provide an overview of the ongoing activities of CEOS to the IAC. CEOS ensures international coordination of civil space-based Earth observation programmes and promotes exchange of data to optimise societal benefit and inform decision-making for a prosperous and sustainable future for humankind. For almost four decades, CEOS, which today consists of 34 Members and 29 Associates, substantively advances space-based Earth observation efforts that no one country can do alone. As the challenges affecting the planet become more pronounced, more frequent, and more acute, this international cooperation continues to elevate societal benefit at multiple scales. Over the past year, CEOS has significantly contributed to the advancement of space-based Earth observation community efforts, provides an established means of communicating with external organisations, and enables CEOS membership to understand and to act upon these organisations' Earth observation needs and requirements. GISTDA will outline the key initiatives undertaken in 2023 by the CEOS Chair and CEOS Strategic Implementation Team, and will present important highlights of the CEOS organisation. The key CEOS Chair priorities for 20203 include: 1. Supporting CEOS Preparations and Inputs to the Global Stocktake of the UNFCCC Paris Agreement and 2. Supporting Exploration of New Geometries for Space Agencies and CEOS with New Space.

B3	IAF HUMAN SPACEFLIGHT SYMPOSIUM	Date	Time	Room
	**Session:** 1. Governmental Human Spaceflight Programmes (Overview)	02.10.2023	15:15	BCC A7

James FREE
Associate Administrator for the Exploration Systems Development Mission Directorate (ESDMD)
National Aeronautics and Space Administration (NASA)
United States

KEYNOTE: B3.1 Implementing an Inclusive Deep Space Ecosystem

Abstract
NASA's Moon to Mars exploration strategy is a multi-faceted effort to use the Moon as a proving ground in preparation for sending humans to Mars, all along putting scientific discovery at the forefront. The activities to support this strategy, led by NASA's Exploration Systems Development Mission Directorate (ESDMD), involve a series of progressive steps, from testing our deep space transportation systems, the Space Launch System rocket and Orion spacecraft, to building the first space station in lunar orbit, known as the Gateway, to deploying robotic and human landers to the Moon and Mars. NASA's Moon to Mars initiative will enable humanity to understand the solar system and its habitability better while inspiring the next generation of space exploration and discovery.

On the heels of the successful Artemis I mission, ESDMD is developing the systems necessary and plotting a course for future missions to achieve the objectives set by NASA's Moon to Mars exploration strategy. While ESDMD is focused on building these systems, the directorate carries the mantle of long-term planning and, over the past year, has implemented an architecture concept review process. This process distills the objectives and goals into characteristics and needs from which use cases, functions, elements, and requirements are derived. From there, the directorate implements new programs and establishes partnerships to build the elements that will achieve these functions, as well as designs missions to put the elements into use. As the architecture advances, ESDMD and its partners, including other NASA Mission Directorates, international space agencies, industry organizations, and academic institutions, will develop the technologies and capabilities needed to achieve the objectives. This collaboration will be instrumental to build a long-term presence beyond low-Earth orbit for scientific discovery and will be an invaluable asset in expanding humanity's exploration of the solar system.

This paper will elaborate on ESDMD's role in executing NASA's Moon to Mars exploration strategy through iterative architecture development and the implementing programs charged with building the elements. Readers will gain insight into NASA's internal management and collaborative efforts to create a cadence of exploration missions to the Moon and inform future exploration of farther away destinations, including Mars.

C4	IAF SPACE PROPULSION SYMPOSIUM	Date	Time	Room

Session: 1. Liquid Propulsion (1) 02.10.2023 15:15 BCC A8

Gao YUSHAN
Research Professor
Academy of Aerospace Liquid Propulsion Technology
China

KEYNOTE: C4.1 Overview on Development of Liquid Rocket Engines for Heavy Launch Vehicles in China

Abstract
Liquid rocket engines are the core parts of heavy launch vehicles in China. They represent the milestone of national space propulsion technologies and the premise of China's major aerospace projects such as manned Lunar exploration, deep space exploration and space infrastructure development. To meet the requirements of the first stage, second stage and third stage for the heavy launch vehicles, study and research on key technologies of 500tf LOX/kerosene engine, 220tf LOX/LH2 engine and 25tf LOX/LH2 engine have been carried out. The overview on development of these liquid rocket engines will be presented. The 500tf LOX/kerosene engine has two-thrust-chambers with high pressure staged combustion, swinging after pump and staged startup process. The 220tf LOX/LH2 engine has high pressure staged combustion system with a single fuel-rich preburner driving the high pressure turbopumps in parallel. The 25tf LOX/LH2 engine has the closed expansion cycle. Those engines represent China's top level in liquid rocket propulsion technologies with characteristics of non-toxic, high performance, high reliability and wide thrust range. Based on the basic research, technology studies and innovations, the first full-system test of 500tf LOX/kerosene engine and 25tf LOX/LH2 engine, semi-system test of 220tf LOX/LH2 engine have been successfully completed. Comprehensive breakthroughs in key technologies of these engines have laid a solid foundation for the development of heavy launch vehicles, and have dramatically improved China's liquid rocket propulsion technologies.

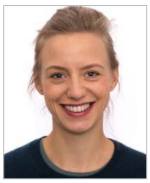
E7	IISL COLLOQUIUM ON THE LAW OF OUTER SPACE	Date	Time	Room
	Session: 1. Young Scholars Session with Keynote Lecture	02.10.2023	15:15	HAC Hall B

Márcia ALVARENGA
Senior Science and Technology Analyst, Head
Department of Education and Training, Instituto Nacional de Pesquisas Espaciais (INPE)
Brazil

Joan CHESONI
Principal State Counsel
Office of the Attorney-General, Department of Justice
Kenya

Viva DADWAL
Associate
King & Spalding LLP
Canada

Bryan LIM
Assistant Director
Ministry of Trade and Industry
Singapore



Scarlet O'DONNELL
International Space Law Specialist
Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR)
Germany

KEYNOTE: E7.1 Trajectory Towards a Common Understanding - a Multi-Continental Next-Generational Perspective on the Rule of Law in Outer Space

Abstract
The IISL's 15th Nandasiri Jasentuliyana Keynote Lecture on Space Law (2023) highlights a key mission of the IISL: the expansion of the rule of law in the exploration and use of outer space for peaceful purposes. The keynote lecture explores the role that the rule of law holds under international and national space law from the angle of the five regions of the IISL Manfred Lachs Space Law Moot Court Competition: Africa, Asia Pacific, Europe, Latin America, and North America; with the five authors of the keynote lecture each representing one region. Regional understandings as well as historical development of conceptions of the rule of law in outer space are highlighted. The keynote lecture pronounces on how the rule of law can advance the (peaceful) use of outer space by focusing on its commonalities across the globe.

Tuesday 3 October

A4	52nd IAA SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) – The Next Steps	Date	Time	Room

Session: 1. SETI 1: SETI Science and Technology

03.10.2023 | 10:15 | BCC B7

Vishal GAJJAR
Astronomer
Berkeley SETI Research Center
United States

KEYNOTE: A4.1 "Pesek Lecture" - ExpandingtThe Search for ETI Through Wide-Band and Broadband Pulsed Signals

Abstract
The search for extraterrestrial intelligence (ETI) through radio frequencies has primarily focused on detecting continuous-wave narrowband signals. However, we show that wide-band and broadband pulsed beacons are more energy-efficient over longer operational periods compared to narrowband beacons. The search for these unconventional signals helps us to narrow down the existence of ETIs within the multi-dimensional parameter space. These signal classes consist of wide-band periodic pulses similar to Earth's air-traffic radar, 24 different types of wide-band signals with built-in modulations, and three different types of broadband signals with artificially created dispersions. Here, we present the results of our surveys for two different signal classes, which included 1883 stars in the solar neighbourhood and around half a million stars at the Galactic Center, using 250 hours of observations with the Robert C. Byrd Green Bank Telescope as part of the Breakthrough Listen program [Gajjar et al. 2021}. We have developed a novel, open-source CPU-based software, blipss, that uses a fast folding algorithm (FFA) to detect wide-band periodic signals. We conducted searches for kHz wide-band signals with periods between 11- 100 seconds and duty cycles between 10-50\% at the Galactic centre. To the best of our knowledge, these searches represent the first FFA exploration for technosignatures. We found no evidence of kHz-wide periodic signals, placing a constraint on the abundance of transmitting extraterrestrial worlds to fewer than one in 600,000 stars at the Galactic Center [Suresh et al. 2023]. In another extensive survey, we targeted 1883 stars in the solar neighborhood and the Galactic Center for broadband pulsed beacons. We did not detect any signals of interest and have therefore placed a constraint on the existence of broadband beacons, with fewer than 1 in 1000 stars in the solar neighborhood and fewer than 1 in half a million stars at the Galactic Center having transmitter power densities greater than 105 W/Hz and 107 W/Hz, respectively [Gajjar et al. 2022]. One of the significant challenges in searching for unconventional signals using single dishes is the high number of false positives due to radio frequency interference. We discuss how we are addressing this challenge by using interferometers such as the Allen Telescope Array and the Giant Meterwave Radio Telescope.

A4	52nd IAA SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) – The Next Steps	Date	Time	Room

Session: 2. SETI 2: SETI and Society

03.10.2023 | 15:00 | BCC B7

Lori WALTON
Private Consultant for the Mineral Exploration Sector
Canada

KEYNOTE: A4.2 "Billingham Cutting Edge Lecture" - The History of the IAA SETI Permanent Committee - 1990 to 1999

Abstract
This paper is the third in a series outlining the history of the International Academy of Astronautics (IAA) SETI (search for extraterrestrial intelligence) Permanent Committee. The IAA established the SETI Committee in 1974 in response to growing awareness that humanity might detect intelligent extraterrestrial life. The IAA SETI Committee has an extraordinarily broad mandate to examine all aspects of the search for intelligent extraterrestrial life, including international issues, astrophysical and astronomical observations, biochemistry, exoplanets, complex life and evolution, planetary space missions, SETI search strategies, and the societal, legal, and political impact of a verified detection. The founding and early years of the IAA SETI Permanent Committee up to 1989 are described in two previous papers. By the late 1980s, the IAA SETI Committee focused on drafting "The Declaration of Principles Regarding Activities Following the Detection of Extraterrestrial Intelligence." Of particular concern was a separate agreement, which would present the outline of a potential response from earth. This paper describes SETI Committee activities during the 1990s, including the SETI Review Meetings held during the International Astronautical Congress, membership, SETI searches, and SETI topics of interest. Throughout the 1990s, the IAA SETI Committee worked vigorously on the contentious issue of transmissions from earth. The possibility of intelligent extraterrestrial life was heightened by the end of the 1990s with the confirmed detection of exoplanets.

C2	IAF MATERIALS AND STRUCTURES SYMPOSIUM	Date	Time	Room

Session: 3. Space Structures - Dynamics and Microdynamics

03.10.2023 | 15:00 | BCC A1

Harijono DJOJODIHARDJO
Professor
Bandung Institute of Technology
Indonesia

KEYNOTE: C2.3 11th Paolo Santini Memorial Lecture: Structural Integrity of Space Vehicles and Structures Subject to Motion, Thermo-Structural Dynamics and Environmental Effects

Abstract
Since the first object in space was launched in 1957, a great achievement and progress has been made to date with vision for future, further exploration and taking advantage of the Universe, for human benefits and sustainability, gaining scientific knowledge and developing engineering structures to that end. The series of celebrated and grand accomplishments as well as unfortunate failures will make people more intelligent, quixotic, imaginative, creative and realistic. Remarkable achievements as cases in point are most modern Earth and Universe observation spacecraft to date which are now equipped with large lightweight and flexible structures, such as antennas, telescopes, and extendable elements, including the incorporation of more complex and larger appendages with high precision for scientific applications, making the requirements for more stringent structural integrity requirement of large space structure to minimize performance degradation due to structural damages. In addition, considerable effort is being directed to reducing aerospace structures weight and their associated manufacturing costs, selection of the most appropriate materials employed, to reduce assembly costs and to reduce weight through fewer parts, or to produce one-piece more complex configuration parts. Various sensor actuator and control technology could be employed to reduce structural damage. Associated with these, deep learning framework and sensors configuration may be required to accurately detect failures in the most critical areas of the structure and strategies for their deployment. To that end, the objective of the present paper is to focus at:

- Collecting an inventory of concepts, design, methods, engineering and operation to maintain structural integrity and associated means for implementation.
- Reviewing already implemented concepts and programs selectively with the view of recognizing the successes and failures of these technology advances and identify some efforts for improvements, which may be offered as solution possibilities.
- Reviewing a selected aspects out of the multitude of prevailing issues relevant to structural integrity, such as the methods and technologies that account for the concept, design and engineering for constructing a tool, a space vehicle or structure, to meet a multitude of objectives under a multitude of requirements and constraints.

D4	21st IAA SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FUTURE	Date	Time	Room

Session: 3. Modern Day Space Elevators Customer Design Drivers

03.10.2023 | 15:00 | BCC Balcony C2

Peter SWAN
Senior Vice President
Galactic Harbour Associates, Inc.
United States

KEYNOTE: D4.3 "Jerome Pearson Memorial Lecture" - Research Into Characteristics of a Permanent Space Access Transportation Infrastructure

Abstract
Space Elevators' remarkable transformational capabilities as a permanent space access infrastructure dwarfs traditional space access approaches. Transportation infrastructures, such as trains, provide to the user: permanent, daily, and routine; massive movement; safe; inexpensive; environmentally friendly; storage facilities at stations (ours are at GEO and the Apex Anchor); assembly and repair areas (above the massive gravity of Earth at GEO and the Apex Anchor); rapid transit (in our case to Moon/Mars); and, others. This paper will start discussions with the top-level transformational characteristics of a permanent space access transportation infrastructure – Space Elevators. This analysis at "a higher level" will enable discussions about the possibilities, instead of the technical difficulties in fulfilling their promise. The results of the ISEC Dual Space Access Architecture study show the characteristics leading to remarkable capabilities enabling many new and traditional missions. As such, the realization surfaces that: "As we build it – they will come!" This phrase has driven inventions and developments from the beginning of time. These types of statements are commercially powerful when a projected technology is going to transform the "way of doing business." These transformational leaps have enabled remarkable capabilities in communications, transportation, sports, business, and/or leisure. One potentially powerful transformation comes from Space Elevator electric tether climbers which can be seen as one of these game changers for the environment – no burning of rocket fuels inside our atmosphere or leaving of space debris in LEO. As Alfaro and Barry have stated: "The Industry must … develop a long-term sustainable economic overview for Space Elevators to accelerate the development of this megaproject." As this is realized, investors will support the development of this transformational permanent space access transportation infrastructure.

As we build it, they will come!

Wednesday 4 October

A2	IAF MICROGRAVITY SCIENCES AND PROCESSES SYMPOSIUM	Date	Time	Room

Session: 2. Fluid and Materials Sciences | 04.10.2023 | 10:15 | BCC B7

Evgeniya SKRYLEVA
Scientist
Lomonosov Moscow State University
Russia

KEYNOTE: A2.2 Investigation of the Fluids Behavior Under Microgravity Conditions: Conducting Experiments, Mathematical Modeling and Numerical Simulations

Abstract
The behavior of liquids in microgravity is significantly different from the behavior in terrestrial conditions. In the absence of terrestrial gravity, capillary pressure becomes the main driving force. The study of capillary effects under terrestrial conditions is difficult, since they are masked by the gravitational force. Capillary imbibition under ordinary gravity is possible in small capillaries, in which it is difficult to observe it. To observe capillary flow in larger capillaries, where the flow is well visualized, it is necessary to resort to experiments in conditions of reduced gravity. This work is devoted to the study of fluid flow in microgravity. Studies of the flow of liquids due to capillary forces are very relevant for space technologies. For example, on board the space station, the supply of liquid from a reservoir (for example, fuel) is possible only due to capillary forces. Also, the results of studying seepage processes in microgravity can be useful in the development of a plant growing system for bioregenerative life support systems in space for long-term manned flights. It should be noted that the results of studying seepage processes under microgravity conditions can also find applications for Earth technologies and processes, for example, for oil production. Capillary effects strongly influence the seepage processes under terrestrial conditions, but the study of capillary effects under standard gravity is difficult: it is problematic to visualize the liquid flow in small pores, and capillary imbibition is impossible in large pores due to the prevailing gravity. Therefore, it is so important to conduct experiments on the flow of liquid due to capillary effects in microgravity. This paper describes experiments on capillary imbibition at a spacecraft in Earth orbit, as well as during parabolic flights. The features of the experiments, experimental equipment, post-processing of experimental data are described. Experiments in microgravity are very time-consuming and expensive. Therefore, it is important to develop mathematical models and numerical schemes for predictive simulations of fluid flow in microgravity. Description of the behavior of fluids in microgravity requires special mathematical models, which are described in this paper. Comparison of the results of numerical simulations with experimental data makes it possible to develop verified software packages. The paper also discusses the issues of numerical modeling of the processes of flow through a porous medium, taking into account chemical interactions between fluids. The authors wish to acknowledge the support by Russian Science Foundation (Grant initiative 22-21-00236).

A6	21st IAA SYMPOSIUM ON SPACE DEBRIS	Date	Time	Room

Session: 3. Impact-Induced Mission Effects and Risk Assessments | 04.10.2023 | 10:15 | BCC A6

Zizheng GONG
Chief Engineer
Beijing Institute of Spacecraft Environment Engineering, CAST
China

KEYNOTE: A6.3 Progress in China's Space Debris Protection Research-Retrospect and Prospect

Abstract
Over the past two decades, China has made remarkable progress in the field of space debris protection, which not only provided strong support for the design of space debris protection for China's manned spacecraft, but also manifested different characteristics in multiple research directions and keeps improving its capabilities. This paper introduces the resent progress in China's space debris protection research in detail, including:

- (1) space debris impact risk assessment, protection design, and protection structure development, etc., for China space station.
- (2) development of advanced shielding materials, including wave impedance-gradient materials with high kinetic energy dissipation, active materials PTFE/Al based on thermochemical reaction, and silicon carbide fiber/Basalt/Kevlar/Al-mesh stuffed Whipple shields.
- (3) developing of vulnerability research, including threshold impact conditions for spacecraft component failure (cable, pipeline, pressure vessel, Solar array), spacecraft survivability evaluation software.
- (4) developing of ultrahigh-velocity launching techniques, including achieved the stable launch capability over 10 km/s for the spherical projectile with mm diameter at three-stage light gas gun, launched sub-gram flyer to above 18 km/s by using Electric gun, and launched sub-gram flyer over 10 km/s by Laser-driven device.
- (5) developing of the satellite impact breakup model and the space debris environment engineering model (SDEEM). The basic function of SDEEM 2019 is basically equivalent to the latest version of MASTER. On-orbit detection of millimeter-scale space debris is being carried out.
- (6) The influence of temperature and projectile shape on impact effect and ballistic limit curve. Keyword: Space debris, China space station shield design, advanced shielding materials, vulnerability, ultrahigh-velocity launching techniques, satellite breakup model and the space debris environment engineering model, projectile shape effect. The research priorities for the next 10 years in China are prospected.

B2	IAF SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM	Date	Time	Room

Session: 3. Advances in Space-based Communication Systems and Services, Part 2

04.10.2023 | 15:00 | BCC B2

Christopher VASKO
Optical and Quantum Innovation Engineer
European Space Agency (ESA)

KEYNOTE: B2.3 Optical and Quantum Communication – Bridging the Final Frontiers to Space. Where We Are and Where We Might Be Going

Abstract
Optical and Quantum Communication are certainly disruptive technologies for satcom market. While terrestrial services have successfully revolutionized the market, significant technology gaps remain for space applications for both optical and quantum technologies. Initially, only few isolated and self-standing developments have successfully been launched in niche areas. This is now changing rapidly.

In the recent years, the emergence of large commercial satcom constellations have created new opportunities for developing upstream technologies, figuratively tying satellites into commercial networks and making them true non-terrestrial networks. The move from RF towards optical technologies is made evident as next generations of constellation nodes aim to embark optical intersatellite links to manage the data traffic across the constellations.

Quantum technologies are slowly evolving beyond quantum key distribution concepts. Those are the domain of security applications and often underpin large governmental projects that are able to develop security sensitive hardware. However, other quantum technologies are slowly emerging from labs and academic environments, in search of early adopters. Today a key challenge remains in the identification of commercial use cases that allow to validate the advantages of quantum technologies in real world conditions beyond the labs.

This paper will review ongoing development programmes around the world aimed at developing Optical and Quantum communication technologies, discuss current market developments and upcoming projects. It aims to provide a wider, global perspective on the topic and to refine both the context and background on these for an interested audience.

C1	IAF ASTRODYNAMICS SYMPOSIUM	Date	Time	Room

Session: 2. Attitude Dynamics (2)

04.10.2023 | 10:15 | BCC B4

Mikhail OVCHINNIKOV
Chief Researcher and the Head of Space Systems Dynamics Department
Keldysh Institute of Applied Mathematics
Russia

KEYNOTE: C1.2 "Breakwell Lecture" - Small Satellites Dynamics and Control: Retrospect and Future

Abstract
Small satellites offer a number of well-known benefits, such as low cost, simplified development, manufacturing, launch and operation, as well as their consequent accessibility and utility for a wide range of users, from universities to large space agencies. One of the conceptual advantages of small satellites is the possibility to combine the existing practice with novel techniques and non-verified, sometimes risky, approaches. This feature refers also to development of small satellites dynamics models and motion control algorithms. In the beginning of the small-satellite era, passive and semi-passive techniques were used to provide attitude without any control of orbital motion having been provided by conditions of the piggy-back launch or by orbital-station deployment. Emergence of multi-satellite constellations and, next, formations demanded to ensure the relative distance and even relative motion which cannot be solved without proper attitude motion, even if orbital motion is provided without fuel. Nowadays tendency to implement small satellites in interplanetary and even beyond the Solar System missions requires to make use of available physical knowledge and fresh mathematical techniques. The paper presents the author's accomplished experience in the field since 1980's accompanied by the results of his colleagues and other small satellite fans, up to the prospection on the subject.

E1	IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM	Date	Time	Room
	Session: 4. In Orbit - Postgraduate Space Education	04.10.2023	10:15	HAC Museum GA

Klaus SCHILLING
Professor and Chair or Robotics and Telematics
University Wuerzburg
Germany

KEYNOTE: E1.4 Hands-on Education With Cubesats Motivating Innovative New Space Projects: Smart, Small, Self-Organizing Spacecraft Systems (S5)

Abstract
Education in space technology needs to reflect not only related important theory, but should also include practical implementation classes to practice problem solution capabilities. In this context in the curriculum "Satellite Technology" at University Würzburg already in the first semester so called "CanSat" labs were introduced since 2005, where teams of students implement a measurement device to characterize atmospheric properties, like density or temperature. The CanSat device will be deployed from an aircraft in about 3 km altitude, is implemented in an empty can as structural subsystem, and will descent by using a parachute.

In more advanced semesters, small CubeSat satellites serve as example to practice system engineering skills. In a "FlatSat" a baseplate with access to space simulation environments, measurement and test equipment allows to access different subsystem hardware components. This way challenges at different complexity levels are offered to the students and solved in hands-on approaches in close interaction with supervisors. A set of essential satellite building blocks (such as on-bord data handling system, power control system, attitude control system) is provided, such that the students can solve given specific tasks, like integration of sensor payloads or autonomous control software, and test them in hardware-in-the-loop experiments.

At the stage of MSc- or PhD-level, students are integrated in related project teams to ongoing research projects, based on CubeSat approaches. In particular, satellite formations are a core research topic in Würzburg, allowing parallel teams to contribute. Here innovative topics in Earth observation, like characterization of cloud composition by use of computed tomography approaches to derive from measurement of backscattered Sun light from different perspectives enabled by the multi-satellite system. This way, slice by slice an image of the cloud's interior is generated. It is motivating for the students to work here in cooperation with scientists in interdisciplinary and international teams.

Hands-on experiments guide students in the "Satellite Technology" program at University Würzburg in tasks of increasing complexity to apply system engineering skills for finding solutions. At advanced stage of studies, they acquired the appropriate experience to contribute to ongoing CubeSat research projects as a precursor to contribute to future complex space technology implementation projects at agencies and in industry.

E6	IAF BUSINESSES AND INNOVATION SYMPOSIUM	Date	Time	Room
	Session: 2. Public-Private Partnerships: Traditional and New Space Applications	04.10.2023	10:15	HAC Balcony 2

Richard DALBELLO
Director
Office of Space Commerce, National Oceanic and Atmospheric Administration (NOAA)
United States

Nancy WOLFSON
American Institute of Aeronautics and Astronautics (AIAA)
United States

KEYNOTE: E6.2 The U.S. Department of Commerce and the SEIC IAF on PPP Models for Space Resources and Sustainability

Abstract
Join our Keynote Speakers for a session on space sustainability and space resource utilization at the IAC 2023! Space resources refer to the natural physical materials and substances that can be found in space and on celestial bodies, such as asteroids, comets, the Moon, and other planets. With the increasing diversity of commercial activity in space, including in-situ resource utilization, there is a corresponding imperative to manage human-made debris, evolve collision avoidance mechanisms, and vastly improve coordination and data sharing among operators. Our SEIC E6.2 session's experts will discuss the relationships between space sustainability and novel space activities such as in-situ resource utilization and in-space assembly and manufacturing. They will also discuss implications for space operations, facilitation of new commercial activities that can help sustain space ventures, and the new norms and regulatory framework needed to do so safely- in the long term. Our distinguished experts - Dr. Richard DalBello, Director of the Office of Space Commerce, and Nancy C. Wolfson, Chair of the IAF-SEIC- will each share their insights through their respective presentations. Dr. DalBello will discuss "Achieving Space Sustainability," Dr. Abbud-Madrid will expound on "Space Resources and The Future of Space Exploration," and Nancy C. Wolfson will discuss the new IAF-SEIC research project on "Designing an Entity Model After the UN-ITU" for Space Resources. We will conclude the session with an interactive Q&A/Poll.

Thursday 5 October

A7	IAF SYMPOSIUM ON ONGOING AND NEAR FUTURE SPACE ASTRONOMY AND SOLAR-SYSTEM SCIENCE MISSIONS	Date	Time	Room

Session: 1. Space Astronomy Missions, Strategies and Plans

05.10.2023 | 10:15 | BCC Auditorium Balcony

Pietro UBERTINI
Associate Director of Research
National Institute for Astrophysics (INAF)
Italy

KEYNOTE: A7.1 The Italian Participation to the CSES-1 and CSES-2 Missions: Recent Results and Future Perspectives

Abstract
Based on an agreement between the China National Space Administration (CNSA) and the Italian Space Agency (ASI), the Limadou Collaboration represents the Italian contribution to the China Seismo Electromagnetic Satellite (CSES) constellation.

The scientific institutes participating to this space program are the Italian National Institute for Nuclear Physics (INFN), the Italian Institute for Astrophysics (INAF), the Italian Institute of Geophysics and Volcanology (INGV) and various Italian Universities. The first CSES-1 was launched on February 2, 2018 from the Jiuquan space center carrying a suite of eight advanced instruments, two of them developed with a large Italian contribution: the High-Energy Particle Detector (HEPD-01) and the Electric Field Detector (EFD-01). During the 5 years of successful operation the mission has obtained important results in the field of Cosmic Rays, Space Weather, Sun- Earth interaction, lithosphere-ionosphere-magnetosphere coupling also associated to pre-seismic and co-seismic phenomena, and more recently on the ionospheric electric field perturbances triggered by terrestrial (eruptions) and strong impulsive cosmic explosions.

We will discuss the status of the mission, outline the main results obtained, and future perspectives opened by the joint operation of CSES-1 and CSES-2, the latter carrying on board the new, state of the art, Italian instruments HEPD-02 and EFD-02.

The talk is presented on behalf of CSES- Limadou Collaboration.

E10	IAF SYMPOSIUM ON PLANETARY DEFENSE AND NEAR-EARTH OBJECTS	Date	Time	Room

Session: 1. Planetary Defense from Asteroids and Comets

05.10.2023 | 15:00 | HAC Hall B

Jason KALIRAI
Mission Area Executive for Civil Space
The Johns Hopkins University Applied Physics Laboratory
United States

KEYNOTE: E10.1 Dart: Latest Results From the Dimorphos Impact and a Look Forward to Future Planetary Defense Initiatives

Abstract
DART, the Double Asteroid Redirection Test, successfully impacted asteroid Dimorphos on September 26, 2022, becoming the first mission to demonstrate asteroid deflection. Shared live via a NASA broadcast, over a million concurrent viewers around the world watched as the DART spacecraft streamed images to Earth up to the final second before its impact with Dimorphos. In this talk, we will share with the audience the final phases of the DART encounter and the latest results from the DART Investigation Team's analysis of ground and space-based data. This includes measurements on the amount of deflection that DART imparted on Dimorphos, a determination of the momentum transfer enhancement factor, and results on understanding the geology and surface characteristics of the impact site.

The success of the DART mission paves the future for a bold international Planetary Defense program. We will share ideas on bolstering international coordination, developing new technologies that can mitigate different types of asteroid threats, and closing identified gaps in our overall preparedness.

Friday 6 October

B2	IAF SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM	Date	Time	Room

Session: 6. Advances in Space-based Communication Technologies, Part 2 | 06.10.2023 | 10:15 | BCC B2

Mirko MAGAROTTO
Researcher
University of Padova
Italy

KEYNOTE: B2.6 X-Band Plasma-Based Reflective Surface

Abstract
Recently, plasma-based reflective surfaces have been proposed to control the reflection of an incident electromagnetic (EM) wave in terms of beam-steering and polarization. A plasma-based reflective surface consist on a series of plasma discharges placed on top of a ground plane in which the phase front of the reflected wave (i.e., its direction) can be reconfigured varying plasma parameters. Specifically, the plasma density can be controlled varying the electrical power spent to sustain each discharge. Moreover, if a magnetic field is added, also the polarization of the reflected wave can be fully controlled (e.g., conversion from linear to circular).

Plasma-based reflective surfaces are an appealing technology for SatCom and radio navigation. Indeed, operations of beam-forming and beam-steering can be accomplished electronically without relying on mechanical moving parts or complex phasing systems. This feature can be exploited in broadcast satellites if multi-beam antennas are required to widen the coverage area maintaining high signal levels. The possibility to control the polarization is also appealing if signals are transmitted relying on circular polarization (e.g., in the field of radio navigation). Indeed the design of the antennas that generate the signal could be eased with respect to the state of the art (e.g., horn antennas instead of helix). Finally, once the plasma is turned "off", the interference produced by plasma-based reflective surfaces on other antennas in the nearby is drastically reduced provided that the main conductive medium (i.e., plasma) fades. This is very useful in satellite applications where several antennas are usually stacked together because of the strict volume constrains.

In this work we present the design of a plasma-based reflective surface operated in X band. A combined numerical-experimental approach will be adopted. Numerical simulations of both the plasma dynamics within the discharges and the EM response of the reflective surface will be accomplished with the software OpenFoam and CST Studio Suite, respectively. Plasma discharges will be realized and tested to be used as benchmark for the numerical solvers both in terms of plasma parameters and EM response. Thus, the design presented in this work will be a first step toward the development of a plasma-based reflective surface for space application.

C4	IAF SPACE PROPULSION SYMPOSIUM	Date	Time	Room

Session: 9. Disruptive Propulsion Concepts for Enabling New Missions | 06.10.2023 | 10:15 | BCC A8

Jiro KASAHARA
Professor
Institute of Materials and Systems for Sustainability, Nagoya University
Japan

KEYNOTE: C4.9 Space Flight Experiments of Detonation Engine System by Using Sounding Rocket S-520

Abstract
The detonation engine generates detonation and compression waves at extremely high frequencies (1–100 kHz) to drastically increase reaction speed, leading to radical reduction of rocket engine weights and high performance by easy generation of thrust. The research group of Nagoya University, Keio University, JAXA/ISAS, and Muroran Institute of technology has successfully demonstrated a detonation engine in space flight. The Detonation Engine System (DES) developed in this study was loaded onto the mission section of the sounding rocket S-520-31 and launched from the JAXA Uchinoura Space Center at 5:30 a.m. on July 27, 2021. After the separation of the first stage rocket, the rotating detonation engine and pulse detonation engine were successfully operated in space, and photo images, pressure, temperature, vibration, position, and attitude data were acquired by telemetry and RATS (Reentry and Recovery Module with Deployable Aeroshell Technology for Sounding Rocket Experiment). The fuel is methane and the oxidizer is oxygen. The success of this space flight demonstration will bring the detonation engine much closer to practical use as a kick motor for deep space exploration, and as a first and second stage engine for rockets. Now the liquid propellant (ethanol-N2O) detonation engine system for the next sounding rocket S-520-34 project scheduled on summer 2024 is in the process of development. The recent progress of the project and fundamental research of detonation engines will be addressed.

C4	IAF SPACE PROPULSION SYMPOSIUM	Date	Time	Room

Session: 10-C3.5. Joint Session on Nuclear Power and Propulsion Systems, and Propellantless Propulsion

06.10.2023 | 13:45 | BCC A8

Dale THOMAS
Professor and Eminent Scholar of Systems Engineering in the Department of Industrial and Systems Engineering and Engineering Management
University of Alabama in Huntsville
United States

KEYNOTE: C4.10-C3.5 Nuclear Thermal Propulsion – Progress and Potential

Abstract
This keynote address will describe the current research and development efforts currently underway within the United States on Nuclear Thermal Propulsion (NTP), with a particular focus on the Demonstration Rocket for Agile Cislunar Operations (DRACO) project, a joint effort of the United States Defense Advanced Projects Agency and the National Aeronautics and Space Administration. The impact of NTP propulsion on both human and scientific exploration of the Solar System will also be discussed. And finally, the topic of advanced NTP propulsion will be addressed, including liquid fuel NTP engines.

E4	57th IAA HISTORY OF ASTRONAUTICS SYMPOSIUM	Date	Time	Room

Session: 3. History of Western Asia Contribution to Astronautics

06.10.2023 | 10:15 | HAC Balcony 2

Rustam B. RUSTAMOV
Professor
Institute of Physics, National Academy of Science of Azerbaijan
Azerbaijan

KEYNOTE: E4.3 Overview of Space Science and Technology History – Destiny Against of Rule

Abstract
International Astronautical Congress 1973: It has been held the 24th IAC in 1973 in Baku capital of Azerbaijan. It was biggest Congress of the IAF for that time in terms of participants more than 1500 from 30 countries such as USA, Czechoslovakia, Cuba, Argentina, Brazil, India, Japan, Iran, Spain, Italy, France, Sweden and embraced topics reflecting a wide range of space science and technology. The slogan of the Congress was "Cosmos must become an area of peace", "Cosmos must serve humanity: it must be discovered for the happiness of man!" Azerbaijan was one of the republics of the former Soviet Union. The Congress 1973 has created an excellent environment on establishment of entity related to the space science and technology activities. Taking into account of the capacity of country it has been decided engagement of Azerbaijan for Earth study by use of advances of space technology.

Establishment of the Caspiy Center: A few months later after the end of the Congress, on 21 August 1974, the south-eastern Scientific Center for Natural Resource Studies – Caspiy was established in Baku. This Center has been transferred into Space Research of Natural Resources Institute behind of National Academy. In 1981, the Institute has become the Scientific Production Association for Space Research (SPASR), which was pioneer of such management system as scientific production within the Academy system of the former Soviet Union. SPASR from 1985 to 1992 operated under the Ministry of General Machine-Building the second powerful ministry after Ministry of Defense of the former USSR.

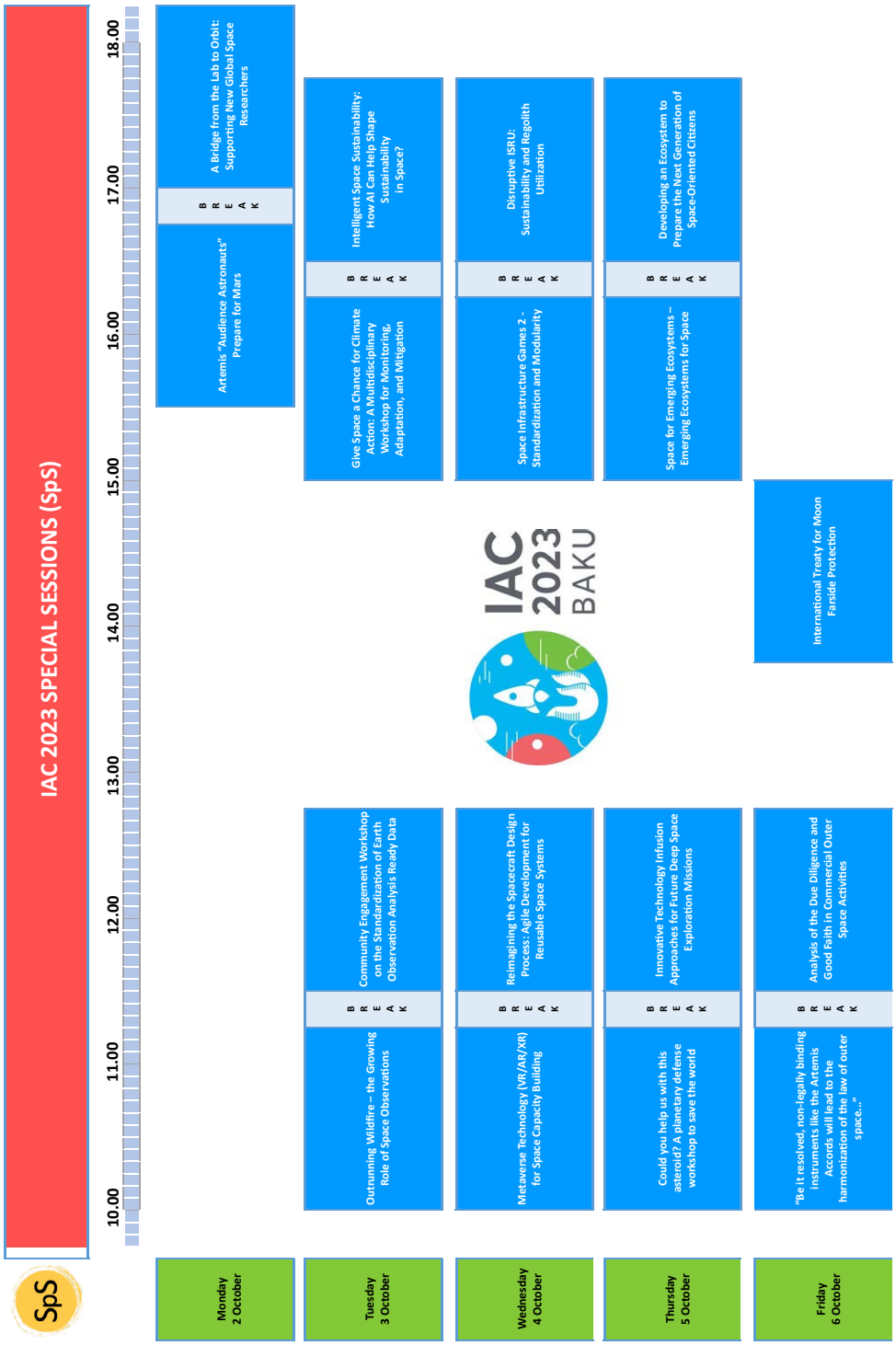
Azerbaijan National Aerospace Agency: Azerbaijan National Aerospace Agency (ANAS) has established on the base of Scientific Production Association for Space Research after collapse of Soviet Union. During all the period space science and technology organization was engaged in various scientific research fields such as astrophysics, development of space-borne and air-borne parts and equipment, and remote sensing devices. In the meantime, number of local and international events have conducted.

IAF Memberships: Azerbaijan National Aerospace Agency is the first organization who become the member of the IAF. Today Shamakhy Astrophysical Observatory and Azercosmos are the members of the IAF.

Azercosmos: Space Agency of the Republic of Azerbaijan (Azercosmos) is providing customized solutions based on advanced technologies for peace and prosperity. Now days Space Agency of the Republic of Azerbaijan services are not limited only deliver a broad spectrum of services and solutions, as well as engage in a wide range of R&D activities Space Agency of the Republic of Azerbaijan is the main organization who responsible for IAC74 which will be held in Baku, Azerbaijan in October 2-6, 2023.

4 Special Sessions

4.1 Special Sessions at a Glance



4.2 Special Sessions per Day

Monday 2 October

15:15 - 16:25 Artemis "Audience Astronauts" Prepare for Mars

Room: HAC Hall C

Format: Simulated Crew Briefing

Organizers:

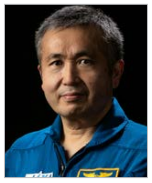
Sam SCIMEMI
Senior Assistant,
Exploration Systems Development Mission Directorate (ESDMD), National Aeronautics and Space Administration (NASA)
United States

Erin MAHONEY
Deputy Communications Director,
Strategy and Architecture, Exploration Systems Development Mission Directorate (ESDMD), National Aeronautics and Space Administration (NASA)
United States

Darcy ELBURN
Communications Integration Manager,
Moon to Mars Program Office, Exploration Systems Development Mission Directorate (ESDMD), National Aeronautics and Space Administration (NASA)
United States

Speakers:

Kenneth BOWERSOX
Deputy Associate Administrator,
Space Operations Mission Directorate (SOMD), National Aeronautics and Space Administration (NASA)



Koichi WAKATA
Astronaut,
Japan Aerospace Exploration Agency (JAXA)
Japan

Erika ALVAREZ
Systems Engineering and Integration,
Moon to Mars Program Office, Exploration Systems Development Mission Directorate (ESDMD), National Aeronautics and Space Administration (NASA)
United States

Patrick CHAI
In-space Propulsion Lead,
Mars Architecture Team, Exploration Systems Development Mission Directorate (ESDMD), National Aeronautics and Space Administration (NASA)
United States

Ryan WATKINS
Program Scientist,
Science Mission Directorate, National Aeronautics and Space Administration (NASA)
United States

Will you be selected for a Mars analog mission at the Moon? A raffle will determine audience members to participate in a simulated astronaut briefing. In the 2030s, they will be Artemis astronauts assigned a months-long mission to the Moon that will act as the first integrated partial Mars analog. Experts will walk you through your mission, then the audience will investigate the mission concept through probing questions. Are you up for the challenge?

16:35 - 17:45 A Bridge From the Lab to Orbit: Supporting New Global Space Researchers

Room: HAC Hall C

Format: Workshop

Organizers:

Jessica ROUSSET
Deputy Director,
Interplanetary Initiative, Arizona State University
United States

Allison AREIAS-VOGEL
Strategic Partnerships and Initiatives Expert,
United Nations Office for Outer Space Affairs (UNOOSA)
Austria

Liz WARREN
Director,
Research Development for Orbital Reef, Blue Origin
United States

Speakers:

Allison AREIAS-VOGEL
Strategic Partnerships and Initiatives Expert,
United Nations Office for Outer Space Affairs (UNOOSA)
Austria

Erika WAGNER
Director,
Senior Director, Emerging Market Development, Blue Origin
United States

Michael GOLD
Chief Growth Officer,
Redwire
United States

Thorben KÖNEMANN
Head of Science and Operation,
ZARM, University of Bremen
Germany

Carl GELDERLOOS
Strategic Development Executive and Physicist,
Laboratory for Atmospheric and Space Physics, University of Colorado Boulder
United States

Ken SHIELDS
Senior Director,
Emerging Market Development and In-Space R&D, Sierra Space
United States

By participating in this guided workshop, you will help design the ideal user journey for sending experiments to a future commercial space station in low Earth orbit (LEO). This session will seek to uncover current challenges for research and development on the International Space Station, brainstorm ways to overcome barriers, identify opportunities for new capabilities, and publish a report on key findings. This workshop is ideally suited for a diverse, international audience of academic researchers planning to use or using LEO to advance their science, industry scientists and leaders seeking to leverage new LEO platforms to advance their R&D strategies, and university administrators.

Tuesday 3 October

10:15 - 11:25 Outrunning Wildfire – The Growing Role of Space Observations

Room: HAC Hall C

Format: Fishbowl

Organizers:

Harry CIKANEK
Chair,
IAF Earth Observations Committee
United States

James GRAF
Director,
Earth Science and Technology, NASA Jet Propulsion Laboratory
United States

Speakers:

Simonetta CHELI
Director of Earth Observation Programmes and Head of ESRIN,
European Space Agency (ESA)
Italy

Koji TERADA
Vice President,
Japan Aerospace Exploration Agency (JAXA)
Japan

Karen ST. GERMAIN
Director for Earth Science,
National Aeronautics and Space Administration (NASA)
United States

Selma CHERCHALI
Head of the Earth Observation Department,
Centre National d'Etudes Spatiales (CNES)
France

Wildfire threats and impacts are increasing dramatically and rapidly due to climate change and human development. This has greatly increased the political priority to address these threats. Space Based observations play a unique and essential role in mitigating the risks and impacts before, during and after wildfires. Engage with Agency leaders for Earth Observations to develop an integrated view of this much needed application of the unique capabilities of space-based observations and products.

11:35 - 12:45 Community Engagement Workshop on the Standardization of Earth Observation Analysis Ready Data

Room: HAC Hall C

Format: Workshop

Organizer:

Liping DI
Professor and Director,
Center for Spatial Information Science and Systems, George Mason University
United States

Speakers:

Liying GUO
Research Professor and Associate Director,
Center for Spatial Information Science and Systems, George Mason University
United States

Liping DI
Professor and Director,
Center for Spatial Information Science and Systems, George Mason University
United States

Matthew STEVENTON
Chair,
ARD Oversight Group, Committee on Earth Observation Satellites (CEOS)

Joshua LIEBERMAN
Director,
Collaborative Solutions and Innovation Program, Open Geospatial Consortium (OGC)
United States

Analysis ready data (ARD) is satellite data that have been processed to a minimum set of requirements and organized into a form that allows immediate analysis with a minimum of additional user effort and interoperability both through time and with other datasets. ARD standardization will impact all of you. Please come to the workshop to learn the current status of ARD standardization, voice your opinions, and engage in defining ISO and OGC ARD standards.

15:00 - 16:10 Give Space a Chance for Climate Action: a Multidisciplinary Workshop for Monitoring, Adaptation, and Mitigation

Room: HAC Hall C

Format: Workshop

Organizers/Speakers:

Bruce CHESLEY
Senior Associate,
Teaching Science and Technology, Inc (TSTI)
United States

Marcello ROMANO
Professor,
Politecnico di Torino
Italy

Julie CHESLEY
President,
The Chesley Group
United States

Sita SONTY
Partner and Associate Director,
Boston Consulting Group
United States

Mahhad NAYYER
Manager,
Space Sustainability Center, National Aerospace Science & Tech Park
Pakistan

Building on the momentum created at the Global Conference on Climate Change (GLOC) in May 2023, this workshop invites the global space community to add their voice to the ongoing call for climate action utilizing space-based approaches. This engaging and interactive session fosters a vigorous discussion of climate mitigation actions and sets the foundation for future technology development, policy initiatives, and action on climate change mitigation.

16:20 - 17:30 Intelligent Space Sustainability: How Can AI Help Shape Sustainability in Space?

Room: HAC Hall C

Format: Workshop

Organizer:

James PARR
CEO,
Trillium Technologies
United Kingdom

Speakers:

James PARR
CEO,
Trillium Technologies
United Kingdom

Allison AREIAS-VOGEL
Strategic Partnerships and Initiatives Expert,
United Nations Office for Outer Space Affairs (UNOOSA)
Austria

Alison LOWNDES
Senior Scientist,
NVIDIA
United Kingdom

Anu OJHA
Engagement, International and Inspiration Director,
UK Space Agency
United Kingdom

Tejpaul BHATI
Chief Revenue Officer,
Axiom Space, LLC
United States

Peter MARTINEZ
Executive Director,
Secure World Foundation
United States

Carolyn MERCER
Chief Technologist,
Science Mission Directorate, National Aeronautics and Space Administration (NASA)
United States

Space technology and exploration are playing an increasingly vital role in shaping Humanity's future. How can we ensure bold space endeavours are done sustainably over the next decade and beyond? As AI matures in capabilities, what will be the role of autonomy and ML in enabling sustainable space exploration and exploitation? We will explore key ideas in space traffic management, planetary protection as well as emerging technologies for spacecraft end-of-life, green fuels and closed-loop systems.

Wednesday 4 October

10:15 - 11:25 Metaverse Technology (VR/AR/XR) for Space Capacity Building

Room: HAC Hall C

Format: Metaverse Interactive Session

Organizer:

Hilde STENUIT
Scientist Team Lead,
Business Development Team, ICE Cubes, Space Applications Services NV
Belgium

Speakers:

Hilde STENUIT
Scientist Team Lead,
Business Development Team, ICE Cubes, Space Applications Services NV
Belgium

James GREEN
Chief Executive Officer, Chairman,
Space Science Endeavors LLC, The Metavisionaries
United States

Wasim AHMED
CEO,
The Metavisionaries UK
United Kingdom

Camilo Andrés REYES
Project Manager,
Space-related Initiatives, The Metavisionaries UAE
United Arab Emirates

Join us at the “Metaverse for Space Capacity Building” special session. Experience the power of immersive and interactive capacity building through the metaverse for space-related topics. Be a part of the cutting-edge technology revolutionizing the way space capacity building is conducted. Meet and network with experts from around the world and collaborate on future projects. Don’t miss this opportunity to learn and be a part of shaping the future of the space industry! Register now!

11:35 - 12:45 Reimagining the Spacecraft Design Process: Agile Development for Reusable Space Systems

Room: HAC Hall C

Format: Mock Design Challenge & Discussion

Organizers:

Ryan DE FREITAS BART
PhD Candidate,
Department of Aeronautics and Astronautics, Massachusetts Institute of Technology
United States

Frances DE FREITAS
Agile Coach,
Northrop Grumman Corporation
United States

Join us to discuss innovative concepts for the development of reusable space systems using agile processes! In this session, we will hold a mock design competition where participants will be separated into teams and tasked with reviewing a design process for a proposed reusable lunar lander. This workshop welcomes participants from all disciplines to develop novel concepts to frame a White Paper on this topic to inform future research directions and spacecraft development programmes.

15:00 - 16:10 Space Infrastructure Games 2 - Standardization and Modularity

Room: HAC Hall C

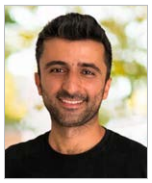
Format: Interactive Games and Reflection

Organizer:

Kevin BARRY
Co-Founder,
LightBridge Strategic Consulting LLC
United States

Speakers:

John C. MANKINS
Vice President,
Moon Village Association (MVA), President, ARTEMIS Innovation Management Solutions
United States



Manny SHAR
Managing Director,
Orbit Fab
United Kingdom

Dave HEBERT
Vice President,
Global Marketing and Communication, Astroscale
United States

Al TADROS
Mike Gold,
Chief Growth Officer,
Redwire Space
United States

Joerg KREISEL
CEO,
JKIC
Germany

Nancy WOLFSON
American Institute of Aeronautics and Astronautics (AIAA)
United States

Join us to compete in interactive physical games (with prizes) to explore the positive and negative impacts of Standardization and Modularity for the creation of a sustainable and profitable Space Economy. Take advantage of this unique opportunity to engage with colleagues, local participants, young professionals, and space leaders/experts on how these ideas are impacting current projects and discuss how they can be implemented to accelerate humanity's expansion into space.

16:20 - 17:30 Disruptive ISRU: Sustainability and Regolith Utilization

Room: HAC Hall C

Format: Campfire

Organizers:

Haroon B. OQAB
President,
Columbiad Launch Services
Canada

George B. DIETRICH
Chairman,
Columbiad Launch Services
Canada

Speakers:

John WEN
Director,
Laboratory for Emerging Energy Research (LEER)
Canada

Jean-Pierre HICKEY
Director,
Multi-physics Interaction Laboratory (MPI Lab), University of Waterloo
Canada

Massimiliano VASILE
Director,
Aerospace Centre for Excellence, University of Strathclyde
United Kingdom

Nobuyuki KAYA
President,
Wave Arrays
Japan

Andrew WILSON
Managing Director,
Metasat
United Kingdom

Regolith represents the largest and most accessible solid resource on the lunar and Mars surface. The sustainable use of this resource is enabling new technological advances that will shape space exploration for years to come. This special session brings together an interdisciplinary panel in a campfire format to discuss the novel usage of regolith and the potential sustainability implication for long-term space missions.

Thursday 5 October

10:15 - 11:25 Could You Help Us With This Asteroid? A Planetary Defense Workshop to Save the World

Room: HAC Hall C

Format: Workshop

Organizers:

Alex KARL
Operations Engineer,
Space Applications Services
Belgium

Alissa J. HADDAJI
Director,
Boston Space Consortium; Lecturer in Space Law, Policy and Ethics
United States

Speakers:

Aurélie MOUSSI
Project Manager,
Small Bodies Exploration Missions, Centre National d'Etudes Spatiales (CNES)
France

Daniel MAZANEK
Senior Space Systems Engineer,
Langley Research Center, National Aeronautics and Space Administration (NASA)
United States

Anastasia MEDVEDEVA
Independent Journalist,
Aerospace Communicator and Influencer
Russia

Frans VON DER DUNK
Professor of Space Law,
College of Law, University of Nebraska-Lincoln
United States

Have you heard about the asteroid impact that wiped out the dinosaurs? Want to help prevent it from happening again? Join this citizen-science workshop led by world experts in the field of planetary defense. Using various fictitious scenarios, we'll discuss different areas: technology, science, legal and media/communications to learn how to distinguish facts from fiction, and you can contribute! With your help and guided by the experts this workshop will explore different aspects to mitigate a NEO impact threat and how to avoid the fate of the dinosaurs.

11:35 - 12:45 Innovative Technology Infusion Approaches For Future Deep Space Exploration Missions

Room: HAC Hall C

Format: Campfire

Organizers:

Tom CWIK
Chief Technologist,
NASA Jet Propulsion Laboratory (JPL)
United States

Charles NORTON
Deputy Chief Technologist,
NASA Jet Propulsion Laboratory (JPL)
United States

Speakers:

Carolyn MERCER
Chief Technologist,
Science Mission Directorate, National Aeronautics and Space Administration (NASA)
United States

A. C. CHARANIA
Agency Chief Technologist,
National Aeronautics and Space Administration (NASA)
United States

Agnès MESTREAU
ESA-ESTEC Head of the Systems Engineering Division,
European Space Agency (ESA)
Netherlands

Hitoshi KUNINAKA
Director General,
Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency (JAXA)
Japan

Join us for a keynote, panel, and audience interactive discussion on the opportunities and challenges of infusing new technology into deep space science missions. This session will allow scientists, technologists, project and program managers to share their stories, and work with you, to formulate a pathway together toward achieving more ambitious science return through the adoption of mission-enabling advances in space technology.

15:00 - 16:10 Space for Emerging Ecosystems – Emerging Ecosystems for Space

Room: HAC Hall C

Format: Campfire

Organizer:

Michal BRICHTA
Head,
Slovak Investment and Trade Development Agency (SARIO) - Slovak Space Office
Slovakia

Moderator:

Daniel SAGATH
International Cooperation Manager,
Slovak Investment and Trade Development Agency (SARIO) - Slovak Space Office
Slovakia

Speakers:

Pilar ZAMORA ACEVEDO
Executive Director,
Colombian Space Agency (AEC)
Colombia

Pascale EHRENFREUND
IAF Bureaum IAF past President
International Space University (ISU)
President of Committee on Space Research (COSPAR)

Alejandro J. ROMAN MOLINAS
General Director of Aerospace Development,
Paraguayan Space Agency
Paraguay

Allison AREIAS-VOGEL
Strategic Partnerships and Initiatives Expert,
United Nations Office for Outer Space Affairs (UNOOSA)
Austria

Annalisa DONATI
Secretary General,
EURISY
France

Mae JEMISON
Principal,
100 Year Starship
United States

Matias CAMPOS
CEO & Founder,
Astralintu Space Technologies
Ecuador

Tensae ALI
Regional Coordinator, Africa,
Space Generation Advisory Council (SGAC)
Ethiopia

Jonathan HUNG
Founder & Executive Chairman,
Singapore Space and Technology Limited (SSTL)
Singapore

Fuad ASLANOV
Vice-Chairman,
Azercosmos Space Agency of the Republic of Azerbaijan
Azerbaijan

Every country has something to offer to the global space community and can contribute to its endeavors. The Space for emerging ecosystems – emerging ecosystems for space will gather experience from all over the world on how to build a new space ecosystem, scale it up, and make it a valuable part of the global space community.

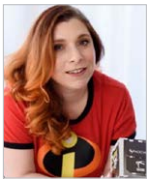
16:20 - 17:30 Developing an Ecosystem to Prepare the Next Generation of Space-Oriented Citizens

Room: HAC Hall C

Format: Workshop

Organizers:

Ayelet WEIZMAN
Lecturer, Researcher & Leader,
Innovation, Space & Robotics, EdTech Programme, Kibbutzim College of Education
Israel



Maya GLICKMAN-PARIENTE
CEO,
Head of Operations, SPACECIALIST, Sky and Space Company
Israel

Speakers:

Danna Linn BARNETT
Senior Satellite Systems Engineer, Chairwoman,
Elbit Systems, WiSpace
Israel

Liat DOZORETZ
Manager,
Space Education Center, Kiryat Shmona Municipality
Israel

Michal JASHINSKI
Senior System Engineer,
Israel Aerospace Industries. Ltd.
Israel

Orianne LEIBOVITZ
Senior System Engineer,
Israel Aerospace Industries. Ltd.
Israel

Alice MILLER
Vice-President,
Space, Helios
Israel

What skills do you think your grandchildren will need in the future? The day when human space travel will be common, and many more people will be working on space-stations orbiting the Earth is very near. Our grandchildren will be the ones to lead this future, and we must provide them with the right skills to be capable of using their full potential. Now is the time to brainstorm all the possible aspects that they will need, such as Education, Finances, Law, Well-Being, Science, Engineering, etc. In this interdisciplinary session we will set the guidelines for a healthy space-traveling future society.

Friday 6 October

10:15 - 11:25 "Be It Resolved, Non-Legally Binding Instruments Like the Artemis Accords Will Lead to the Harmonization of the Law of Outer Space..."

Room: HAC Hall C

Format: Debate

Organizer:

Viva DADWAL
Associate,
King & Spalding LLP
Canada

Speakers:

Michael GOLD
Chief Growth Officer,
Redwire
United States

Ian GROSNER
Federal Attorney,
Brazilian Space Agency (AEB)
Brazil

Ruvimbo SAMANGA
Ambassador,
MILO Space Science Institute
Zimbabwe

Kai-Uwe SCHROGL
President,
International Institute of Space Law (IISL)
Germany

This multidisciplinary session brings together high-level speakers from the fields of space law and policy, politics and diplomacy, to engage in a fun and interactive debate on the impact of non-legally binding instruments on the development of the law on outer space. Non-legally binding instruments like the Artemis Accords have gained relevance following the rapid and successful contributions of emergent State and non-State actors, proliferation of space technologies, and a strained multilateral order.

The debate is organized by the Space Arbitration Association.

Disclaimer: The debate aims to examine the development of the law on outer space in an inclusive and respectful manner. The views and opinions expressed at this event are advanced solely to facilitate dialogue and discussion for educational purposes. They do not necessarily reflect the actual views of any of the speakers or their employers.

11:35 - 12:45 Analysis of the Due Diligence and Good Faith in Commercial Outer Space Activities

Room: HAC Hall C

Format: Campfire

Organizers:

Alyson Claire DECKER
Legal Advisor,
Jus Ad Astra
United States

Vugar MAMMADOV
Lawyer,
Azercosmos Space Agency of the Republic of Azerbaijan
Azerbaijan

Speakers:

Alyson Claire DECKER
Legal Advisor,
Jus Ad Astra
United States

Vugar MAMMADOV
Lawyer,
Azercosmos Space Agency of the Republic of Azerbaijan
Azerbaijan

Nebile Pelin MANTI
Academic at PIL Department, Istanbul University
Türkiye

Lisa KUCHER
Lead Legal & Business Analyst,
RespectUs
Luxembourg

Riccardo LOSCHI
Associate,
LALIVE
Italy

This special session shall discuss core principles of international law such as jurisdiction, due diligence, due regard, and good faith, including related disputes and specific cases, as it relates to commercial outer space activities. For example, due diligence evolved as an element of a State's international obligations and such considerations overlap with broader discussions on the role of fault in international responsibility. As private outer space activities have increased, young professionals should get acquainted with the challenges posed by commercial space exploration and how the creation of new legal regimes and practices can promote long-term sustainability in outer space activities.

13:45 - 14:55 International Treaty for Moon Farside Protection

Room: HAC Hall C

Format: Workshop

Organizer:

Nicolò ANTONIETTI
Corresponding Member,
International Academy of Astronautics (IAA), National Institute of Astrophysics (INAF), InCosmiCon
Italy

Facilitator:

Claudio MACCONE
Director for Scientific Space Exploration and Chair,
International Academy of Astronautics (IAA)
Italy

Speakers:

Niklas HEDMAN
Committee Services and Research Section Chief,
United Nations Office for Outer Space Affairs (UNOOSA)
Sweden

Kai-Uwe SCHROGL
President,
International Institute of Space Law (IISL)
Germany

Marc Klein WOLT
Director,
Radboud Radio Lab
Netherlands

Brad BAILEY
Assistant Deputy Associate Administrator for Exploration,
National Aeronautics and Space Administration (NASA)
United States

Chuen Chern LOO
Head,
Space Publication and Registration Division, Radiocommunication Bureau, International Telecommunication Union (ITU)
Switzerland

Jack O. BURNS
Professor,
Department of Astrophysical and Planetary Sciences, Colorado Center for Astrodynamics Research, University of Colorado
United States

Antonino SALMERI
Space Lawyer,
Lunar Policy Platform
Italy

This Special Session advocates the support by all scientists working in different areas of science to submit the UNO an international treaty for the Moon Farside protection:

1. COSMOLOGY needs the radio quietness to pick up the feeble radiation of the hydrogen line down-shifted to MHz or kHz frequencies
2. ASTROBIOLOGY studies pre-biological interstellar molecules by virtue of their roto-vibrational spectra
3. SETI needs radio quietness to possibly detect Alien Civilizations "signatures"
4. PLANETARY DEFENSE. The seeing from the Moon is wonderful. Thus, optical telescopes pointing at the (blocked) Sun would enable high-accuracy measurements of the orbital parameters of NEOs

5 Interactive Presentations Sessions

5.1 Category Coordinators and Members of the IP Award Committee

Category A	SCIENCE AND EXPLORATION

Maria-Antonietta Perino

Thales Alenia Space,
Italy

Category B	APPLICATIONS AND OPERATIONS

Igor V. Sorokin
S.P. Korolev Rocket and Space Corporation Energia
Russian Federation

Category C	TECHNOLOGY

John C. Mankins
Vice President President, Moon Village Association (MVA)
Vice President, ARTEMIS Innovation Management Solutions
United States

Category D	INFRASTRUCTURE

Roberta Mugellesi-Dow
Integrated Applications Manager,
European Space Agency (ESA)
United States

Category E	SPACE AND SOCIETY

Lyn Wigbels

American Astronautical Society (AAS),
United States

5.2 IP Sessions and IP Award Ceremony

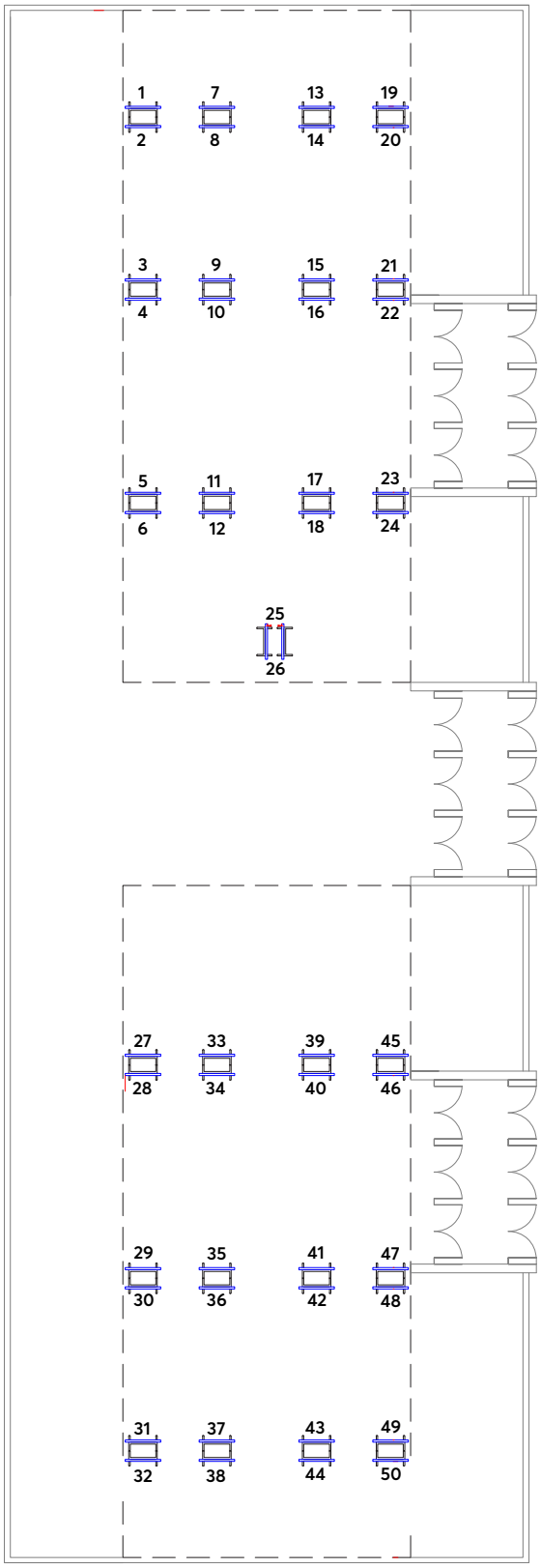
IP Session
Wednesday 4 October,
Baku Convention Centre (BCC),
12:50 – 13:30
(**IP Area**)

IP Award Ceremony
Thursday 5 October,
Baku Convention Centre (BCC),
12:50 – 13:30
(**ROOM BCC A6**)

IP Session
Thursday 5 October,
Baku Convention Centre (BCC),
13:30 – 14:50
(**IP Area**)

IP Session & IP Cocktail Reception
Thursday 5 October,
13:30-14:50,
IP Area Baku Convention Centre (BCC)

5.3 Interactive Presentations Floor Plans



5.4 Interactive Presentations Schedule

Please check the IAF App to get the latest updates on the Interactive Presentations.

Wednesday 4 October 2023

SCREEN #1

13:00-13:10 IAC-23/A1/IPB/80628
MARTIAN BIOSPHERE
Miguel Correa, Aerospace Technology Investigation Center - Fuerza Aérea Colombiana, Colombia

13:10-13:20 IAC-23/C3/IPB/80593
POWERING THE NEW SPACE ECONOMY WITH ADVANCED SOLAR TECHNOLOGIES
Luke Gordon, Solestial, Inc. United States

13:20-13:30 IAC-23/E3/IPB/75555
THE CREATION OF SPACE CAPABILITIES ON DEVELOPING COUNTRIES, THE ROLE OF SPACE POLICIES FORMULATION AT THE BEGINNING OF LATINAMERICA´S SPACE ERA.
Victoria Valdivia, [unlisted], Chile

SCREEN #2

13:00-13:10 IAC-23/A1/IPB/74791
AUTOMATED PUPILLOMETRY IN SPACE NEUROSCIENCE
Bader Shirah, [unlisted], Saudi Arabia

13:10-13:20 IAC-23/A1/IPB/75572
PUBLIC PERCEPTION AND ATTITUDE OF SPACE TRAVEL AND EXPLORATION AND SPACE MEDICINE IN SAUDI ARABIA
Bader Shirah, [unlisted], Saudi Arabia

13:20-13:30 IAC-23/E1/IPB/78342
A FRAMEWORK FOR COLLABORATIVE DISTRIBUTED DESIGN IN THE SPACE INDUSTRY- LEVERAGING THE SMITHVENT EXPERIENCE
Sarah Chu, United States

SCREEN #3

13:00-13:10 IAC-23/A6/IPB/75232
A MODEL FOR SATELLITE COLLISIONS
Mathilde Leuridan, Germany

13:10-13:20 IAC-23/B4/IPB/78806
STUDY OF SMALL SATELLITE CONSTELLATION FOR HIGH-RESOLUTION GREENHOUSE GAS MONITORING
Andrew Karim, Universite Laval, Canada

13:20-13:30 IAC-23/A6/IPB/75761
CUBESAT CONFUSION: CUBESAT ID VIA GROUND-BASED OBSERVATIONS OF A PULSED LED BEACON
Mark A. Skinner, The Aerospace Corporation, United States

SCREEN #4

13:00-13:10 IAC-23/A2/IPB/79367
PROJECT MUSA: A SYSTEMS ENGINEERING APPROACH TO BIOLOGICAL EXPERIMENTATION IN MICROGRAVITY
Carlos Rodríguez, Orbital Space Technologies Costa Rica

13:10-13:20 IAC-23/D1/IPB/78037
DIGITAL TWIN TECHNOLOGY AS A NEW APPROACH FOR INFRASTRUCTURE MANAGEMENT
Adalat Samadov, National Aviation Academy - Azerbaijan, Azerbaijan

13:20-13:30 IAC-23/B3/IPB/76289
THE EAGLE HAS LANDED: EVIDENCE OF THE NEED TO ASSIST SPACE TOURISTS TO OUTER SPACE
Barbara Le Roy, [unlisted], France

SCREEN #5

13:00-13:10 IAC-23/E7/IPB/80075
THE CASE OF OVERLAPPING SAFETY ZONES ON THE MOON: DELIMITATION OF SPACE, RIGHTS AND OBLIGATIONS
Niki Giannakou, National and Kapodistrian University Of Athens, Greece

13:10-13:20 IAC-23/B1/IPB/78941
PARAMETRIC INDEX INSURANCE FOR KENYAN SMALLHOLDER FARMERS BASED ON SATELLITE DERIVED SOIL MOISTURE.
Hellen Wanjala, Planet Labs Inc., The Netherlands

13:20-13:30 IAC-23/B1/IPB/78013
AEROSPACE MONITORING OF ENVIRONMENTAL RISKS
Aytaj Badalova, National Aviation Academy - Azerbaijan, Azerbaijan

SCREEN #6

13:00-13:10 IAC-23/B1/IPB/76749
DETECTION OF THE COLLAPSED BUILDINGS IN TURKY FROM MULTI-SENSOR VERY HIGH RESOLUTION SATELLITE IMAGES.
Tatsuyuki Sekine, ELSPINA VEINZ INC., Japan

13:10-13:20 IAC-23/E3/IPB/79326
EARTH'S ORBITS AS A UNESCO WORLD HERITAGE SITE
Selene Cannelli, Space Generation Advisory Council (SGAC), Italy

13:20-13:30 IAC-23/E6/IPB/75647
A BUILDER'S APPROACH TO ENGAGING THE SPACE ECONOMY: BALANCING ENTHUSIASM WITH CLARITY
Kelli Kedis Ogborn, Space Foundation, United States

SCREEN #7

13:00-13:10 IAC-23/C3/IPB/78337
FEASIBILITY ANALYSIS OF INTEGRATING THERMO-ELECTRIC GENERATORS TO SPACECRAFT SOLAR PANELS
Surya Vaibhav DVR, BMS College of Engineering, Bengaluru, India

13:10-13:20 IAC-23/A3/IPB/79931
SWARM UAVS: A NOVEL APPROACH FOR EFFICIENT REMOTE SENSING ON MARS
Shambhavi A S, Nitte Meenakshi Institute of Technology, India

13:20-13:30 IAC-23/D1/IPB/75591
HARDWARE DEGRADATION MODELS FOR DESIGN OPTIMIZATION OF REUSABLE SPACE SYSTEMS
Ryan de Freitas Bart, Massachusetts Institute of Technology (MIT), United States

Wednesday 4 October 2023

SCREEN #8

13:00-13:10 IAC-23/B4/IPB/75718
NEPAL'S HIGH SCHOOL 1U CUBESAT MUNAL INTEGRATED BUS SYSTEM: MODIFICATION OF THE BIRDS OPEN-SOURCE STANDARDIZED BUS
Trishna Shrestha, Nepal Space Foundation, Nepal

13:10-13:20 IAC-23/B1/IPB/75716
NEPAL'S MUNAL 1U EDGE AI TECHNOLOGY DEMONSTRATION CUBESAT FOR TARGETED EARTH IMAGE DOWNLINK CAPABILITY USING DEEP LEARNING
Anuja Shrestha, Nepal Space Foundation, Nepal

13:20-13:30 IAC-23/E7/IPB/79428
AN ANALYSIS OF SPACE LAW SYSTEM AS AN EXAMPLE OF SELF-CONTAINED REGIME: A STRANGER IN THE CROWD
Sima Moradinasab, Shahid Beheshti University, Iran

SCREEN #9

13:00-13:10 IAC-23/E4/IPB/77232
THE ROLE AND HISTORY OF SPACE IN SOCIETY
Həlilə Sadıqova, Azerbaijan

13:10-13:20 IAC-23/A1/IPB/80049
AUGMENTED COGNITION: SUPPORTING ASTRONAUT PERFORMANCE DURING MISSION-CRITICAL TASKS
Claudia Covarrubias, McGill Univeristy, Canada

13:20-13:30 IAC-23/A6/IPB/78346
BREAKING THE CYCLE: NOVEL CAPTURE MECHANISMS FOR ACTIVE SPACE DEBRIS REMOVAL
Anisa Taggart, University of Nottingham, United Kingdom

SCREEN #10

13:00-13:10 IAC-23/E1/IPB/75662
AN INTERDISCIPLINARY APPROACH TO SPATIAL DESIGN AT THE UNIVERSITY LEVEL
Julia Alvarez Vallero, INVAP, Argentina

13:10-13:20 IAC-23/E1/IPB/78303
MISSION MINERVA: THE ESA-ASI EDUCATION ACTIVITIES TO TACKLE EDUCATIONAL POVERTY IN VIEW OF DEVELOPING THE FUTURE SPACE WORKFORCE
Germana Galoforo, Italian Space Agency (ASI), Italy

13:20-13:30 IAC-23/C4/IPB/78916
SIDEWALL-MOUNTED PLANAR TYPE PROPULSION SYSTEM FOR POST MISSION DISPOSAL OF CUBESATS
Daeban Seo, Korea Aerospace Research Institute (KARI), Korea, Republic of

SCREEN #11

13:00-13:10 IAC-23/C2/IPB/76972
4D LIDAR AND SENSOR FUSION FOR AUTONOMOUS ROVERS MISSIONS
oussema jouini, Space Generation Advisory Council (SGAC), Tunisia

13:10-13:20 IAC-23/B1/IPB/77404
RESEARCH ON IMAGE DATA PROCESSING BASED ON IMPROVED TRANSFORMER SEMANTIC COMMUNICATION
Tingwei Shu, University of Electronic Science and Technology of China (UESTC), China

13:20-13:30 IAC-23/B1/IPB/78375
A SOCIO-ECONOMIC BENEFIT MODEL FRAMEWORK USING SWIR BAND EARTH OBSERVATION DATA
Vee Kuan Chew, Malaysia

SCREEN #12

13:00-13:10 IAC-23/C1/IPB/75958
MACHINE LEARNING BASED GUIDANCE FOR OPTIMAL SPACECRAFT DE-ORBITING
Emanuela Gaglio, Scuola Superiore Meridionale, Italy

13:10-13:20 IAC-23/A7/IPB/76249
INVESTIGATION ON THE SEMIDIURNAL DESCENT OF SPORADIC-E LAYER USING IONOSONDE HEIGHT-TIME-INTENSITY DATA
Muhammad Mubasshir Shaikh, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

13:20-13:30 IAC-23/D3/IPB/78491
MARTIAN LAVA TUBE EXPLORATION USING JUMPING LEGGED ROBOTS: A CONCEPT STUDY
Jørgen Anker Olsen, Norwegian University of Science and Technology, Norway

SCREEN #13

13:00-13:10 IAC-23/D1/IPB/77691
FEASIBILITY STUDY ON A CREWED MARS LANDER
Andrea Paternoster, Politecnico di Torino - Thales Alenia Space Italia - ISAE Supaero Toulouse, Italy

13:10-13:20 IAC-23/E1/IPB/79008
THE SCIENCE OF ASTRONOMY
Gulnar Gasımzade, Azerbaijan State Pedagogical University (ASPU) Azerbaijan

13:20-13:30 IAC-23/B3/IPB/80720
EUROPEAN COMMERCIAL SPACE STATION: STUDY OF A PRELIMINARY DESIGN.
Alessandro Peluso, Politecnico di Torino - Thales Alenia Space Italia - ISAE Supaero Toulouse, Italy

SCREEN #14

13:00-13:10 IAC-23/A6/IPB/76012
PROBABILITY OF COLLISION OF SATELLITES AND SPACE DEBRIS FOR SHORT-TERM ENCOUNTERS: REDERIVATION AND FAST-TO-COMPUTE UPPER AND LOWER BOUNDS
Ricardo Ferreira, FCT-UNL, Portugal

13:10-13:20 IAC-23/A2/IPB/78592
DEVELOPING A LOW-COST OPEN-SOURCE PLATFORM FOR CONDUCTING MICROGRAVITY RESEARCH IN SPACE AS A VOLUNTEER STUDENT ORGANIZATION
Freider Fløan, Norwegian University of Science and Technology, Norway

13:20-13:30 IAC-23/A1/IPB/75484
IMBIBITION OF MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE TOOLS FOR INFERRING EXOPLANETARY HABITABILITY
king kumire, University of South Africa - UNISA, South Africa

SCREEN #15

13:00-13:10 IAC-23/A7/IPB/77339
HIGH-FOCUS PROPERTY OF COSMIC RELIC NEUTRINOS SCATTERED BY ULTRA-RELATIVISTIC ELECTRONS
Vali Huseynov, Shamakhy Astrophysical Observatory, Azerbaijan

13:10-13:20 IAC-23/A1/IPB/75969
THE EFFECTS OF MICROGRAVITY DURING PARABOLIC FLIGHT, SHORT-DURATION AND LONG-DURATION SPACEFLIGHT ON LUNG VOLUME, CAPACITY AND SHAPE: A SYSTEMATIC REVIEW AND META-ANALYSIS
Fay Ghani, The University of Auckland, New Zealand

Wednesday 4 October 2023

13:20-13:30 IAC-23/A1/IPB/75906
RELATIONSHIP BETWEEN SPACE ACTIVITIES AND CLIMATE SMART AGRICULTURE: THE SOIL BIOCHAR INFLUENCE ON ROOT ANATOMY AND NODULATION OF COMMON BEAN GENOTYPES
Funmilola Adebisi Oluwafemi, National Space Research and Development Agency (NASRDA), Abuja, Nigeria

SCREEN #16

13:00-13:10 IAC-23/A1/IPB/77124
ANALYSIS OF THE PLASTIC CHANGES INDUCED IN THE SOLEUS MUSCLE UNDER A MICROGRAVITY CONDITION
Ryosuke Tsuji, University of Tsukuba, Japan

13:10-13:20 IAC-23/B5/IPB/76940
RADIO ASTRONOMY DATA ACQUISITION THROUGH HTTP REQUESTS
Mohammad Musharraf, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

13:20-13:30 IAC-23/B1/IPB/75292
OPTIMIZED GEOHAZARDS MONITORING, ASSESSMENT AND MAPPING USING MULTI-SOURCE EARTH OBSERVATION MICROWAVE SATELLITE MISSIONS FOR THE CASPIAN SEA COASTAL PETROLEUM AND GAS INDUSTRY
Emil Bayramov, Nazarbayev University, Kazakhstan

SCREEN #17

13:00-13:10 IAC-23/B4/IPB/78869
EAGLEAI: ESTIMATION OF ATTITUDE GEO-LOCALIZING LANDMARKS ON EARTH
Nelly Gaillard, Italy

13:10-13:20 IAC-23/D1/IPB/78201
SOFTWARE DEVELOPMENT FOR THE BUDGETING OF A CUBESAT SYSTEM DESIGN BASED ON VARIABLE PARAMETERS
Edlira Hoxha, Space Products and Innovation - SPiN, Italy

13:20-13:30 IAC-23/B6/IPB/77606
ONBOARD GENETIC ALGORITHM-BASED SCHEDULER FOR OPTIMIZED SATELLITE OPERATIONS
Francesco Porcelli, Universität der Bundeswehr München, Germany

SCREEN #18

13:00-13:10 IAC-23/E3/IPB/77655
HIGH INFLATION AND SUPPLY CHAIN DISRUPTION
Stephen Airey, European Space Agency (ESA), The Netherlands

13:10-13:20 IAC-23/C1/IPB/78764
MINIMUM-PROPELLANT DIRECT, ASSISTED, AND SLINGSHOT RETURN TRAJECTORIES FROM MARS, JUPITER, AND THEIR MOONS
Alessio Patti, Politecnico di Torino, Italy

13:20-13:30 IAC-23/D1/IPB/78891
MULTI-OBJECTIVE GENETIC ALGORITHM BASED METHOD FOR SATELLITE PAYLOADS CONFIGURATION DESIGN OPTIMIZATION
Andrei Constantin, Universität der Bundeswehr München, Germany

SCREEN #19

13:00-13:10 IAC-23/B4/IPB/79332
COMPARISON OF REACTION WHEELS AND MAGNETORQUERS PERFORMANCE IN PRECISE ONE-AXIS STABILIZATION OF A CUBESAT SOLAR OBSERVATORY
Anna Okhitina, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

13:10-13:20 IAC-23/C1/IPB/78200
THREE-BODY MOON-MARS TRANSFER WITH REVISITED WEAK STABILITY BOUNDARY CONCEPT AND AEROBRAKING CAPTURE
Gabriele Mocciola, Politecnico di Torino, Italy

13:20-13:30 IAC-23/E3/IPB/80721
NORTH KOREA AND SOUTH KOREA SPACE POLICIES AFFECTED BY TECHNOLOGICAL SIMILARITIES BETWEEN SPACE LAUNCH VEHICLES (SLVS) AND INTERCONTINENTAL BALLISTIC MISSILES (ICBMS)
Mo Rang Kim, University of Public Service (UPS), Hungary

SCREEN #20

13:00-13:10 IAC-23/A6/IPB/79820
SPACECRAFT REFLECTANCE EXPERIMENTAL FACILITY FOR SPACE TRAFFIC MANAGEMENT AND BRIGHTNESS ESTIMATION: LESSONS LEARNED FROM HELIOS AT S5LAB
Gaia Lorenzi, Sapienza University of Rome, Italy

13:10-13:20 IAC-23/A6/IPB/79292
UK ADR: THE UK SPACE AGENCY'S ACTIVE DEBRIS REMOVAL MISSION
Jodie Howlett, UK Space Agency, United Kingdom

13:20-13:30 IAC-23/C4/IPB/78015
RESEARCH PROGRESS AND FUTURE PROSPECTS OF NOVEL LIQUID PROPELLANT
Xing Zhang, China Aerospace of Science and Technology Corporation, China

SCREEN #21

13:00-13:10 IAC-23/E6/IPB/76904
UNFOLDING SPACE PROGRAM GOVERNANCE MODELS DRIVING THE TRANSITION TOWARDS THE NEW SPACE
Valentina Zancan, Politecnico di Milano, Italy

13:10-13:20 IAC-23/A6/IPB/77819
FEASIBILITY STUDY OF LOADS REDUCTION IN PROCESS OF LARGE SPACE DEBRIS OBJECT CAPTURING WITH ROBOTIC ARM
Georgy Shcheglov, Bauman Moscow State Technical University, Russian Federation

13:20-13:30 IAC-23/D2/IPB/76978
SMALL LAUNCHERS - 2023 INDUSTRY SURVEY AND MARKET ANALYSIS
Erik Kulu, Estonia

SCREEN #22

13:00-13:10 IAC-23/C4/IPB/78952
GREEN PROPELLANTS: SELF-PRESSURIZATION BEHAVIOR MODELLING
Simone La Luna, Politecnico di Milano, Italy

13:10-13:20 IAC-23/C1/IPB/76693
THE EXTENDED WAHBA'S PROBLEM IN DUAL AND MULTIDUAL QUATERNIONS
Daniel Condurache, Technical University of Iasi, Romania

13:20-13:30 IAC-23/C2/IPB/78630
ASSESSMENT OF A PHOTOSENSITIVE SOL-GEL AS A SPACE READY MATERIAL THROUGH THE RECORDING OF HOLOGRAPHIC OPTICAL ELEMENTS.
Kevin McGrath, Dublin Institute of Technology, Ireland

Wednesday 4 October 2023

SCREEN #23

13:00-13:10 IAC-23/C2/IPB/79544
THERMAL CONTROL DESIGN OF REMOTE-SENSING SPACECRAFT ON ELLIPTICAL SUN-SYNCHRONOUS ORBIT
Byungho Lee, Moscow Aviation Institute (National Research Institute, MAI), Russian Federation

13:10-13:20 IAC-23/E3/IPB/78756
LAW AND GEOPOLITICS OF THE MOON: STATE OF THE ART AND FUTURE CHALLENGES
Maria Vittoria Prest, Sapienza University of Rome, Italy

13:20-13:30 IAC-23/C1/IPB/79290
MODEL PREDICTIVE CONTROL BASED ON RECURRENT NEURAL NETWORK FOR REUSABLE LAUNCH VEHICLE WITH DYNAMICS UNCERTAINTIES
Xiaokui Yue, Northwestern Polytechnical University, China

SCREEN #24

13:00-13:10 IAC-23/A6/IPB/78876
ORBIT DETERMINATION WITH THE HELP OF SPACE-BASED OPTICAL INSTRUMENTATION IMAGES
Dmitrii Petrov, Moscow Institute of Physics and Technology (MIPT), Russian Federation

13:10-13:20 IAC-23/B3/IPB/80123
ASTRO_CASCO: AN INTEGRATED AND ROBUST TELEMETRY TRANSMISSION/RECEPTION SYSTEM FOR ANALOG ASTRONAUTS DURING EXTRAVEHICULAR ACTIVITIES (EVA)
Sebasthian Ogalde, Andes Aerospace, Italy

13:20-13:30 IAC-23/B3/IPB/80739
SIMULATION FRAMEWORK FOR ASTRO CASCO, AN INTEGRATED AND ROBUST TELEMETRY TRANSCEIVER AND DATA PROCESSING SYSTEM FOR ANALOG SPACE MISSIONS
Sebasthian Ogalde, Andes Aerospace, Italy

SCREEN #25

13:00-13:10 IAC-23/C2/IPB/78229
DEVELOPMENT OF RADIOPROTECTIVE BIO-COATINGS VIA METAL-DOPING OF MELANIN NANOPARTICLES
Aryan Waghmode, The Johns Hopkins University, United States

13:10-13:20 IAC-23/A3/IPB/75687
DETERMINING THE GEOGENIC FORCES INVOLVED IN THE FORMATION OF ORCUS PATERA
Shrushti Patil, India

13:20-13:30 IAC-23/A3/IPB/75815
LUNAR WATER ANALYSIS MODULE WITH DIRECT MEASUREMENT
Mayuko Shinohara, Chiyoda Corporation, Japan

SCREEN #26

13:00-13:10 IAC-23/C2/IPB/78666
STANDARDIZATION OF CUBESAT PLATFORM FOR MASS PRODUCTION APPLICATIONS
Eyoas Areda, Kyushu Institute of Technology, Japan

13:10-13:20 IAC-23/B1/IPB/80194
OCEANS, RESOURCES, AND CLIMATE APPLICATIONS FROM SPACE: ADDRESSING ENVIRONMENTAL AND CLIMATE CHALLENGES
David Reid, University of Bristol, United Kingdom

13:20-13:30 IAC-23/B1/IPB/79143
SCHEDULE OPTIMIZATION FOR A HETEROGENEOUS EARTH OBSERVATION SATELLITE CONSTELLATION
Florian Strasser, Technische Universität München, Germany

SCREEN #27

13:00-13:10 IAC-23/E1/IPB/75629
HYBRID ONLINE AND HANDS-ON TRAINING FRAMEWORK FOR SPACE EMERGING NATION: THAILAND CASE STUDY AND FOLLOW UP
Paripat Pairat, Geo-Informatics and Space Technology Development Agency (GISTDA), Thailand

13:10-13:20 IAC-23/A3/IPB/78901
SMALL SATELLITE MARS AEROCAPTURE THROUGH MULTI-EVENT DRAG MODULATION
Tobia Armando La Marca, Scuola Superiore Meridionale, Italy

13:20-13:30 IAC-23/C2/IPB/77222
A COMPREHENSIVE INVESTIGATION AND MECHANICAL CHARACTERIZATION OF ALUMINUM-BASED METAL MATRIX COMPOSITES REINFORCED WITH BORON NITRATE AND COPPER SULPHATE FOR ENHANCED AEROSPACE APPLICATIONS
Sriram Kumar, Sri Sairam Engineering College, India

SCREEN #28

13:00-13:10 IAC-23/A6/IPB/80142
ENGINEERING MODEL OF THE SOLID ROCKET MOTOR FOR DIRECT DEORBITATION
Pawel Nowakowski, Łukasiewicz Research Network – Institute of Aviation (ILOT), Poland

13:10-13:20 IAC-23/A3/IPB/76075
LUNAR MINERALOGY: UNLOCKING THE MYSTERIES OF THE EARTH-MOON CO-EVOLUTION THROUGH PANGOLIN-INSPIRED ROBOTICS
Sathesh Raj V Periasamey, [unlisted], Malaysia

13:20-13:30 IAC-23/C1/IPB/77299
A CONSTELLATION DESIGN FOR ORBITING SOLAR REFLECTORS TO ENHANCE TERRESTRIAL SOLAR ENERGY
Onur Çelik, University of Glasgow, United Kingdom

SCREEN #29

13:00-13:10 IAC-23/A3/IPB/77140
REAL-TIME TRAJECTORY OPTIMIZATION FOR ASTEROID LANDING USING PICARD ITERATION-BASED CONVEXIFICATION AND DEEP NEURAL NETWORKS
Yangyang Ma, Northwestern Polytechnical University, China

13:10-13:20 IAC-23/E1/IPB/78641
EDUCATING THE NEXT GENERATION OF AEROSPACE ENGINEERS: THE ROLE OF ORBIT NTNU, A VOLUNTEER STUDENT ORGANIZATION
Gustav Fosse Hansen, Norwegian University of Science and Technology, Norway

13:20-13:30 IAC-23/C2/IPB/80253
DESIGN OF A DIFFERENTIAL SYSTEM FOCUSED ON REUSABILITY AND PAYLOAD HOSTING CAPABILITIES FOR A ROVER BASED ON ROCKER-BOGIE LOCOMOTION MECHANISM
Lorenzo Caraccio, Politecnico di Torino, Italy

SCREEN #30

13:00-13:10 IAC-23/C1/IPB/78791
CONVEX OPTIMIZATION OF SPACECRAFT REST-TO-REST ATTITUDE REORIENTATION MANEUVERS WITH KEEP-OUT CONSTRAINTS
Alessandro Zavoli, Sapienza University of Rome, Italy

Wednesday 4 October 2023

13:10-13:20 IAC-23/C1/IPB/79158
DYNAMIC ANALYSIS OF MECHANICAL MOTION OF A VARIABLE-MASS ROCKET SYSTEM
Valeh Bakhshali, Azerbaijan Technical University, Azerbaijan

13:20-13:30 IAC-23/B4/IPB/79393
IN-ORBIT ATTITUDE DETERMINATION AND SYSTEM MODELING OF SKOLTECH B1 AND B2 CUBESATS
Bisma Sajid, Skolkovo Institute of Science and Technology, Russian Federation

SCREEN #31

13:00-13:10 IAC-23/B1/IPB/76142
EARTH OBSERVATION FROM NEAR-EQUATORIAL ORBITS WITH SMALL AND VERY SMALL SATELLITES: "EQUATORIAL SENTINELS" FOR ENVIRONMENT
Erick Lansard, Nanyang Technological University, Singapore, Republic of

13:10-13:20 IAC-23/A3/IPB/79369
THE NEXT ARECIBO TELESCOPE ON THE MOON'S FAR SIDE
Akanksha Hale, Student, India

13:20-13:30 IAC-23/E1/IPB/80489
UNISEC LOCAL CHAPTER EMPOWERMENT PROGRAM: AN APPROACH FOR SPACE WORKFORCE DEVELOPMENT IN NON-SPACEFARING COUNTRIES
Rei Kawashima, UNISEC Global, Japan

SCREEN #32

13:00-13:10 IAC-23/A3/IPB/76438
MEMS PLASMA SPECTROMETER FOR SMALL MISSIONS
Paweł Knapkiewicz, Wroclaw University of Science and Technology, Poland

13:10-13:20 IAC-23/A6/IPB/77482
THE LASERS MISSION CONCEPT FOR ACTIVE DEBRIS REMOVAL USING LASER ABLATION BY A SWARM OF CUBESATS
Iosto Fodde, University of Strathclyde, The Netherlands

13:20-13:30 IAC-23/B4/IPB/80396
ORBITNET: AN OPEN-SOURCE SATELLITE FOR IOT DATA TRANSMISSION IN REMOTE AREAS
Ishita Sharma, University of Swansea, United Kingdom

SCREEN #33

13:00-13:10 IAC-23/E7/IPB/75499
INTERNATIONAL LIABILITY REGIME FOR DAMAGE IN COMMERCIAL HUMAN SPACEFLIGHT: DILEMMAS AND RESPONSES
Jie Long, Shenzhen University, China

13:10-13:20 IAC-23/E7/IPB/75510
SPACE ENVIRONMENTAL PROTECTION GOVERNANCE: A DECENTRALIZED MODEL
Jie Long, Shenzhen University, China

13:20-13:30 IAC-23/E7/IPB/76985
LEGAL ISSUES ON SCIENTIFIC INVESTIGATIONS IN LUNAR STATION ACTIVITIES: IMPLICATIONS FROM THE HIGH SEAS AND ANTARCTIC
Jiaying Yu, The University of Hong Kong, China

SCREEN #34

13:00-13:10 IAC-23/B4/IPB/79659
ALFACRUX CUBESAT MAGNETIC DIPOLE DETERMINATION AND ATTITUDE MOTION ESTIMATION USING MAGNETOMETER MEASUREMENTS ONLY
Emanuel Brenag, University of Brasilia, Brazil

13:10-13:20 IAC-23/C1/IPB/79472
REACTION WHEELS ANGULAR MOMENTUM MANAGEMENT DURING INTERPLANETARY FLIGHT
Yaroslav Mashtakov, Keldysh Institute of Applied Mathematics of RAS, Russian Federation

13:20-13:30 IAC-23/C1/IPB/79481
ATTITUDE DETERMINATION AND CONTROL SYSTEM DESIGN FOR A 3U CUBESAT TO MONITOR FORWARD LIGHT SCATTERING OVER EARTH HORIZON
Mehmet Esit, Kyushu Institute of Technology, Japan

SCREEN #35

13:00-13:10 IAC-23/A6/IPB/77925
THE ROLE OF ADVANCED SOFTWARE TOOLS IN ENSURING SPACE DEBRIS MITIGATION IN CUBESAT MISSIONS
Emanuele Tomassi, Politecnico di Milano, Italy

13:10-13:20 IAC-23/A1/IPB/79653
PHYSICAL PERFORMANCE OF PARTICIPANTS IN EIGHT-MONTH VOLUNTARY ISOLATION (SIRIUS-21 EXPERIMENT)
Vera Bakhtereva, SSC RF Institute of Biomedical problems of RAS, Russian Federation

13:20-13:30 IAC-23/C1/IPB/80250
MAGNETORQUERS ATTITUDE CONTROL FOR FORMATION FLYING IN LEO
Uliana Monakhova, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

SCREEN #36

13:00-13:10 IAC-23/A5/IPB/76397
HOW TO BUILD AN EFFICIENT SPACE HABITATS?
Amirmohsen Paziresh, National Aviation Academy - Azerbaijan, Azerbaijan

13:10-13:20 IAC-23/B3/IPB/76415
COTS FOOD IN SPACE: PARABOLIC FLIGHT TESTING OF AN ADAPTER BETWEEN THE ISS POTABLE WATER DISPENSER AND COMMERCIAL-OFF-THE-SHELF DEHYDRATED FOOD PACKAGES
Roxanne Fournier, University of Waterloo, Canada

13:20-13:30 IAC-23/D1/IPB/76476
THE CRITICALITY OF ROBUST FAILURE ANALYSIS PROGRAMS
Elizabeth Barrios, National Aeronautics and Space Administration (NASA), United States

SCREEN #37

13:00-13:10 IAC-23/A6/IPB/79098
A CUBESAT-SIZED IN-SITU SPACE DEBRIS IMPACT SENSOR
Giacomo Battaglia, University of Padova, Italy

13:10-13:20 IAC-23/A3/IPB/76671
MARTIAN CRATER CLASSIFICATION USING LIGHTGBM
Abdollah Darya, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

Wednesday 4 October 2023

SCREEN #38

13:00-13:10 IAC-23/C1/IPB/79896
TRAJECTORY PLANNING AND EXECUTION IN A HYPER REDUNDANT CONTINUUM MANIPULATOR FOR SATELLITE DOCKING
Ayush Ranjan, Indian Institute of Technology Kanpur, India

13:10-13:20 IAC-23/E4/IPB/78267
FORM AND FUNCTION: REFINING HUMAN SPACE EXPLORATION ORGANIZATIONAL STRUCTURES
Ruth Siboni, NASA Headquarters, United States

13:20-13:30 IAC-23/A6/IPB/80131
STABILIZATION OF TUMBLING SPACECRAFT VIA CONTINUUM ARM USING VISION-LANGUAGE HYBRID MODEL
Prateesh Awasthi, Indian Institute of Technology Kanpur, India

SCREEN #39

13:00-13:10 IAC-23/E1/IPB/77050
A HANDS ON MULTIDISCIPLINARY CRASH COURSE BASED ON A SIMULATION MODEL FOR A DESIGN TO COST MULTITASK MICROSATELLITE SYSTEM TO BE BUILT AND OPERATED ON A PROJECT FINANCING BASIS - THE SEA-LIKE HORIZON SPACE TUTOR (SHST)
Giacomo Primo Sciortino, Italian Space Agency (ASI), Italy

13:10-13:20 IAC-23/A5/IPB/80386
AUTOMATED AQUAPONIC SYSTEM
Mikołaj Gąbka, AGH University of Science and Technology, Poland

13:20-13:30 IAC-23/E6/IPB/80154
EXPLORING CHALLENGES AND OPPORTUNITIES FOR SPACE START-UPS IN CANADA
Grecia Olano O'Brien, Concordia University, Canada

SCREEN #40

13:00-13:10 IAC-23/A6/IPB/79604
TOWARDS IN-ORBIT HYPERSPECTRAL IMAGING OF SPACE DEBRIS
Mekhi Dhesi, Astroscale Ltd, United Kingdom

13:10-13:20 IAC-23/A1/IPB/79629
CUBESAT-BASED TESTING TECHNIQUES FOR SPACE SUIT AND EQUIPMENT COMPONENTS
Arwa Bin tareef, [unlisted], Jordan

13:20-13:30 IAC-23/A1/IPB/75800
INVESTIGATING THE EFFECTS OF SPACE ON IN VITRO FERTILIZATION IN MICE CELLS
Sumbal Mushtaq, Deep Space Initiative, Maldives

SCREEN #41

13:00-13:10 IAC-23/C1/IPB/79438
OPTIMAL TUNING OF THE NANOSATELLITE ATTITUDE CONTROLLER USING TRIAD-AIDED KALMAN FILTER AND PARTICLE SWARM OPTIMIZATION
Mehmet Fatih Ertürk, TAI - Turkish Aerospace Industries, Inc., Türkiye

13:10-13:20 IAC-23/E3/IPB/80715
KOREA'S JOURNEY TOWARDS SPACE TECHNOLOGY INDEPENDENCE
Nammi Choe, Korea Aerospace Research Institute (KARI), Korea, Republic of

13:20-13:30 IAC-23/B4/IPB/79791
DESIGN AND DEVELOPMENT OF ENGINE CONTROL UNIT FOR NANOSATELLITE APPLICATIONS
Karol Bresler, Łukasiewicz Research Network – Institute of Aviation (ILOT), Poland

SCREEN #42

13:00-13:10 IAC-23/C1/IPB/77087
DESIGN OF TRANSFER TRAJECTORIES FROM CISLUNAR ORBITS TO THE RETROGRADE GEO-SYNCHRONOUS ORBIT
Yuchen He, Beihang University, China

13:10-13:20 IAC-23/E9/IPB/80746
SATELLITE WITH DRONES SYSTEM TO REDUCE THE SPACE DEBRIS PROBLEM
Dulce Fernanda Lopez Salvador, TECNOLOGICO DE MONTERREY, Mexico

13:20-13:30 IAC-23/C4/IPB/76836
A TRADE STUDY OF MISSION ARCHITECTURES FOR CENTRIFUGAL NUCLEAR THERMAL PROPULSION
William Ziehm, University of Alabama in Huntsville, United States

SCREEN #43

13:00-13:10 IAC-23/C2/IPB/77392
EVALUATION OF A VARIETY OF WOOD MATERIAL IN CUBESAT STRUCTURES
Yaqoob Alqassab, National Space Science Agency (NSSA), Bahrain

13:10-13:20 IAC-23/A3/IPB/75919
DESIGN AND ANALYSIS OF A NOVEL TREAD CONFIGURATION USING FINITE ELEMENT ANALYSIS FOR LUNAR ROVER WHEELS
Yusuf Alqattan, National Space Science Agency (NSSA), Bahrain

13:20-13:30 IAC-23/B4/IPB/77807
LESSONS LEARNED FROM THE FIRST GENERATION OF INTERPLANETARY SMALLSATS
Aysha Alharam, National Space Science Agency (NSSA), Bahrain

SCREEN #44

13:00-13:10 IAC-23/C3/IPB/80600
DIAGNOSING HEALTH AND LIFESPAN OF LI-ION BATTERIES IN SPACE MISSIONS USING MACHINE LEARNING ALGORITHMS
Ulvi Movsum-zada, Jagiellonian University, Poland

13:10-13:20 IAC-23/B1/IPB/77115
EARTH OBSERVATION DATA FOR MACHINE LEARNING: A COMPREHENSIVE APPROACH FOR COLLECTING, PREPROCESSING, AND INTEGRATING DATA SETS
Fahad Bin Abdullah, BRAC University, Bangladesh

13:20-13:30 IAC-23/A3/IPB/76219
RIDING THE ATMOSPHERIC CURRENTS OF VENUS: AN SLS LAUNCHED VENUS BALLOON-SPACECRAFT MISSION
Benjamin Donahue, The Boeing Company United States

SCREEN #45

13:00-13:10 IAC-23/E7/IPB/80392
PROTECTION OF PATENTS IN OUTER SPACE. COULD BLOCKCHAIN TECHNOLOGY BE A SUFFICIENT SOLUTION?
Evgenia Yvonni Tseloni, Leiden University, The Netherlands

Wednesday 4 October 2023

13:10-13:20 IAC-23/E5/IPB/79502
CHARACTERIZATION OF SURFACE SCIENTIFIC EXTRAVEHICULAR OPERATIONS IN THE CONTEXT OF THE HADEES-C ANALOG STATION
Maria Alejandra Botero Botero, Universidad EAFIT, Colombia

13:20-13:30 IAC-23/E9/IPB/77995
A PRACTICAL PERSPECTIVE OF DEVELOPING SUSTAINABLE SPACE FOR THE EU WITH ESSENTIAL STRATEGIES & POLICIES FRAMEWORK
Swarnajyoti Mukherjee, Apogeo Space Srl, Italy

SCREEN #46

13:00-13:10 IAC-23/B1/IPB/77750
A RESOURCE ALLOCATION STRATEGY IN ORBITAL EDGE COMPUTING EARTH OBSERVATION SATELLITE CONSTELLATIONS TO JOINTLY SAVE ENERGY ON GROUND AND BALANCE ON-BOARD ENERGY CONSUMPTION
Francesco Valente, Sapienza University of Rome, Italy

13:10-13:20 IAC-23/E6/IPB/79053
CHALLENGES, DISPARITIES AND RISKS OF THE EUROPEAN INNOVATION ECOSYSTEM: THE SPREAD2INNO PROJECT TO BRIDGE THE GAP.
Giorgia D'Agostinis, Fondazione E. Amaldi, Italy

13:20-13:30 IAC-23/A1/IPB/79830
A CASE DEFINITION IS NEEDED FOR THE SPACEFLIGHT ASSOCIATED NEURO-OCULAR SYNDROME
Mimi Lan, Dartmouth College
United States

SCREEN #47

13:10-13:20 IAC-23/A1/IPB/76483
THE RELEVANCE OF A TOPICAL TEAM IN THE INVESTIGATION, ADVANCEMENT AND OPPORTUNITIES IN THE RESEARCH FROM THE SCIENTIFIC COMMUNITY THROUGH SPACE TECHNOLOGIES TO TERRESTRIAL IMPACTS.
Lorenzo Scatena, Fondazione E. Amaldi, Italy

13:20-13:30 IAC-23/A1/IPB/80730
EYE LENGTH IS A POTENTIAL PREDICTOR OF SPACEFLIGHT-RELATED VISUAL CHANGES
Mimi Lan, Dartmouth College, United States

SCREEN #48

13:00-13:10 IAC-23/E5/IPB/77619
MARTIAN HABITATS: A REVIEW
Majal Shiny Subbiah, Christ University, India

13:10-13:20 IAC-23/A7/IPB/78379
NEUTRINO OSCILLATION IN AN ANISOTROPIC COSMOLOGICAL MODEL
Sajida Abdulvahabova, Baku State University, Azerbaijan

13:20-13:30 IAC-23/C2/IPB/78317
DEVELOPMENT OF A LIFTING BODY SPACE VEHICLE, DESIGNED FOR THE RETURN OF CARGO AND CREW AFTER THE LUNAR EXPEDITION.
Dmitrii Kremnev, Bauman Moscow State Technical University, Russian Federation

SCREEN #49

13:00-13:10 IAC-23/B4/IPB/77366
A NOVEL MULTI-MISSION PLATFORM FOR THE DEVELOPMENT OF APPLICATIONS, SERVICES, AND NEW SATELLITE DATA ALGORITHMS DIRECTLY IN ORBIT AND ON-DEMAND, THE ITALIAN IN-ORBIT SPACE LAB
Vito Fortunato, Planetek Italia, Italy

13:10-13:20 IAC-23/B1/IPB/79564
TRUTHS OPSI: OBSERVING PERFORMANCE SIMULATOR FOR THE TRUTHS MISSION
Maria Ieronymaki, Planetek Hellas epe, Greece

13:20-13:30 IAC-23/A3/IPB/75811
PLAN AND PROGRESSION OF THE TECHNOLOGY READINESS LEVEL OF THE CUBEROVER
Takuto Oikawa, Astrobotic Technology Inc., United States

SCREEN #50

13:00-13:10 IAC-23/C1/IPB/76190
DEPLOYMENT OF LUNAR ORBITAL STATION IN HIGH CIRCULAR ORBIT: ALTERNATIVE TO NRHO
Ekaterina Belyaeva, Rocket Space Corporation Energia, Russian Federation

13:10-13:20 IAC-23/E1/IPB/79866
EMPOWERING FUTURE SPACE INNOVATORS: CHALLENGES AND OPPORTUNITIES
Abdulla Hil Kafi, BRAC University, Bangladesh

13:20-13:30 IAC-23/D1/IPB/79272
COMPARATIVE STUDIES ON SATELLITE FORMATION FLIGHT ARCHITECTURE FOR DEVELOPING AN EMBEDDED CONTROL ALGORITHM: AN OVERVIEW
Sanjeeviraja Thangavel, [unlisted]
Singapore, Republic of

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SCREEN #1

13:30-13:40 IAC-23/A5/IPB/80609
OBTAINING A HIGH-DENSITY BASALTIC CEMENTITIOUS COMPOUND BY USING COMPACTION TECHNIQUES TO IMPROVE ITS PHYSICAL AND MECHANICAL PROPERTIES FOR FUTURE LUNAR INFRASTRUCTURE CONSTRUCTION
Rogelio Morales, Bolivarian Agency for Space Activities (ABAE), Venezuela

13:40-13:50 IAC-23/E6/IPB/75692
ACCELERATORS AND INCUBATORS - AN AUSTRALIAN CASE STUDY
Ariane Platell, QL Space, Australia

13:50-14:00 IAC-23/B6/IPB/76912
APPLICATION OF ARTIFICIAL INTELLIGENCE IN THE SPACE MINING INDUSTRY
Soltan Sharifzada, Azerbaijan State Oil and Industry University (ASOIU), Azerbaijan

14:00-14:10 IAC-23/E7/IPB/78552
MISSION IMPOSSIBLE? WILL AN INTERNATIONALLY BINDING LEGAL REGIME TO GOVERN THE COMMERCIAL EXPLOITATION OF SPACE RESOURCES EVER BE ATTAINABLE?
Rachael O'Grady, United Kingdom

14:10-14:20 IAC-23/E6/IPB/76556
A SPACE ECOSYSTEM MATURITY INDEX: PROPOSITION TO ASSESS AND IDENTIFY THE DEVELOPMENT LEVEL OF SPACE INNOVATION ECOSYSTEMS AROUND THE WORLD
Francesca Covella, Imperial College London, Italy

14:20-14:30 IAC-23/E7/IPB/78081
A CALL FOR AN INTERNATIONALLY BINDING LEGAL DEFINITION OF "SUSTAINABILITY" IN OUTER SPACE LEGISLATION.
Mila Spence, University of Exeter United Kingdom

14:30-14:40 IAC-23/A6/IPB/76273
NUMERICALLY EFFICIENT IMPULSIVE AND LOW-THRUST COLLISION AVOIDANCE MANOEUVRES IN CISLUNAR L1-NEAR RECTILINEAR HALO ORBIT
Luigi De Maria, Politecnico di Milano, Italy

14:40-14:50 IAC-23/E6/IPB/75547
ABAE SPACE HUB: A SPACE STARTUP INCUBATOR
Rogelio Morales, Bolivarian Agency for Space Activities (ABAE), Venezuela

SCREEN #2

13:30-13:40 IAC-23/A4/IPB/79417
SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE
Narmina Gahirmanova, Baku State University, Azerbaijan

13:40-13:50 IAC-23/A3/IPB/76331
AUTOMATIC DATA PROCESSING FOR SPACE ROBOTICS MACHINE LEARNING
Anja Sheppard, University of Michigan, United States

13:50-14:00 IAC-23/A3/IPB/77782
CONSTRAINING THE GEOLOGIC HISTORY AND MODERN GEOMORPHOLOGY OF MARS USING HIGH RESOLUTION AND MULTISPECTRAL CAMERAS ON A SWARM OF WIND-DRIVEN MOBILE IMPACTORS
James Kingsnorth, Team Tumbleweed, The Netherlands

14:00-14:10 IAC-23/C1/IPB/80016
CLOSED-LOOP GUIDANCE FOR INTERPLANETARY CUBESATS WITH INDIRECT METHODS
Alessandra Mannocchi, Politecnico di Milano, Italy

14:10-14:20 IAC-23/C1/IPB/76988
MULTIDUAL QUATERNIONS BASED DYNAMICS MODELING FOR A RIGID-FLEXIBLE COUPLING SPACECRAFT AND APPLICATION
Daniel Condurache, Technical University of Iasi, Romania

14:20-14:30 IAC-23/A6/IPB/79880
THE DEBRIS MITIGATION FACILITY FOR SUSTAINABLE SPACE MISSIONS
Daniel Lubián Arenillas, OKAPI:Orbits GmbH, Germany

14:30-14:40 IAC-23/C1/IPB/77554
DYNAMICS AND CONTROL OF GYROSCOPIC STABILIZED TETHER SATELLITE SYSTEM IN LEO
Stefano Aliberti, Politecnico di Torino, Italy

14:40-14:50 IAC-23/C1/IPB/77817
NEW RESULTS ON THE MASS-OPTIMIZATION ANALYSIS OF A PLANETARY SUNSHADE SYSTEM
Catello Leonardo Matonti, Politecnico di Torino, Italy

SCREEN #3

13:30-13:40 IAC-23/E7/IPB/78729
LEX FERENDA OF THE SAFETY OF SPACE NAVIGATION
Ruslan Konygin, Peoples' Friendship University of Russia (RUDN University), Russian Federation

13:40-13:50 IAC-23/A3/IPB/79209
THE ROLE OF MATHEMATICS IN ASTRONOMY
Tunzala Mammadova, Azerbaijan State Pedagogical University (ASPU), Azerbaijan

13:50-14:00 IAC-23/B2/IPB/77289
EXPLORING SPACE SOLUTIONS TO ENABLE OIL & GAS OPERATION
Mostafa Al Amer, Saudi Space Commission (SSC), Saudi Arabia

14:00-14:10 IAC-23/A7/IPB/78838
JAMES WEBB TELESCOPE
Fidan Huseynzada, Baku State University, Azerbaijan

14:10-14:20 IAC-23/A1/IPB/80663
VÄ°RTUAL REALÄ°TY(VR) TECHNOLOGY-PSYCHOLOGÄ°CAL SUPPORT FOR ASTRONAUTS Ä°N SPACE EXPLORATÄ°ON
Alizada Ravan, Baku State University, Azerbaijan

14:20-14:30 IAC-23/E7/IPB/80710
CYBERSECURITY IN NEW SPACE AND THE PROBLEM OF INTERNATIONAL REGULATION
Arianna Vettorel, Ca' Foscari University of Venice, Italy

14:30-14:40 IAC-23/C1/IPB/79207
DEVELOPING AN LQR/APF BASED ORBIT CORRECTION, ORBIT PREDICTION, AND NAVIGATION CONTROL FOR CUBESAT'S FORMATION FLYING
Sanjeeviraja Thangavel, [unlisted], Singapore, Republic of

14:40-14:50 IAC-23/D1/IPB/77891
PRELIMINARY DESIGN OF A SATELLITE INFRASTRUCTURE FOR WIRELESS POWER SUPPLY OF EARTH SATELLITES
Elia Luigi Altieri, Politecnico di Milano, Italy

SCREEN #4

13:30-13:40 IAC-23/B1/IPB/77010
CALCULATION OF THE DEATH INDEX OF THE MOST CATASTROPHIC WILDFIRES
Marialina Tsinidis, University of Glasgow, United Kingdom

13:40-13:50 IAC-23/C2/IPB/75930
CCDSS (CARBON COW DUNG SANDWICH STRUCTURE)-RADIATION SHIELDING MATERIAL
Vinay Dharmik, India

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13:50-14:00 IAC-23/A1/IPB/76158
ASTROBIOLOGY AND EXPLORATION
Aysu Ibrahimli, Azerbaijan

14:00-14:10 IAC-23/E3/IPB/80258
THE ROLE OF NON-GOVERNMENTAL ORGANIZATIONS (NGOS) IN ACHIEVING "SPACE 2030" AGENDA AND SUPPORTING SUSTAINABLE DEVELOPMENT
Milica Milosev, Econnects, Serbia

14:10-14:20 IAC-23/C1/IPB/80678
ROBUST RELATIVE DYNAMIC MODEL: A NOVEL APPROACH FOR CLUSTER FORMATION SATELLITES
Sanjeeviraja Thangavel, [unlisted], Singapore, Republic of

14:20-14:30 IAC-23/A3/IPB/76443
LUNADRONE: A SMALL FLYING VEHICLE FOR LUNAR PIT EXPLORATION
Stefano Pescaglia, Politecnico di Torino, Italy

14:30-14:40 IAC-23/B1/IPB/77585
UNLOCKING ONBOARD SAR PROCESSING: FOCUSING AND SHIP DETECTION ON SENTINEL-1 IW DATA
Gianluca Maria Campagna, AIKO S.r.l., Italy

14:40-14:50 IAC-23/C4/IPB/77478
THE EFFECT OF SWIRL INJECTION PARAMETERS ON A VORTEX-COOLED THRUSTER FABRICATED USING THERMOPLASTICS AND METAL
Mousa Aqailan, United Arab Emirates University (UAEU), United Arab Emirates

SCREEN #5

13:30-13:40 IAC-23/C4/IPB/78242
A NEW H2O2 ORIENTED ROCKET AND SATELLITE\\ PROPULSION LABORATORY CENTER
Lukasz Radzikowski, Łukasiewicz Research Network – Institute of Aviation (ILOT), Poland

13:40-13:50 IAC-23/C2/IPB/79431
SPACESUIT FABRICS AND MATERIALS SELECTION
Eman AbuZeitoun, [unlisted], Jordan

13:50-14:00 IAC-23/A3/IPB/77870
OPERATING EXPERIENCE SUMMARY AND DEVELOPMENT STRATEGY FOR SPACE TRANSPORT VEHICLES
Tatiana V. Matveeva, Korolev RSC Energia, Russian Federation

14:00-14:10 IAC-23/B1/IPB/77677
GIS PROJECT DEVELOPMENT FOR UNIVERSITY'S CAMPUS: A CASE STUDY OF THE NATIONAL AVIATION ACADEMY IN AZERBAIJAN
Nubar Habizadeh, National Aviation Academy - Azerbaijan, Azerbaijan

14:10-14:20 IAC-23/C4/IPB/80212
DIRECT THRUST MEASUREMENTS OF MULTIDIRECTIONAL PLASMA THRUSTER OPERATED IN KRYPTON
Andrei Shumeiko, Bauman Moscow State Technical University, Russian Federation

14:20-14:30 IAC-23/E3/IPB/76748
SPACE AND HUMAN EXPECTATIONS
Nubar Seyidova, National Aviation Academy - Azerbaijan, Azerbaijan

14:30-14:40 IAC-23/B1/IPB/76197
MONITORING AND RESEARCH OF ANIMAL MOVEMENTS ON EARTH BY MEANS OF THE SCIENTIFIC HARDWARE INSTALLED ON THE ISS RS
Mikhail Yu. Belyaev, Korolev RSC Energia, Russian Federation

14:40-14:50 IAC-23/A3/IPB/80704
TITANIA, LUNA OF URANUS: A PROPOSAL FOR DETECTING A POTENTIAL SURFACE OCEAN
Abigail Sanchez Gonzalez, IPN, Mexico

SCREEN #6

13:30-13:40 IAC-23/E3/IPB/74803
IMPLEMENTING SPACE2030 - SPACE COOPERATION AND CAPABILITY BUILDING
Rose Croshier, Center for Global Development, United States

13:40-13:50 IAC-23/E7/IPB/76818
THE EU AS AN EMERGING ACTOR IN THE FIELD OF SPACE SECURITY AND THE CONTROVERSY BEHIND THE "LIMIT" OF A SHARED COMPETENCE
Giulia Casa, Italy

13:50-14:00 IAC-23/C1/IPB/78424
MODEL PREDICTIVE CONTROL WITH SEQUENTIAL CONVEX PROGRAMMING (SCP) FOR COOPERATIVE/NON-COOPERATIVE FORMATION FLYING SATELLITES
Sanjeeviraja Thangavel, [unlisted], Singapore, Republic of

14:00-14:10 IAC-23/B3/IPB/80747
"ARMILLIARY SPHERE; FLIGHT SIMULATOR AND SPACE SUIT"
Dulce Fernanda Lopez Salvador, TECNOLOGICO DE MONTERREY, Mexico

14:10-14:20 IAC-23/C4/IPB/77629
RENEWABLE LIQUID PROPELLANTS: DECARBONIZING SPACE EXPLORATION
Nazim Muradov, University of Central Florida (UCF), United States

14:20-14:30 IAC-23/C4/IPB/78825
FABRICATION AND PROPULSION PERFORMANCE TESTING OF A 100 MN CLASS RESISTOJET THRUSTER
Mohamed Elawad, United Arab Emirates University (UAEU), United Arab Emirates

14:30-14:40 IAC-23/E1/IPB/76005
ACADEMIA AND INDUSTRY PARTNERSHIP IN SATELLITE ENGINEERING TRAINING, RESEARCH, AND DEVELOPMENT AT UNIVERSITI SAINS MALAYSIA
Md Yusoff Siti Harwani, Universiti Sains Malaysia, Malaysia

14:40-14:50 IAC-23/B4/IPB/77443
EXAMINING THE INFLUENCE OF ANISOTROPIC ENERGETIC ELECTRONS ON DIFFERENTIAL CHARGING
Raphael Bertrand Delgado, National Autonomous University of Honduras (UNAH), Honduras

SCREEN #7

13:30-13:40 IAC-23/A1/IPB/76217
DEVELOPMENT AND PERFORMANCE ANALYSIS OF A MACHINE LEARNING BASED COGNITIVE PERFORMANCE AND MENTAL FITNESS MONITORING SYSTEM FOR ASTRONAUTS IN TRAINING
Sriram Kumar, Sri Sairam Engineering College, India

13:40-13:50 IAC-23/B2/IPB/77798
SYSTEM DESIGN STUDY OF A CONSTELLATION OF SMALL SPACECRAFT TO DELIVER SEAMLESS 5G CONNECTIVITY TO UNMODIFIED CELL PHONES THROUGH AN END-TO-END NON-TERRESTRIAL NETWORK
Gerardo Vargas Avila, Cranfield University, United Kingdom

13:50-14:00 IAC-23/B3/IPB/80737
DIGITAL HUMAN-CENTERED INTERFACE DESIGN FOR A SHORT LEARNING CURVE ON CRITICAL TELEMETRY SYSTEMS
Jorge Olmos Ríos, Andes Aerospace, Chile

14:00-14:10 IAC-23/E5/IPB/76905
THE USE OF INTERIOR AND ARCHITECTURAL TECHNIQUES TO IMPROVE THE QUALITY OF LIFE OF PEOPLE OUTSIDE THE EARTH
Anna Dovliatidou, Cyprus

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14:10-14:20 IAC-23/A6/IPB/80716
CREATION OF A SERVICE FOR MONITORING SATELLITE MANEUVERS
Abdikul Ashurov, L. N. Gumilev Eurasian National University, Kazakhstan

14:20-14:30 IAC-23/C2/IPB/79116
TEG-BASED COOLING SYSTEM: A PROMISING ADVANCEMENT IN MATERIALS AND RAPID PROTOTYPING FOR SPACESUITS
Salam AbuAlhayjaa, [unlisted], Jordan

14:30-14:40 IAC-23/A3/IPB/79298
A MULTI-ROBOT PATH PLANNING METHOD BASED ON IMPROVED CONFLICT SEARCH FOR COMPLEX LUNAR ENVIRONMENT
Yufei Guo, "Northwestern Polytechnical University;National Key Laboratory of Aerospace Flight Dynamics", China

14:40-14:50 IAC-23/A1/IPB/78727
A WEARABLE-BASED SYSTEM TO REDUCE SPACE MOTION SICKNESS BY MULTI-SENSORY PRE-HABITUATION
Carole-Anne Vollette, University of Zurich, Switzerland

SCREEN #8

13:30-13:40 IAC-23/B6/IPB/80541
A FRAMEWORK FOR NEAR-EARTH ASTEROID MINING CAMPAIGN DESIGN AND ANALYSIS
Ruida Xie, UNSW Australia, Australia

13:40-13:50 IAC-23/B1/IPB/79762
DESIGN AND EVALUATION OF A ROTATING APPARATUS FOR TESTING EARTH OBSERVATION OPTICAL PAYLOAD
Raynell Inojosa, Philippine Space Agency, The Philippines

13:50-14:00 IAC-23/B4/IPB/77746
MISSION DESIGN OF A 3U CUBESAT FOR OPTICAL COMMUNICATION: SAMSAT-LED
Tirza Ohana Berger de Souza, Samara National Research University (Samara University), Russian Federation

14:00-14:10 IAC-23/A3/IPB/77262
EXPANDING THE CAPABILITIES OF LUNAR COLLABORATIVE ROVERS WITH A COMPACT ROBOTIC ARM
Lennart Fox, NEUROSPACE GmbH, Germany

14:10-14:20 IAC-23/E4/IPB/75899
A HISTORY OF SPACE FOOD : ITEMS, ATTRIBUTES, AND CANDIDATES.
Danny Tjokrosetio, Space Generation Advisory Council (SGAC), Saudi Arabia

14:20-14:30 IAC-23/C1/IPB/79670
ATTITUDE CONTROL OF AN EARTH-POINTING SATELLITE EMPLOYING NOVEL ACTUATOR CONFIGURATIONS FOR GLOBAL ASYMPTOTIC STABILITY
Anirudh Etagi, India

14:30-14:40 IAC-23/A3/IPB/77818
THE DEVELOPMENT AND DESIGN OF A SOLAR TRACKER SYSTEM IMPLEMENTED IN SPACE EXPLORATION VEHICLES
Carlos Alfredo Aguilera Manriquez, Samara National Research University (Samara University), Russian Federation

14:40-14:50 IAC-23/A1/IPB/78889
INCONGRUENT BODY MOVEMENT AFFECTS TELEOPERATION PERFORMANCE
Maëlis Lefebvre, [unlisted], France

SCREEN #9

13:30-13:40 IAC-23/IPB/75197
"THE ASSESSMENT OF "HARMFUL INTERFERENCE" CONFLICTS IN OUTER SPACE ACTIVITIES ACCORDING TO INTERNATIONAL TORT LAW STANDARDS; AND SELECTING THE APPROPRIATE DISPUTE SETTLEMENT METHOD FOR SMALL SATELLITE OPERATORS."
Vugar Mammadov, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

13:40-13:50 IAC-23/B6/IPB/79913
REAL TIME AUTONOMOUS ON BOARD TIMER DRIFT ESTIMATION AND CALIBRATION IN DEEP SPACE MISSIONS
Pratibha Srivastava, Indian Space Research Organization (ISRO), India

13:50-14:00 IAC-23/C2/IPB/80709
ACTIVE VIBRATION CONTROL OF SMART LIGHTWEIGHT COMPOSITE STRUCTURES FOR A SMALL FLEXIBLE SPACECRAFT
Federica Angeletti, University of Rome "La Sapienza", Italy

14:00-14:10 IAC-23/E7/IPB/75259
ANALYSIS OF INSURANCE POLICY AND THE RULE OF LAW FOR PROVIDING CYBER SECURITY IN COMMERCIAL SPACE AFFAIRS
Vugar Mammadov, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

14:10-14:20 IAC-23/C4/IPB/78126
DEVELOPMENT OF ATLAS: A LIQUID ROCKET ENGINE CRYOGENIC TEST STAND AND FEED SYSTEM
Danetti Martino, Viterbi School of Engineering, USC, United States

14:20-14:30 IAC-23/E7/IPB/75917
COMPARATIVE ANALYSIS OF THE PRECAUTIONARY PRINCIPLE WITH THE PRINCIPLE OF DUE DILIGENCE FOR COMMERCIAL SPACE ACTORS TOWARD SPACE DEBRIS REMEDIATION.
Vugar Mammadov, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

14:30-14:40 IAC-23/E1/IPB/80662
NOVEL CUBESAT TEST SETUP VALIDATING SATELLITE ATTITUDE DETERMINATION AND CONTROL
A. Bilal Özcan, Istanbul Technical University, Türkiye

14:40-14:50 IAC-23/E7/IPB/76147
ARTEMIS ACCORDS, AND ANALYSIS OF THE DEVELOPMENT OF TRANSPARENCY AND CONFIDENCE-BUILDING MEASURES (TCBMS) FOR INVOLVEMENT OF SMALL AND MEDIUM SPACE AGENCIES.
Vugar Mammadov, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

SCREEN #10

13:30-13:40 IAC-23/A1/IPB/79582
THE ART OF CELLULAR RESILIENCE: UNLOCKING THE SECRETS OF DNA PROTECTION IN A RADIATION-FILLED UNIVERSE
Jaume Puig, University Pompeu Fabra of Barcelona, Spain

13:40-13:50 IAC-23/A3/IPB/80335
SYSTEM DESIGN AND ANALYSIS OF AN AI-ASSISTED MULTI-MODEL LOCOMOTION FOR MARS EXPLORATION
Nijanthan Vasudevan, Space Generation Advisory Council (SGAC), United States

13:50-14:00 IAC-23/A6/IPB/80349
ACTIVE SPACE DEBRIS REMOVAL WITH ARTIFICIAL INTELLIGENCE ASSISTED CUBESATS USING ROBOT TECHNOLOGY AND SWARM INTELLIGENCE FOR TRAJECTORY PREDICTION, DEBRIS CAPTURE, AND DEORBITING IN LOW EARTH ORBIT
Nijanthan Vasudevan, Space Generation Advisory Council (SGAC), United States

14:00-14:10 IAC-23/E1/IPB/80607
IMPORTANCE OF SCIENCE AND TECHNOLOGY IN WOMEN
Driana Gabriela Sanchez Contreras, Instituto Politécnico Nacional, Mexico

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14:10-14:20 IAC-23/E5/IPB/74762
SPACE TUGS AND LAGRANGE POINTS: KEY ARCHITECTURES FOR THE NEW CIS-LUNAR ECONOMY
Paolo Mangili, University of Houston, United States

14:20-14:30 IAC-23/A6/IPB/79061
HOW TO MAKE MONEY FROM SPACE DEBRIS?
Salihat Haciyeva, Azerbaijan State University of Economics, Azerbaijan

14:30-14:40 IAC-23/D2/IPB/79717
DESIGN OF A LIFTING-BODY EARTH RETURN ORBITER FOR MARS EXPEDITION MISSIONS
Hao Liu, Tsinghua University, China

14:40-14:50 IAC-23/A7/IPB/80753
COSMIC RELIC ANTINEUTRINOS AS UNIQUE TOOL FOR DETERMINATION OF MAGNITUDE OF INTERNAL ELECTRIC FIELD INTENSITY VECTOR OF SINGLE CRYSTAL
Vali Huseynov, Shamakhy Astrophysical Observatory, Azerbaijan

SCREEN #11

13:30-13:40 IAC-23/A3/IPB/77467
IMPLICATIONS OF LUNAR VEHICLE WHEELS CREATED THROUGH 3D PRINTING OF AMORPHOUS METAL AND HIGH ENTROPY ALLOYS
Antonio Stark, Unmanned Exploration Laboratory (UEL), N/A

13:40-13:50 IAC-23/A3/IPB/79666
SENSOR LEVELING AND DISTANCE MATCHING METHODOLOGIES FOR LUNAR ROVERS
Antonio Stark, Unmanned Exploration Laboratory (UEL), N/A

13:50-14:00 IAC-23/B4/IPB/79220
EXPERIMENTAL VERIFICATION OF THE ALTITUDE STABILISATION CAPABILITY OF A METEOROLOGICAL BALLOON
Kamil Ziolkowski, Rzeszow University of Technology, Poland

14:00-14:10 IAC-23/C1/IPB/75565
DESENSITIZED ENSEMBLE GUIDANCE
Akan Selim, Roketsan, Türkiye

14:10-14:20 IAC-23/B4/IPB/78815
USING UNIVERSITY CUBESATS FOR EARTHQUAKE DETECTION AND DISASTER MANAGEMENT
Ugur Drguven, UN CSSTEAP, United Kingdom

14:20-14:30 IAC-23/A2/IPB/80701
RELATIVISTIC COMPARISON OF PARTICLE WAVE MOVEMENT TO ORBITAL MECHANICS: HARMONIC ORBITING FOR GENERATING 1G INERTIA IN A SPACECRAFT
Stefan Aleksa Djurdjevic, [unlisted], Serbia

14:30-14:40 IAC-23/E5/IPB/78505
SPACE THROUGH SOCIAL AND HUMANITARIAN SCIENCES LENS: SOME ISSUES RELATED TO THE DEVELOPMENT OF ASTROSOCIOLOGY IN AZERBAIJAN
Tahira Allahyarova, Social Research Center (SRC), Azerbaijan

14:40-14:50 IAC-23/A7/IPB/78353
Λ171Å FE IX LINE PROFILES IN THE SPECTRUM OF SLOW MAGNETO-ACOUSTIC WAVES
Zamina Aliyeva, Baku State University, Azerbaijan

SCREEN #12

13:30-13:40 IAC-23/B1/IPB/77317
SMALL SPACECRAFT FOR GLOBAL GREENHOUSE GAS EMISSION MONITORING
Vera Mayorova, Bauman Moscow State Technical University, Russian Federation

13:40-13:50 IAC-23/A6/IPB/76123
PLASMA MEANS OF COMBATING TECHNOGENIC DEBRIS IN SPACE
Ekaterina Tverdokhlebova, TSNIIMASH, Russian Federation

13:50-14:00 IAC-23/A6/IPB/76700
FINDING REAL-WORLD ORBITAL MOTION LAWS FROM DATA
João Funenga, FCT-UNL, Portugal

14:00-14:10 IAC-23/A3/IPB/76046
EUROCUBES – EUROPA CUBESAT EXPLORATION AND SCIENCE
Raj Kedia, University of Colorado Boulder, United States

14:10-14:20 IAC-23/A6/IPB/76376
A NOVEL METHOD OF SPACE NON-COOPERATIVE TARGET CAPTURE BASED ON MULTI-SOURCE VISUAL INFORMATION FUSION ALGORITHM
Xiaowei Wand, China Academy of Launch Vehicle Technology (CALT), China

14:20-14:30 IAC-23/A6/IPB/78918
ESA'S COLLISION RISK ESTIMATION AND AUTOMATED MITIGATION (CREAM) PROJECT – STATUS, RESULTS AND FUTURE EVOLUTION
Klaus Merz, European Space Agency (ESA/ESOC), Germany

14:30-14:40 IAC-23/B4/IPB/77765
PASSIVE THERMAL CONTROL TO MAINTAIN EARTH-LIKE TEMPERATURES INSIDE A CUBESAT
Yasser Moumtaz, The Spring Institute for Forests on the Moon, France

14:40-14:50 IAC-23/A6/IPB/77054
THE IOAG WORKING GROUP ON SUSTAINABILITY OF OPERATIONS IN SPACE (SOS WG): FINDINGS AND RECOMMENDATIONS IN THE DOMAINS OF SPACE DEBRIS, COLLISION AVOIDANCE AND END-OF-LIFE ACTIVITIES
Klaus Merz, European Space Agency (ESA/ESOC), Germany

SCREEN #13

13:30-13:40 IAC-23/E1/IPB/80719
DAPHNE: MORPH TO SURVIVE WITH AN INNOVATIVE DESIGN APPROACH
Raffaele Minichini, UniversitÃ degli Studi di Napoli "Federico II", Italy

13:40-13:50 IAC-23/E1/IPB/80391
A PARADIGM INVOLVING YOUNG PROFESSIONALS IN RESEARCH AND ACADEMIA CONTRIBUTING TO THE SPACE INDUSTRY BROUGHT TO LIGHT
Sri Venkata Vathsala Musunuri, Polytechnique Montreal, Canada

13:50-14:00 IAC-23/C1/IPB/80639
APPLICATION OF DYNAMIC PROGRAMMING FOR LOW-THRUST STATION-KEEPING OPTIMIZATION ON GEOSTATIONARY ORBIT.
Hayeon Kim, Moscow Aviation Institute (National Research Institute, MAI), Russian Federation

14:00-14:10 IAC-23/A4/IPB/76137
HOW TO DISTINGUISH A POTENTIAL SPACESHIP IN SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE?
Ugur drguven, UN CSSTEAP, United Kingdom

14:10-14:20 IAC-23/B6/IPB/75673
QUESTION ANSWERING OVER KNOWLEDGE GRAPHS FOR EXPLAINABLE SATELLITE SCHEDULING
Cheyenne Powell, University of Strathclyde, United Kingdom

14:20-14:30 IAC-23/B4/IPB/78211
DESIGN AND LABORATORY TESTING OF A 4U 3D-PRINTED ION/ELECTRON SPECTROMETER WITH AN INSTANTANEOUS 3D FIELD OF VIEW FOR SMALL SATELLITES.
Gwendal Hénaff, Laboratoire de Physique des Plasmas (LPP), France

14:30-14:40 IAC-23/B1/IPB/76011
LITHOSPHERIC-IONOSPHERIC COUPLING EFFECTS: OBSERVATIONS PRIOR TO THE 15 DECEMBER 2017, INDONESIA EARTHQUAKE USING SPACE BORNE AND GROUND SENSOR
Nur Awatiff Mohamad Rizal, Universiti Sains Malaysia, Malaysia

14:40-14:50 IAC-23/A2/IPB/77948
MICROGRAVITY ENVIRONMENT TEST FACILITIES IN KOREA
I Sang Yu, Korea Aerospace Research Institute (KARI), Korea, Republic of

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SCREEN #14

13:30-13:40 IAC-23/B4/IPB/77161
ASSESSING THE EFFECTIVENESS OF DIFFERENT DEPLOYABLE SOLAR PANEL SETUPS ON SHARJAH-SAT-2, AN EARTH OBSERVATIONAL 6U CUBESAT, USING THE CUBESAT TOOLBOX
Fatima Alketbi, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

13:40-13:50 IAC-23/B4/IPB/74848
OPTIMUM PANEL DEPLOYMENT ANGLE FOR PASSIVE AERODYNAMIC ATTITUDE STABILIZATION IN CUBESATS
Muhammad Taha Ansari, Khalifa University of Science and Technology (KUST), United Arab Emirates

13:50-14:00 IAC-23/E1/IPB/80703
STRA2SPHERA: ACCESSING SPACE BELOW THE KARMAN LINE
Claudia Guerra, UniversitÃ degli Studi di Napoli "Federico II", Italy

14:00-14:10 IAC-23/B1/IPB/78269
ONBOARD DIRECT WEAKLY SUPERVISED BAND-TO-BAND ALIGNMENT
Gilberto Goracci, Scuola di Ingegneria Aerospaziale La Sapienza, Italy

14:10-14:20 IAC-23/A3/IPB/79010
ANALOGUE SPACE MISSIONS AS TESTING PLATFORMS FOR A BROADER ACCESS TO SPACE FOR PARASTRONAUTS
Tomas Ducai, University of Vienna, Austria

14:20-14:30 IAC-23/A6/IPB/76549
IMPROVING THE METHOD OF ASSESSING THE POTENTIAL DAMAGE OF SPACE OBJECTS
KaiQi Cui, Purple Mountain Observatory (PMO), China

14:30-14:40 IAC-23/B4/IPB/80344
EARTH OBSERVATION PAYLOADS ON-BOARD A 3U CUBESAT AND THEIR SCIENTIFIC PURPOSE FOR MONITORING SURFACE TEMPERATURE HOTSPOTS
David Vlassov, Polytechnique Montreal, Canada

14:40-14:50 IAC-23/A7/IPB/77254
DETERMINATION METHODS OF THE DISTANCE TO NOVAE
Kamala Alisheva, Baku State University Azerbaijan

SCREEN #15

13:30-13:40 IAC-23/C1/IPB/80485
SATELLITE ROUTING WITH QUANTUM ANNEALING: COLLECTING SPACE DEBRIS AND ON-ORBIT SERVICING
Priyank Dubey, Indian Institute of Science Education and Research Berhampur, India

13:40-13:50 IAC-23/A3/IPB/74738
INTRODUCING A NOVEL FAST TERMINAL SLIDING MODE CONTROL WITH THE APPLICATION OF SPACE ROBOTICS
Mahsa Azadmanesh, K. N. Toosi University of Technology, Iran

13:50-14:00 IAC-23/B6/IPB/80733
OPTIMIZING ROUTING AND NETWORK PLANNING IN SATELLITE CONSTELLATIONS USING THE FLOYD-WARSHALL ALGORITHM
Angel Vázquez, High Technology Unit (UAT) Faculty of Engineering - UNAM, Mexico

14:00-14:10 IAC-23/C1/IPB/77517
THE CAPTURE OF NEAR-EARTH ASTEROIDS IN CLOSE PROXIMITY ORBITS WITH A TWO-SPACECRAFT STRATEGY USING A LINEAR APPROXIMATION
Livia Ionescu, University of Glasgow, United Kingdom

14:10-14:20 IAC-23/A1/IPB/78746
FEMALE DRY IMMERSION: RESULTS OF A POSTUROGRAPHIC STUDY
Nelly Abu Sheli, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

14:20-14:30 IAC-23/C1/IPB/79703
COMPARISON OF NON-LINEAR HEURISTIC CONTROL AND LINEAR TIME-VARYING OPTIMAL CONTROL DESIGN FOR 3-AXES ATTITUDE CONTROL OF A MICROSATELLITE
Neha Chohan, ReOrbit, Finland

14:30-14:40 IAC-23/B1/IPB/79164
BUILDING A SUSTAINABLE CLIMATE CHANGE MONITORING SATELLITE MISSION THROUGH LIFE CYCLE ASSESSMENT
Dhanisha Sateesh, Space Generation Advisory Council (SGAC), India

14:40-14:50 IAC-23/E5/IPB/75670
FIRST ANALOG MISSION OF THE JORDAN SPACE RESEARCH INITIATIVE: ONE SMALL STEP FOR EMERGING SPACE COUNTRIES, ONE GIANT LEAP FOR JORDAN
Sahba El-Shawa, Jordan Space Research Initiative (JSRI), Jordan

SCREEN #16

13:30-13:40 IAC-23/A6/IPB/79120
THE EUSST COLLISION AVOIDANCE SERVICE READY TO SUPPORT THE NEW SPACE ENVIROMENT
Cristina Pérez Hernández, CDTI (Centre for the development of Industrial Technology), Spain

13:40-13:50 IAC-23/E3/IPB/77085
REVISITING THE MOON AGREEMENT: ANALYZING 45 YEARS OF POLICY AND LEGAL TRENDS THROUGH THE LENS OF NEWSPACE COMMERCIALIZATION
Natacha Hughes, University of Toronto Aerospace Team (UTAT), Canada

13:50-14:00 IAC-23/B1/IPB/79702
DEEPSEA CLUSTER: DETECTION AND CLASSIFICATION OF ANTHROPOGENIC OCEAN NOISE USING SATELLITE IMAGES
Jahir Uddin, University of Nebraska-Lincoln, United States

14:00-14:10 IAC-23/A3/IPB/79689
OPTIMIZING AUTONOMOUS NAVIGATION OF UNMANNED GROUND VEHICLES IN CHALLENGING TERRAIN THROUGH SURFACE ANALYSIS AND AI
Jahir Uddin, University of Nebraska-Lincoln, United States

14:10-14:20 IAC-23/A1/IPB/77310
COMBINED ELECTROMYOSTIMULATION MODE TO MITIGATION OF SPACE FLIGHT EFFECTS ON CONTRACTILE PROPERTIES OF LOWER EXTREMITIES MUSCLES
Ivan Ponomarev, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

14:20-14:30 IAC-23/A1/IPB/77363
EFFECTS OF DIFFERENT DURATION DRY IMMERSION ON SENSORY ORGANIZATION OF POSTURAL SYSTEM
Nikita Shishkin, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

14:30-14:40 IAC-23/E6/IPB/77031
EMPOWERING EUROPEAN NEWSPACE ENTREPRENEURS: A TAILORED DATABASE FRAMEWORK FOR VENTURE CAPITAL FUNDING
Stirling Forbes, International Space University (ISU), France

14:40-14:50 IAC-23/C1/IPB/77964
INTELLIGENT INTEGRATED NAVIGATION OF SOLAR SYSTEM BOUNDARY EXPLORATION CRUISE PHASE BASED ON Q-LEARNING EXTENDED KALMAN FILTER
Wenjian Tao, School of aeronautics and astronautics, Sun Yat-Sen University Guangzhou, China

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SCREEN #17

13:30-13:40 IAC-23/E3/IPB/77117
KOREA'S PARTICIPATION IN SPACE4WOMEN: A WIN-WIN STRATEGY FOR A UN PROJECT AND A LOCAL INITIATIVE
Soyoung Chung, Korea Aerospace Research Institute (KARI), Korea, Republic of

13:40-13:50 IAC-23/A6/IPB/76035
RESIDENT SPACE OBJECT CLASSIFICATION FROM LIGHT CURVES WITH DEEP LEARNING.
Eliott Simon, European Space Agency (ESA), Belgium

13:50-14:00 IAC-23/A3/IPB/80007
USING WADI RUM DESERT AND TERRAINS AS A SPACE TESTING FIELDS.
M.omar Albalbaki, Blinc- Borderless lab, Jordan

14:00-14:10 IAC-23/C2/IPB/76706
NITINOL BIOMIMETIC COMPLIANT MECHANISM FOR DEEP SPACE EXPLORATION TESTED ONBOARD THE ISS ON MISSE PLATFORM.
Omar Saldana Penetro, Instituto Nacional de AstrofÃsica, Óptica y Electrónica, Mexico

14:10-14:20 IAC-23/A6/IPB/76402
OPTIMAL LOW THRUST DEBRIS REMOVAL USING A TETHERED SYSTEM CONSIDERING COLLISION AVOIDANCE
Liqiang Hou, Shanghai Jiaotong University, China

14:20-14:30 IAC-23/A7/IPB/77165
SPECTRAL INVESTIGATIONS OF THE SYMBIOTIC STAR CH CYGNI IN 2014-2020
Khidir Mikailov, Baku State University, Azerbaijan

14:30-14:40 IAC-23/A3/IPB/77353
INERTIAL-VISUAL COLLABORATIVE NAVIGATION METHOD FOR MASTER-SLAVE MULTI-LUNAR-BASED EQUIPMENT
Siqi Lu, School of Aerospace Engineering, Beijing Institute of Technology, China

14:40-14:50 IAC-23/A1/IPB/79633
VIRTUAL REALITY RESCUE TRAINING SIMULATION- ADDRESSING RETENTION OF SKILLS IN EXTREME ENVIRONMENTS
Carole Dangoisse, [unlisted], United Kingdom

SCREEN #18

13:30-13:40 IAC-23/A3/IPB/79620
DAN CATALOG OF WATER AND CHLORINE DISTRIBUTIONS ALONG THE TRAVERSE OF CURIOSITY ROVER
Sergei Nikiforov, Space Research Institute (IKI), RAS, Russian Federation

13:40-13:50 IAC-23/B4/IPB/77711
ESTIMATION OF THE MICRO PULSED PLASMA THRUSTER SPECIFIC IMPULSE
Denis Egoshin, Bauman Moscow State Technical University, Russian Federation

13:50-14:00 IAC-23/E1/IPB/76737
SUMMER STUDENTS INTERNSHIP PROGRAM AT THE SHARJAH ACADEMY FOR ASTRONOMY, SPACE SCIENCES, AND TECHNOLOGY
Ilias Fernini, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

14:00-14:10 IAC-23/E2/IPB/79490
FLIGHT TRAJECTORY AND RECOVERY OPTIMIZATION OF A MODEL ROCKET THROUGH A SYSTEM OF ACTIVE AND PASSIVE STABILITY ELEMENTS DESIGNED FROM TENSEGRITY STRUCTURES
Bryan Méndez Medina , Universidad de Costa Rica, Costa Rica

14:10-14:20 IAC-23/C1/IPB/79031
OBSERVER-BASED FAULT-TOLERANT INTEGRATED ORBIT-ATTITUDE CONTROL OF SOLAR SAIL
Fuqiang Duan, National University of Defense Technology, China

14:20-14:30 IAC-23/B1/IPB/75507
METHOD AND PRACTICAL RESULTS OF PROCESSING SPACE IMAGES OF THE CAUCASUS-CASPIAN REGION
Fazil Ismailov, Azerbaijan

14:30-14:40 IAC-23/C2/IPB/80591
MODELING OF FUNCTIONALLY GRADED COATINGS AND APPLICATIONS IN SANDWICH STRUCTURES
Abdulla Sofiyev, [unlisted], Türkiye

14:40-14:50 IAC-23/B6/IPB/77423
UNLOCKING THE POTENTIAL OF THE IN-ORBIT SERVICING MARKET: KEY SEGMENTS AND THEIR FUTURE VALUE
Marco Guerzoni, Italy

SCREEN #19

13:30-13:40 IAC-23/A6/IPB/79136
QUANTIFYING IMPROVEMENTS IN DEBRIS RISK ANALYSIS USING A CONSTELLATION OF SPACEBORNE OPTICAL SENSORS
Antonio D'Anniballe, Cranfield University, United Kingdom

13:40-13:50 IAC-23/E7/IPB/77841
IS SPACE FUEL A SPACE OBJECT: IN-SITU PROPELLANT PRODUCTION AND THE LEGAL FRAMEWORK THAT GOVERNS IT
Natalia Gorina, The Netherlands

13:50-14:00 IAC-23/E5/IPB/80477
TOWARDS THE PRACTICE OF JAPANESE TRADITIONAL PERFORMING CULTURE IN FUTURE SPACE ACTIVITIES.
Yurie Suzuki, Royal College of Art, Japan

14:00-14:10 IAC-23/E5/IPB/78839
THE IDEA OF CONVIVIAL SOCIETY EMBODIED IN THE FLAME THAT LIT IN THE STRATOSPHERE
Motoki Kawase, Nagoya Institute of Technology, Japan

14:10-14:20 IAC-23/E6/IPB/78622
THE CATALAN NEWSPACE STRATEGY
Josep Colomé Ferrer, Institut d'Estudis Espacials de Catalunya (IEEC), Spain

14:20-14:30 IAC-23/E6/IPB/79845
NEWSPACE LAB: SUPPORTING THE DEVELOPMENT OF THE SPACE ECOSYSTEM IN CATALONIA
Lluís Foreman Campins, Institut d'Estudis Espacials de Catalunya (IEEC), Spain

14:40-14:50 IAC-23/D2/IPB/77672
TRADE-OFF STUDIES ON MISSION ARCHITECTURE AND CONFIGURATION OF A SMALL PARTIALLY REUSABLE STRATOLAUNCHER FOR SMALLSAT LEO DELIVERY
Luca Colombo, Politecnico di Milano, Italy

SCREEN #20

13:30-13:40 IAC-23/C1/IPB/77992
STUDY ON SHORT RANGE FORMATION FLIGHT AND DOCKING CONTROL USING AC MAGNETIC FIELD
Hayate Tajima, The University of TOKYO, Graduate school, Japan

13:40-13:50 IAC-23/A4/IPB/80680
SETI (OVER HUMAN OUTER BOD OBSERVING INTELLIGENCE)
Ragunath Ragunth, India

13:50-14:00 IAC-23/C2/IPB/76069
ADDITIVE DESIGN OF HEAT SWITCH TECHNOLOGY: LESSONS LEARNED
Jakub MaÅ¡iek, Brno University of Technology, Czech Republic

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14:00-14:10 IAC-23/A1/IPB/75705
CORRELATION ANALYSIS AS PART OF A NOVEL BIOMARKER ANALYSIS SYSTEM FOR ASTRONAUT HEALTH IN SPACE
Anurag Sakharkar, University of Saskatchewan, Canada

14:10-14:20 IAC-23/A5/IPB/79508
LAVA TUBE-BASED LUNAR/MARS ANALOG STATION IN JEJU ISLAND
Hong-Kyu Moon, Korea Astronomy and Space Science Institute, Korea, Republic of

14:30-14:40 IAC-23/E5/IPB/75898
FOOD PRODUCTION SYSTEMS AND METHODS TOWARDS FOOD SECURITY AND SUSTAINABILITY IN SPACE AND ON EARTH.
Delphine Urbah, [unlisted], France

14:40-14:50 IAC-23/A6/IPB/78441
TAXONOMY FOR RESIDENT SPACE OBJECTS IN LEO
Marta Guimaraes, Neuraspace, Portugal

SCREEN #21

13:30-13:40 IAC-23/C2/IPB/80218
BENDING ANALYSIS AND TESTING OF A HYPERSONIC ROCKET FINS
Mohammed Omar Nawaz, Concordia University, Canada

13:40-13:50 IAC-23/A1/IPB/75667
INVESTIGATING THE NEUROPSYCHOLOGICAL IMPACT OF THE OVERVIEW EFFECT USING VIRTUAL REALITY
Sahba El-Shawa, Jordan Space Research Initiative (JSRI), Jordan

13:50-14:00 IAC-23/E3/IPB/78566
BUSINESS MODELS WITHIN THE SATELLITE SERVICES AND APPLICATIONS SECTOR
Filippo Papamarenghi, Italy

14:00-14:10 IAC-23/C1/IPB/76195
GENERAL OVERVIEW OF NEAR-EARTH MAGNETIC ANOMALY EFFECTS ON SATELLITE ATTITUDE ESTIMATION
Demet Cilden-Guler, Istanbul Technical University, Türkiye

14:10-14:20 IAC-23/D1/IPB/80612
NANOSATELLITE ATTITUDE ESTIMATION WITH UNCERTAIN PROCESS AND MEASUREMENT NOISE USING NONTRADITIONAL FILTERING
Chingiz Hajiyev, Istanbul Technical University, Türkiye

14:20-14:30 IAC-23/D1/IPB/80615
IN-ORBIT ESTIMATION OF MAGNETOMETER BIASES AND SCALE FACTORS VIA NONLINEAR TWO-STAGE KALMAN FILTER
Chingiz Hajiyev, Istanbul Technical University, Türkiye

14:30-14:40 IAC-23/C4/IPB/77794
TOOLKIT FOR LIQUID ROCKET PROPULSION SYSTEM DESIGN
Nijat Abdulla, National Aviation Academy - Azerbaijan, Azerbaijan

14:40-14:50 IAC-23/E6/IPB/76107
421-DAY PILOTED EXPEDITION TWO TRAVELERS TO MARS AND BACK.
Oleg Aleksandrov, Private individual www.oleg.space, United States

SCREEN #22

13:30-13:40 IAC-23/E5/IPB/75167
A EUROPEAN SPACE POLICY BRIDGE WITH CHINESE CHARACTERISTICS
Andrew Thomas, The British Interplanetary Society, United Kingdom

13:40-13:50 IAC-23/B1/IPB/77352
OPTIMIZING OBJECT DETECTORS WITH KNOWLEDGE DISTILLATION FOR ON-BOARD EARTH OBSERVATION
Lingyun Gu, School of Aerospace, Tsinghua University, Beijing, China

13:50-14:00 IAC-23/B4/IPB/77212
SHARJAH-SAT-3 MISSION DESIGN ANALYSIS WITH STK SOFTWARE: ORBIT DETERMINATION, LIFETIME ANALYSIS, AND POWER GENERATION
Amel Alhammadi, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

14:00-14:10 IAC-23/B3/IPB/76108
421-DAY PILOTED EXPEDITION TWO TRAVELERS TO MARS AND BACK.
Oleg Aleksandrov, Private individual www.oleg.space, United States

14:10-14:20 IAC-23/E9/IPB/80078
ADVANCEMENTS IN PAYLOAD HOSTING OPERATIONS FOR NEW SPACE: ADDRESSING CHALLENGES, STREAMLINING PROCESSES, ENHANCING ECONOMIC VIABILITY, AND DEMONSTRATING EFFICACY THROUGH EMPIRICAL EVIDENCE
Fakhri Babayev, GomSpace Aps, Luxembourg

14:30-14:40 IAC-23/C4/IPB/80624
GRAPHENE-BASED LASER PROPULSION FOR SPACE APPLICATION
Omnia Khattab, Khalifa University of Science and Technology (KUST), United Arab Emirates

14:40-14:50 IAC-23/E1/IPB/79707
FROM SPACE TO EARTH: BRIDGING THE SPACE-NON-SPACE DIVIDE THROUGH RAISING AWARENESS AND ESTABLISHING MUTUAL UNDERSTANDING
Katsiaryna Rutkouskaya, Stichting dotSPACE, The Netherlands

SCREEN #23

13:30-13:40 IAC-23/B1/IPB/77193
ON THE OBJECT RECOGNITION IN AEROSPACE IMAGES
Elkhan Sabziev, [unlisted], Azerbaijan

13:40-13:50 IAC-23/C1/IPB/76781
ROBUST LOW-THRUST GRAVITY-ASSIST TRAJECTORY OPTIMIZATION
Jin Cheng Hu, Nanjing University of Aeronautics and Astronautics, China

13:50-14:00 IAC-23/B6/IPB/77173
A DECENTRALIZED APPROACH FOR MULTI-SPACECRAFT MISSION PLANNING
Junhui Zhou, School of Aerospace Engineering, Beijing Institute of Technology, China

14:00-14:10 IAC-23/A3/IPB/77505
MODEL-BASED SYSTEMS ENGINEERING SIMULATION TOOL FOR THE DESIGN AND PERFORMANCE ANALYSIS OF MODULAR LUNAR ROVERS
Majid Alhajeri, University of Glasgow, United Kingdom

14:40-14:50 IAC-23/A6/IPB/78859
TECHNOLOGIES PAVING THE WAY TOWARD SPACE DEBRIS OBSERVATION NETWORK IN SUPPORT OF SPACE TRAFFIC MANAGEMENT
Emiliano Cordelli, GMV, Space Debris Office (SDO), ESA/ESOC, Germany

SCREEN #24

13:30-13:40 IAC-23/B6/IPB/80134
SMALL SATELLITES SYSTEM OVERVIEW SIMULATOR: DESIGN AND EVALUATION
Mohammad Fahim Sultan Anoy, BRAC University, Bangladesh

13:50-14:00 IAC-23/C2/IPB/76885
THE LESSON LEARNED OF FACING THEOS-2A BATTERY THERMAL HANDLING ISSUE DURING SATELLITE DEVELOPMENT PHASE
Chidchanok Chaichuenchob, Geo-Informatics and Space Technology Development Agency (GISTDA), Thailand

Thursday 5 October 2023

14:00-14:10 IAC-23/B4/IPB/75666
COLLISION RISK ASSESSMENT: AUTONOMY LEVELS FOR AI-BASED AUTONOMOUS COLLISION AVOIDANCE
Salman Ali Thepdawala, Universität der Bundeswehr München, Germany

14:10-14:20 IAC-23/E3/IPB/77123
THE IMPORTANCE OF NUCLEAR ENERGY GOVERNANCE IN ESTABLISHING SUSTAINABLE LUNAR SETTLEMENTS
Héloïse Vertadier, Open Lunar Foundation, New Zealand

14:30-14:40 IAC-23/C1/IPB/77447
BOUNDARY-VALUE PROBLEM OF TISSERAND-LEVERAGING TRANSFERS
Jin Cheng Hu, Nanjing University of Aeronautics and Astronautics, China

14:40-14:50 IAC-23/E3/IPB/80428
THE INSTITUCIONAL ENVIRONMENT OF THE ALCANTARA LAUNCH CENTER
Leticia Morosino, Brazilian Space Agency (AEB), Brazil

SCREEN #25

13:30-13:40 IAC-23/E1/IPB/76567
THE ACHIEVED ACADEMY, ACCESSIBLE SPACE EDUCATION INITIATIVE LAUNCHED BY THE SPACE GENERATION ADVISORY COUNCIL.
Maria Casanovas Crespo, Space Generation Advisory Council (SGAC), Spain

14:00-14:10 IAC-23/E1/IPB/80232
ESTABLISHMENT OF SPACE EDUCATION RESEARCH LAB: A NOVEL INITIATIVE FOR PROMOTING SPACE SCIENCE, TECHNOLOGY AND ITS APPLICATIONS
Najam Naqvi, Institute of Space Technology (IST), Pakistan

14:20-14:30 IAC-23/C1/IPB/78741
METHODS FOR DYNAMIC STUDIES OF CLOSE ENCOUNTERS AND APPLICATION TO REAL CASES
Nicolo' Stronati, Cranfield University, United Kingdom

14:40-14:50 IAC-23/E2/IPB/80341
A STUDENT APPROACH FOR THERMAL MODELLING, VALIDATION AND TESTING OF THE 6S CUBESAT
Davide Scalettari, Politecnico di Milano, Italy

SCREEN #26

13:30-13:40 IAC-23/C2/IPB/78182
INFLUENCE OF POST-BUCKLING BEHAVIOR AND MANUFACTURING ERRORS ON THE ACCURACY OF SPACE-TENSIONED THIN-FILM ANTENNA
Xiaotao Zhou, Xi'an Institute of Space Radio Technology, China

14:00-14:10 IAC-23/C2/IPB/78023
AN EFFICIENT STRUCTURAL ANALYSIS OF NARITCUBE-1 SATELLITE
Chinathip Narongphun, National Astronomical Research Institute of Thailand (NARIT), Thailand

SCREEN #27

13:30-13:40 IAC-23/C4/IPB/76772
ADVANCED ROOM TEMPERATURE PROPELLANTS FOR ROCKETS AND SPACECRAFTS
Ansh Jaipuria, SRM Institute of Science and Technology, India

13:50-14:00 IAC-23/E6/IPB/80696
REDUCING DEATHS IN TRAFFIC ACCIDENTS WITH SPACE RESEARCH AND ARTIFICIAL INTELLIGENCE.
Ali Mammadov, Azerbaijan

14:00-14:10 IAC-23/A4/IPB/78059
ENHANCING SPECTRAL SENSITIVITY THROUGH INTELLIGENT TARGETING
Anushka Sharad Kumavat, [unlisted], India

14:30-14:40 IAC-23/C4/IPB/75797
RESEARCH ON THE ACOUSTIC CHARACTERISTICS OF FLOW DISTRIBUTION PLATE IN LOX/KEROSENE STAGED COMBUSTION ROCKET ENGINE
chen cao, Xian Aerospace Propulsion Institute, China

14:40-14:50 IAC-23/C4/IPB/75810
REVIEW ON THE TECHNOLOGY OF LIQUID OXYGEN KEROSENE ENGINE FOR THE BOOSTER STAGE OF LONG MARCH 5
Chen Jianhua, Xi'an Aerospace Propulsion Institute, China

SCREEN #28

13:30-13:40 IAC-23/B6/IPB/80654
A HYBRID APPROACH TO REAL-TIME SPACECRAFT OPERATIONS IN THE GROUND SEGMENT
Doug Smith, University of Colorado Boulder, United States

13:40-13:50 IAC-23/E1/IPB/75720
SPACE EDUCATION AS A TOOL SUPPORTING THE ASSIMILATION OF REFUGEE YOUTH.
Agnieszka Bajtyngier, ESERO Poland, Poland

13:50-14:00 IAC-23/A3/IPB/77917
OPTIMIZATION, DESIGN, FABRICATION, AND EXPERIMENT OF THE FOLDABLE WHEEL OF THE LUNAR ROVER.
TaeYoung Lee, Unmanned Exploration Laboratory (UEL), Korea, Republic of

14:00-14:10 IAC-23/A3/IPB/78706
NON GPS POSITIONING SYSTEM FOR LUNAR EXPLORATION ROVER.
TaeYoung Lee, Unmanned Exploration Laboratory (UEL), Korea, Republic of

SCREEN #29

13:30-13:40 IAC-23/C2/IPB/78217
SAFETY FACTOR OF CRITICAL STRUCTURAL COMPONENTS IN GLASS-FIBER REINFORCED PLASTIC SOUNDING ROCKETS
Hasel Ramírez Cortés, Instituto Politécnico Nacional, Mexico

14:10-14:20 IAC-23/A3/IPB/80488
QUANTIFYING CARBON DEPLETION IN THE MARTIAN ATMOSPHERE THROUGH ULTRAVIOLET RADIATION ANALYSIS: INSIGHTS FROM EMIRATES MARS MISSION (EMM) DATA ON CARBON MONOXIDE (CO) LEVELS
Sarath Raj Nadarajan Syamala, Amity University, Dubai, United Arab Emirates

14:20-14:30 IAC-23/A3/IPB/77544
CHARACTERIZING THE DIRECTIONAL INTENSITIES OF ION IMPACTS ON THE MOON AND THEIR IMPACT ON SPACE WEATHER
Sarath Raj Nadarajan Syamala, Amity University, Dubai, United Arab Emirates

14:30-14:40 IAC-23/A3/IPB/75933
THE STUDY OF CHANGES IN H+ ION CONCENTRATION CONSTITUTING THE AURORAL FORMATION IN MARS USING EMM,MAVEN & THEMIS
Sarath Raj Nadarajan Syamala, Amity University, Dubai, United Arab Emirates

14:40-14:50 IAC-23/B1/IPB/75939
THE ROLE OF SATELLITE IMAGERY IN WAR CRIME INVESTIGATIONS: AN OVERVIEW OF ITS USE AS EVIDENCE
Sarath Raj Nadarajan Syamala, Amity University, Dubai, United Arab Emirates

Thursday 5 October 2023

SCREEN #30

13:30-13:40 IAC-23/B1/IPB/78645
BRINGING BARE SOIL DETECTION ON-BOARD INTUITION-1 THROUGH EXPLOITING DATA-LEVEL DIGITAL TWINS
Jakub Nalepa, KP Labs, Poland

13:40-13:50 IAC-23/A3/IPB/77465
CONSTRAINED UNSCENTED KALMAN FILTERING WITH IMPROVED RELIABILITY FOR SMALL CELESTIAL BODY RELATIVE NAVIGATION
Mingzhen Che, Beijing Institute of Technology, China

13:50-14:00 IAC-23/A3/IPB/77230
COOPERATIVE NAVIGATION METHOD FOR LUNAR BASE EQUIPMENT BASED ON MULTI-SOURCE INFORMATION FUSION
Chengyu Cai, Beijing Institute of Technology, China

14:00-14:10 IAC-23/A6/IPB/77297
LARGE-SCALE RAPID EVALUATION FOR THE COLLISION RISK OF MEGA CONSTELLATIONS
Zhengyu Pan, School of Aerospace Engineering, Beijing Institute of Technology, China

14:10-14:20 IAC-23/A6/IPB/77191
SPACECRAFT COMPONENTS DETECTION METHOD BASED ON RANDOMIZED IMAGE ENHANCEMENT
Ai Gao, Beijing Institute of Technology, China

14:20-14:30 IAC-23/A3/IPB/77214
MULTI-TYPE TERRAIN DETECTION AND EVALUATION ON PLANET SURFACE BASED ON DEEP LEARNING
Ting Song, Northwestern Polytechnical University, China

14:40-14:50 IAC-23/A3/IPB/78285
DEFINITION AND TESTING OF A SATELLITE-TO-USER RANGING AND COMMUNICATION SIGNAL FOR A MARTIAN NAVIGATION SYSTEM
Andrea Manganiello, Argotec, Italy

SCREEN #31

13:30-13:40 IAC-23/B1/IPB/77414
MARKET CONSOLIDATION IN THE EARTH OBSERVATION SECTOR
Dimitra Stefoudi, Leiden University, The Netherlands

14:00-14:10 IAC-23/B4/IPB/79917
CONTROL APPROACH FOR REACTION WHEEL DEVELOPMENT IN LAB ENVIRONMENT
Salah Eddine Bentata, Agence Spatiale Algérienne (ASAL), Algeria

SCREEN #32

13:30-13:40 IAC-23/B1/IPB/80163
SPACE APPLICATIONS FOR DEVELOPING NATIONS: SERIES OF CASE STUDIES
Christopher Richardson, International Space University (ISU), United States

14:20-14:30 IAC-23/C1/IPB/78893
APPROXIMATION FOR GRAVITATIONAL FIELD OF A SMALL CELESTIAL BODY BY A TRIPLE OF UNIFORM BALLS
Anna Guerman, Centre for Mechanical and Aerospace Science and Technologies (C-MAST), Portugal

SCREEN #33

13:30-13:40 IAC-23/E1/IPB/76624
THE SENSES AND CREATIVITY THAT CAN BE ACHIEVED BY BRINGING ENTERTAINMENT IN SPACE
Taiko Kawakami, ASTRAX, Inc., Japan

13:40-13:50 IAC-23/B5/IPB/76634
TECHNOLOGY, PROBLEMS, AND SOLUTIONS FOR SPACE TRAVEL MEALS AS REPRESENTED BY YAKITORI , GRILLED CHICKEN
Taiko Kawakami, ASTRAX, Inc., Japan

13:50-14:00 IAC-23/E5/IPB/76637
THE POSSIBILITY OF DEVELOPING JAPANESE CULTURE THROUGH "NATTO" IN SPACE
Taiko Kawakami, ASTRAX, Inc., Japan

14:00-14:10 IAC-23/C4/IPB/78625
NUMERICAL SIMULATION OF A DETONATION ENGINE
Evgeniya Skryleva, Lomonosov Moscow State University, Russian Federation

14:30-14:40 IAC-23/A1/IPB/79354
BODY COMPOSITION AND BONE STATUS OF WOMEN OF REPRODUCTIVE AGE EXPOSED TO THE CONDITIONS OF 3 AND 5-DAY DRY IMMERSION WITHOUT COUNTERMEASURES
Galina Vassilieva, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

14:40-14:50 IAC-23/A1/IPB/79301
EVALUATION OF THE LACTOFERRIN INFLUENCE ON THE INDICATORS OF BONE TISSUE METABOLISM AT 21-DAY UNLOADING OF THE HIND LIMBS IN RATS
Nadezhda Lukicheva, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

SCREEN #34

13:30-13:40 IAC-23/B2/IPB/79370
IN-FLIGHT CONNECTIVITY FOR ENHANCED PASSENGER EXPERIENCE
Samrudhi Inamdar, United Kingdom

14:30-14:40 IAC-23/B4/IPB/76942
DYNAMIC CHARACTERISTICS OF TETHERED ASTEROID PROBE CONSIDERING TETHER'S FLEXIBILITY
Jie Wang, National University of Defense Technology, China

14:40-14:50 IAC-23/E1/IPB/80224
THE NEED OF CURRICULUM DESIGN FOR SCHOOL & COLLEGE: AN EMERGING NEED FOR SPACE POPULARIZATION FROM GRASSROOTS LEVEL
Muhammad Aqib Khan, Institute of Space Technology (IST), Pakistan

SCREEN #35

13:30-13:40 IAC-23/E5/IPB/80342
TECHNICAL PROBE AND RUDIMENTARY ANALYSIS OF THE DIANA LUNAR BASE SITE
Prishit Modi, University of Stuttgart, Germany

SCREEN #36

13:30-13:40 IAC-23/E10/IPB/79510
MAPPING ACTORS FOR A PLANETARY DEFENSE COORDINATION OFFICE IN BRAZIL USING A CONTEXTUAL-AND-BEHAVIORAL-CENTRIC-STAKEHOLDER IDENTIFICATION METHOD
Ana Lucia Pegetti, ITA-CTA, Brazil

14:40-14:50 IAC-23/D2/IPB/77509
POSSIBILITIES FOR EXPANDING THE APPLICATION AREAS OF SUBORBITAL LAUNCH VEHICLES
Vladyslav Proroka, Oles Honchar Dnipropetrovsk National University Ukraine

Thursday 5 October 2023

SCREEN #37

14:00-14:10 IAC-23/C1/IPB/79602
SATELLITE CHARACTERIZATION USING THE THEORY OF FUNCTIONAL CONNECTIONS AND NELDER-MEAD ALGORITHM
Allan Kardec de Almeida Junior, Instituto de TelecomunicaÃ§Ãµes (Portugal), Portugal

14:20-14:30 IAC-23/B5/IPB/76191
CLASSIFICATION OF INCOMING RADIO DATA FROM A SOLAR RADIO SPECTROMETER
Aisha Alowais, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

14:40-14:50 IAC-23/C2/IPB/77114
CLEARANCE ACCURACY ANALYSIS AND METHOD RESEARCH BASED ON MULTI-CLOSED-LOOP TRUSS ANTENNA UNIT
Di Wu, Nanjing University of Aeronautics and Astronautics, China

SCREEN #38

13:40-13:50 IAC-23/B6/IPB/79754
TOWARDS A ROBUST AND EXPLAINABLE RISK-REWARD MULTI-OBJECTIVE DECISION ARCHITECTURE
Gonzalo Montesino Valle, University of Strathclyde / Computer Science, United Kingdom

14:20-14:30 IAC-23/C2/IPB/80417
APPLIED ELECTRIC FIELD ON IMPROVED SMART OPTICAL MATERIAL (SOM), ALUMINUM-DOPED ZINC OXIDE (AZO), CHARACTERIZED BY MODIFIED VARIABLE ANGLE SPECTROSCOPIC ELLIPSOMETER (VASE) AND INFRARED (IR) CAMERA FOR SPACE APPLICATIONS - PART II
John Patrick Harris, Norfolk State University, United States

SCREEN #39

13:30-13:40 IAC-23/A6/IPB/78758
TOWARDS AN ALL-ORBIT OPTICAL DATA SERVICE PROVISIONING BASED ON ARIANEGROUP GEOTRACKER SYSTEM
Pyanet Marine, ArianeGroup SAS, France

SCREEN #40

14:00-14:10 IAC-23/A1/IPB/79642
ELECTRONIC COMPONENTS FOR ANALOG EVA SPACE SUIT: DESIGN AND PERFORMANCE ANALYSIS.
Arwa Bin tareef, [unlisted], Jordan

SCREEN #42

14:00-14:10 IAC-23/C2/IPB/78360
DETERMINATION OF THERMAL CONTACT RESISTANCE IN THERMO-VACUUM CHAMBER EXPERIMENTS
Václav Lazar, Brno University of Technology, Czech Republic

14:10-14:20 IAC-23/D2/IPB/75568
OPERATION PROCEDURES OF LAUNCH COMPLEX IN NARO SPACE CENTER FOR KSLV-II FLIGHT TEST
Sunil Kang, Korea Aerospace Research Institute (KARI), Korea, Republic of

14:40-14:50 IAC-23/A3/IPB/80744
THE TUMBLEWEED R-SELECTED MARS ROVER SWARM TASKED WITH DEPLOYING MEASUREMENT STATIONS AT SCALE
Matthias Frenzl, Space Forward Lab, Austria

SCREEN #44

13:40-13:50 IAC-23/E5/IPB/79424
SATELLITE AND DRONE IMAGES TO HELP CACAO FARMING IN PERU
Avid Roman-Gonzalez, [unlisted], Peru

13:50-14:00 IAC-23/D1/IPB/76231
AUTOMATED TESTING MODULE PROPOSAL FOR VALIDATING EEE SPACE COTS DEVICES
Avid Roman-Gonzalez, [unlisted], Peru

14:00-14:10 IAC-23/A3/IPB/79521
A ROVER PROPOSAL FOR MOON EXPLORATION DESIGNED AT UNTELS
Avid Roman-Gonzalez, [unlisted], Peru

14:10-14:20 IAC-23/E1/IPB/79894
AEROSPACE SCIENCE & HEALTH RESEARCH LABORATORY (INCAS-LAB) AS A TOOL FOR EDUCATION AND OUTREACH TASKS
Avid Roman-Gonzalez, [unlisted], Peru

14:20-14:30 IAC-23/B4/IPB/79944
PROPOSAL FOR A NATIONAL PROGRAM FOR THE INCURSION INTO THE SPACE INDUSTRY FOR DEVELOPING COUNTRIES
Avid Roman-Gonzalez, [unlisted], Peru

14:30-14:40 IAC-23/E1/IPB/78196
FIRST UNDERGRADUATE COURSE ON SPACE SYSTEMS IN PERUVIAN UNIVERSITIES
Avid Roman-Gonzalez, [unlisted], Peru

14:40-14:50 IAC-23/B1/IPB/79402
PROPOSAL FOR A SATELLITE, DRONE AND GROUND SENSOR INFORMATION FUSION APPLIED TO PUBLIC HEALTH
Avid Roman-Gonzalez, Image Processing Research Laboratory (INTI-Lab). Universidad de Ciencias y Humanidades - UCH, Peru

SCREEN #45

13:30-13:40 IAC-23/C2/IPB/78292
TESTING OF METALGLASS THROUGH A COMPLIANT MECHANISM
Laura Guadalupe Guajardo Villarreal, Universidad Autonoma de Nuevo Leon, Mexico

13:50-14:00 IAC-23/E1/IPB/79517
ANALYSIS OF THE SCIENTIFIC PRODUCTION IN THE SPACE AREA INDEXED IN THE SCOPUS DATABASE IN SOUTH AMERICA
Natalia Indira Vargas-Cuentas, Image Processing Research Laboratory (INTI-Lab). Universidad de Ciencias y Humanidades - UCH, Peru

14:00-14:10 IAC-23/E5/IPB/79433
SATELLITE-BASED AIR POLLUTION MONITORING IN BOLIVIA DURING THE QUARANTINE OF COVID-19
Natalia Indira Vargas-Cuentas, Image Processing Research Laboratory (INTI-Lab). Universidad de Ciencias y Humanidades - UCH, Peru

SCREEN #46

13:30-13:40 IAC-23/C1/IPB/78049
DISTRIBUTED COOPERATIVE SPACECRAFT SURROUNDING CONTROL WITH INPUT SATURATION AND COLLISION AVOIDANCE
Yanning Guo, Harbin Institute of Technology, China

13:40-13:50 IAC-23/D2/IPB/78025
HP-ADAPTATIVE PSEUDOSPECTRAL CONVEX OPTIMIZATION FOR MARS PINPOINT LANDING
Duozhi Gao, Harbin Institute of Technology, China

Thursday 5 October 2023

13:50-14:00 IAC-23/A3/IPB/78675
COOPERATIVE OBSTACLE AVOIDANCE OF A NEW MULTI-NODE FLEXIBLE LANDER FOR ASTEROID LANDING
Jingxuan Chai, Harbin Institute of Technology, China

14:40-14:50 IAC-23/C3/IPB/76456
CURRENT AND FUTURE DEVELOPMENTS IN SOLAR ARRAY TECHNOLOGY FOR SPACE-BASED SOLAR POWER.
Elvin Osmanov, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

SCREEN #47

13:30-13:40 IAC-23/C1/IPB/79590
TWO-IMPULSE ORBITAL TRANSFER BASED ON THE SOLUTION OF LAMBERT PROBLEM WITH OPTIMAL FLIGHT TIME
Vadim Kravchenko, Research Institute of Applied Mechanics and Electrodynamics (RIAME), MAI, Russian Federation

14:00-14:10 IAC-23/B1/IPB/75748
ASSESSING THE IMPACT OF ILLEGAL BUILDINGS USING HIGH-RESOLUTION SATELLITE IMAGERY
Gumru Sharafkhanova, NASA, Azerbaijan

14:40-14:50 IAC-23/E1/IPB/79125
ENABLING SPACE WORKFORCE DEVELOPMENT THROUGH SYSTEMS THINKING
Grecia Olano O'Brien, Concordia University, Canada

SCREEN #48

13:30-13:40 IAC-23/E6/IPB/79322
PIVOTING STRATEGIES IN THE SPACE ECONOMY: A MULTIPLE CASE STUDY APPROACH
Claudio Loporcaro, Politecnico di Bari, Italy

14:40-14:50 IAC-23/C1/IPB/77475
MISSION TO THE TRANS-NEPTUNIAN OBJECT SEDNA: A POSSIBLE NEXT STEP OF HUMANITY TOWARDS STARS
Andrey Belyaev, Bauman Moscow State Technical University, Russian Federation

SCREEN #49

13:30-13:40 IAC-23/A6/IPB/78676
CONJUNCTION ASSESSMENT OF LEO SATELLITE FOR FUTURE SPACE TRAFFIC MANAGEMENT
Okchul Jung, Korea Aerospace Research Institute (KARI), Korea, Republic of

14:30-14:40 IAC-23/D2/IPB/79355
DISTRIBUTED DATA ACQUISITION ARCHITECTURE WITH PRECISE TIME SYNCHRONIZATION FOR CONTROL AND MONITORING PROCESS PARAMETERS DURING STRUCTURAL TESTING OF CRYOGENIC PROPELLANT TANKS
Chippy V, ISRO Propulsion Complex, Mahendragiri, India, India

14:40-14:50 IAC-23/A6/IPB/78715
MANEUVERING DETECTION OF SPACE NON-COOPERATIVE TARGETS BASED ON TIME SEQUENCE INFORMATION
Shaotian Gao, Northwestern Polytechnical University, China

SCREEN #50

13:30-13:40 IAC-23/A3/IPB/76261
TOWARDS AN AUTONOMOUS MICRO ROVER WITH NIGHT SURVIVABILITY FOR LUNAR EXPLORATION
Adam Dabrowski, DFKI GmbH, Robotics Innovation Center, Germany

13:40-13:50 IAC-23/A3/IPB/80425
EVALUATION OF LIBS TECHNOLOGY FOR QUALITY ASSESSMENT OF LUNAR IN-SITU SOURCED WATER FOR DRINKING AND ELECTROLYSIS REQUIREMENTS
Szymon Krawczuk, Gdansk University of Technology, Poland

14:20-14:30 IAC-23/C4/IPB/79288
MAGNETIC OCTUPOLE PLASMA THRUSTER WITH A CENTER-MOUNTED HOLLOW CATHODE
Jordan Hsieh, National Cheng Kung University, Taiwan, China

14:40-14:50 IAC-23/A1/IPB/77019
IMPROVEMENT IN MECHANICAL PROPERTIES OF FUNGAL-BACTERIAL BIOCOMPOSITES AS SPACE CONSTRUCTION MATERIAL - TRANSGENIC MICROORGANISMS IN MWALLD
Diana Pawlicki, University of Lodz, Poland

6 Technical Papers by Symposium

Technical Papers as of September 2023.
Please check the IAF App to get the latest updates on the Technical Papers.

A1. IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM

Coordinator(s): Peter Graef, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Oleg Orlov, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation;

A1.1. Behaviour, Performance and Psychosocial Issues in Space

October 2 2023, 15:15 — BCC B6

Co-Chair(s): Gro M. Sandal, University of Bergen, Norway; Floris Wuyts, University of Antwerp, Belgium;

IAC-23.A1.1.1 (unconfirmed)
PROCESS-BASED COGNITIVE BEHAVIOURAL INTERVENTIONS FOR ENHANCING THE PERFORMANCE, MENTAL HEALTH, TEAM COHESION AND AUTONOMY OF THE ANALOG ASTRONAUTS, FLIGHT CONTROLLERS AND SUPPORT STAFF IN THE AMADEE20 MISSION SIMULATION.
Karoly Schlosser, Institute of Management Studies, Goldsmiths, United Kingdom

IAC-23.A1.1.2
CROSSING BOUNDARIES IN SPACE EXPLORATION MULTITEAM SYSTEMS: INSIGHTS FROM SIRIUS-21 MISSION
Noshir Contractor, Northwestern University, United States

IAC-23.A1.1.3
HUMAN FACTORS & PSYCHOLOGY STUDY IN EMMIHS MOONBASE CAMPAIGNS
Celia Avila-Rauch, ILEWG "EuroMoonMars", Germany

IAC-23.A1.1.4
NEURAL CORRELATES OF WORKING MEMORY CHANGES IN COSMONAUTS AFTER LONG DURATION SPACEFLIGHT
Floris Wuyts, University of Antwerp, Belgium

IAC-23.A1.1.5
IT'S A HEART TIME - ANALYSIS OF THE EFFECTS OF HEARTBEAT AND PHYSICAL ACTIVITY ON SUBJECTIVE TIME PERCEPTION IN THE ISOLATED ENVIRONMENT OF AN ANALOGUE SPACE MISSION
Mateusz Daniol, AGH University of Science and Technology, Poland

IAC-23.A1.1.6
SOCIOMAPPING - QUALITATIVE ANALYSIS OF THE STRUCTURE AND DYNAMICS OF RELATIONSHIPS AND TIES IN THE CREWS OF SIRIUS-18/19 AND SIRIUS-21 DURING A SIMULATED SPACE MISSION TO THE MOON THROUGH THE LENS OF COMPARISON
Katerina Bernardova Sykorova, Czech Republic

IAC-23.A1.1.7
MEASUREMENT AND ANALYSIS OF THE STRUCTURE AND DYNAMICS OF CREW COMMUNICATION CONCERNING ITS QUANTITY AND QUALITY IN THREE STAGES OF THE SIRIUS EXPERIMENT
Radvan Bahbouh, QEDGROUP Ltd, Czech Republic

IAC-23.A1.1.8
IRREGULAR SHIFT WORK AFFECTED WORK ENGAGEMENT IN AN ISOLATED ENVIRONMENT
Ruilin Wu, Beihang University, China

A1.2. Human Physiology in Space

October 3 2023, 10:15 — BCC B6

Co-Chair(s): Elena Fomina, State Scientific Center of Russian Federation, Institute of Biomedical Problems, Russian Academy of Sciences, Russian Federation; Jens Jordan, Institute of Aerospace Medicine (DLR), Germany;
Rapporteur(s): Alain Maillet, MEDES - IMPS, France; Angelique Van Ombergen, European Space Agency (ESA), The Netherlands;

IAC-23.A1.2.1
A 5-DAY "DRY" IMMERSION: INFLUENCE ON THE REPRODUCTIVE SYSTEM OF WOMEN
Elena Gorbacheva, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-23.A1.2.2
ADAPTIVE CHANGES IN HEART RATE VARIABILITY AND CARDIAC FUNCTION DURING LONG-TERM SPACEFLIGHT: INSIGHTS FROM WEARABLE DEVICES
Paniz Balali, Université Libre de Bruxelles, Belgium

IAC-23.A1.2.4
THE RUSSIAN SYSTEM OF COUNTERMEASURE TO NEGATIVE EFFECTS OF WEIGHTLESSNESS PROVIDES A SUFFICIENT LEVEL OF PERFORMANCE FOR A MARTIAN EXPEDITION
Elena Fomina, State Scientific Center of Russian Federation, Institute of Biomedical Problems, Russian Academy of Sciences, Russian Federation

IAC-23.A1.2.5
CORRELATION OF CHANGES IN AORTIC STIFFNESS WITH OTHER PARAMETERS OF CARDIOVASCULAR HEALTH AFTER 60-DAY HEAD-DOWN BED REST
Jeremy Rabineau, Université Libre de Bruxelles, Belgium

IAC-23.A1.2.6 (unconfirmed)
EVALUATION OF THE EFFECT OF 21-DAY HEAD-DOWN BED REST ON THE CARDIOVASCULAR SYSTEM BY BLOOD PROTEIN COMPOSITION, INCLUDING MARKERS SST2, NT-PROBNP AND D-DIMER
Daria Kashirina, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-23.A1.2.7
INTERPLAY OF MIRNAS AND DIFFERENTIALLY EXPRESSED GENES IN THE PSYCHOPATHOLOGY OF DEPRESSION UNDER SIMULATED COMPLEX SPACE ENVIRONMENT
Madiha Rasheed, Beijing Institute of Technology (BIT), China

IAC-23.A1.2.8
LONG-TERM ANALYSIS OF ELECTRO-MECHANICAL ACTIVITY DURING THE TWO ANALOG LUNAR MISSIONS EMMPOL 10 AND EMMPOL 11
Sarah Solbiati, Politecnico di Milano, Italy

IAC-23.A1.2.10
THE NEBULA PROJECT: EFFECT OF PREFLIGHT ENDURANCE AND RESISTANCE TRAINING AS A COUNTERMEASURE AGAINST MICROGRAVITY-INDUCED MUSCULOSKELETAL DECONDITIONING
Margot Issertine, University of Montpellier, France

IAC-23.A1.2.11 (unconfirmed)
THE VARIABILITY OF URINE PROTEOME AND COUPLED BIOCHEMICAL BLOOD INDICATORS IN COSMONAUTS WITH DIFFERENT PREFLIGHT AUTONOMIC STATUS
Luidmila Pastushkova, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-23.A1.2.12 (unconfirmed)
PIEZO1 CHANNEL ACT AS A SPACE ENVIRONMENT MECHANOTRANSDUCER IN BONE METABOLISM
Yanan Zhang, Institute of Modern Physics, Chinese Academy of Sciences, China

A1.3. Medical Care for Humans in Space

October 3 2023, 15:00 — BCC B6

Co-Chair(s): Satoshi Iwase, Aichi Medical University, Japan; Oleg Orlov, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation;
Rapporteur(s): Hasan Birol Cotuk, , Türkiye; Katrin Stang, DLR (German Aerospace Center), Germany;

IAC-23.A1.3.1
NEW EXTRAVEHICULAR ACTIVITY'S SPACESUIT DESIGN TO ALLOW ACCESS TO EMERGENCY MEDICATIONS
Carla Tamai, International Space University, France

IAC-23.A1.3.2
DOES SEX INFLUENCE CARDIOVASCULAR AND AUTONOMIC RESPONSES TO CENTRAL HYPOVOLEMIA?
Nandu Goswami, Medical University of Graz, Austria

IAC-23.A1.3.3
FAR INFRARED (FIR) RAY-EMITTING GARMENTS TO MITIGATE MUSCLE LOSS ONBOARD THE INTERNATIONAL SPACE STATION (ISS)
Aya Hesham, Sigma Fit, United States

IAC-23.A1.3.4
FEDERATED LEARNING FOR SPACE MEDICINE RESEARCH AND ITS APPLICATION FOR SPACEFLIGHT ASSOCIATED NEURO-OCULAR SYNDROME (SANS)
Scott Ritter, University of Bern, Switzerland

IAC-23.A1.3.5
3D PRINTED BIOMIMETIC SCAFFOLDS FOR BONE-CELLS MICROGRAVITY RESPONSE
Eleonora Zenobi, Fondazione E. Amaldi, Italy

IAC-23.A1.3.6
AGING AND PUTATIVE FRAILTY BIOMARKERS ARE ALTERED BY SPACEFLIGHT
Fathi Karouia, National Aeronautics and Space Administration (NASA), Ames Research Center / UCSF, United States

IAC-23.A1.3.7
HEALING OF EX VIVO SUTURED WOUND MODELS IN HUMAN TISSUES EXPOSED TO SPACEFLIGHT
Monica Monici, University of Firenze, Italy

IAC-23.A1.3.9
COMBINED ELECTROMYOSTIMULATION MODE AS A POTENTIAL COUNTERMEASURE FOR FIGHTS TO THE MOON AND BACK
Alina Saveko, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-23.A1.3.10
FACTORS INFLUENCING SURGICAL PROCEDURES IN SPACEFLIGHT ENVIRONMENTS
KangSan Kim, Space Generation Advisory Council (SGAC), Korea, Republic of

IAC-23.A1.3.13
MEASUREMENT SYSTEM OF MYOTUBE MORPHOLOGICAL PARAMETERS FOR SPACE LIFE EXPERIMENT MISSION ABOUT MUSCLE ATROPHY IN ASTRONAUTS
Xinyu Wang, Shanghai Engineering Center for Microsatellites, Chinese Academy of Sciences (CAS), China

IAC-23.A1.3.14
STUDY OF THE PLASMA COMPONENT OF THE HEMOSTASIS REGULATION SYSTEM IN HEALTHY SUBJECTS IN THE 240-DAY ISOLATION EXPERIMENT «SIRIUS-21»
Alexey Kochergin, FSC RF-IMBP, Russian Federation

A1.4. Medicine in Space and Extreme Environments

October 4 2023, 15:00 — BCC B6

Co-Chair(s): Oleg Orlov, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation; Hanns-Christian Gunga, Charité Universitätsmedizin Berlin, Germany;
Rapporteur(s): Jeffrey R. Davis, Exploring 4 Solutions, United States; Alexander Choukér, University of Munich, Germany;

IAC-23.A1.4.1
THE WORLD-CLASS RESEARCH CENTER "THE PAVLOV CENTER" - A COOPERATIVE PLATFORM FOR VERIFICATION OF HEALTHCARE TECHNOLOGIES ON THE BASIS OF SPACE MEDICINE ACHIEVEMENTS
Anna Kussmaul, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-23.A1.4.2 (unconfirmed)
"BEYOND EARTH: ADVANCEMENTS IN MEDICINE FOR SPACE AND EXTREME ENVIRONMENTS"
Javidan Mammadov, Azerbaijan

IAC-23.A1.4.4
AN OVERVIEW OF SPACE ANALOGUES IN PORTUGAL
Joan Alabart, Portugal Space Agency, Portugal

IAC-23.A1.4.5
AN ARTIFICIAL INTELLIGENCE METHOD FOR AUTONOMOUS MONITORING OF THE RETINA FOR MEDICAL APPLICATIONS IN SPACE AND EXTREME ENVIRONMENTS
Scott Ritter, University of Bern, Switzerland

IAC-23.A1.4.6
BRAIN OXYGENATION MONITORING IN A PARABOLIC FLIGHT USING PORTABLE FUNCTIONAL NEAR-INFRARED SPECTROSCOPY
Jesica Kehala Studer, Institute for Space Medicine and Physiology/ MEDES, Switzerland

IAC-23.A1.4.7
PERIPHERAL COOLING AS A COUNTERMEASURE TO ORTHOSTATIC STRESS DURING PARABOLIC FLIGHT – THE COOLFLY EXPERIMENT
Tomas Bothe, Charité Universitätsmedizin Berlin, Germany

A1.5. Radiation Fields, Effects and Risks in Human Space Missions

October 5 2023, 10:15 — BCC B6

Co-Chair(s): Lawrence Pinsky, University of Houston, United States; Guenther Reitz, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;
Rapporteur(s): Premkumar Saganti, Prairie View A&M University, United States;

IAC-23.A1.5.1
FUZZY LOGIC TRIGGER IN THE DISTINCTION OF PIERRE AUGER OBSERVATORY'S SIGNALS FROM NEUTRINO-INDUCED SHOWERS - APPLICATION AND ANALYSIS IN THE STUDY OF ULTRA-HIGH-ENERGY COSMIC RAYS
Diana Pawlicki, University of Lodz, Poland

IAC-23.A1.5.2
RADIATION FIELDS, EFFECTS, AND RISKS IN HUMAN SPACE MISSIONS
Debarshi Mukherjee, India

IAC-23.A1.5.3
IN-SITU INVESTIGATION OF MARS ATMOSPHERE AND IONIZING RADIATION ENVIRONMENT THROUGH A DISTRIBUTED NETWORK OF TUMBLEWEED MEASUREMENT STATIONS
Abhimanyu Shanbhag, Team Tumbleweed, The Netherlands

IAC-23.A1.5.4
ARTIFICIAL RADIATION SHIELDING FOR SPACECRAFT - USING REBCO SUPERCONDUCTIVE MATERIAL
Raj krishnan Angusamy, Skyline Space, India

IAC-23.A1.5.5
EXPERIMENTAL ANALYSIS OF H-BNNT/SIC/GRAPHENE/EPOXY WITH PHENOLIC RESIN FOR COTS AND SPACESUIT MATERIALS
Sanjeeviraja Thangavel, Singapore, Republic of

IAC-23.A1.5.6
INNOVATIVE SOLUTIONS FOR RADIATION SHIELDING
Eleonora Zenobi, Fondazione E. Amaldi, Italy

IAC-23.A1.5.7
ASSESSMENT OF DOSE-DEPENDENT ENDOCRINE AND IMMUNE RESPONSES TO SIMULATED IONIZING RADIATION
Carol Mitchell, Embry-Riddle Aeronautical University, United States

IAC-23.A1.5.8
SPACE RADIATION INDUCED BYSTANDER EFFECTS IN ESTIMATING THE CARCINOGENIC RISK: THE HEAVY NUCLEI CASE
Alessandro Bartoloni, National Insitute of Nuclear Physics - INFN, Italy

IAC-23.A1.5.9
DESIGNING A NEURAL HELMET, MAPPING NEURAL PATTERNS IN AN ASTRONAUT'S BRAIN TO DETECT COGNITIVE PROBLEMS
Akshay Rajshekhar Hiremath, Space Generation Advisory Council (SGAC), United States

IAC-23.A1.5.10
RADIATION SPECTROMETER HARDPIX
Robert Filgas, Czech Technical University In Prague (CTU), Czech Republic

A1.6. Astrobiology and Exploration

October 5 2023, 15:00 — BCC B6

Co-Chair(s): Petra Rettberg, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Stephan Ulamec, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Athena Coustenis, LESIA - Observatoire de Paris, France;
Rapporteur(s): Fathi Karouia, National Aeronautics and Space Administration (NASA), Ames Research Center / UCSF, United States; Tetyana Milojevic, University of Orléans, France;

IAC-23.A1.6.1
SUSTAINABLE EXPLORATION OF GIANT PLANETS' ICY MOONS
Athena Coustenis, LESIA - Observatoire de Paris, France

IAC-23.A1.6.3
EXPLORING THE CO-EVOLUTION OF EARTH-MOON SYSTEM THROUGH LUNAR MINERALOGY AND METEORITE IMPACTS
Akanksha Bhagat, India

IAC-23.A1.6.4
SIMLE STARDUST: HOW AN EXPERIMENT EVOLVED FROM STUDENT TINKERING TO A STRATOSPHERIC RESEARCH PLATFORM
Marcin Jasiukowicz, Gdansk University of Technology, Poland

IAC-23.A1.6.5
A NEW APPROACH FOR THE SEARCH OF BIO-SIGNATURES AND ASSESSMENT OF HABITABILITY ON MARS USING A SWARM OF WIND-DRIVEN MOBILE IMPACTORS
Abhimanyu Shanbhag, Team Tumbleweed, The Netherlands

IAC-23.A1.6.6
PRELIMINARY SCIENTIFIC RESEARCH ON ENZYMATIC ACTIVITY DURING SUBORBITAL ROCKET FLIGHT - AMBER PROJECT
Bartosz Rybacki, Gdansk University of Technology, Poland

A1.7. Life Support, habitats and EVA Systems

October 6 2023, 10:15 — BCC B6

Co-Chair(s): Oliver Opatz, Center for Space Medicine Berlin (ZWMB), Germany; Khalid Badri, Mohammed Bin Rashid Space Centre (MBRSC), United Arab Emirates; Pierre-Alexis Joumel, Airbus Defence and Space, Germany;
Rapporteur(s): Hong Liu, Beihang University, China; Gisela Detrell, Institute of Space Systems, University of Stuttgart, Germany;

IAC-23.A1.7.1
STUDIES ON MONITORING THE USE OF CLOTHES, UNDERWEAR AND PERSONAL HYGIENE MEANS IN 17-DAYS, 120-DAYS AND 240-DAYS ISOLATION EXPERIMENTS UNDER THE SIRIUS PROJECT
Irina Shumilina, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-23.A1.7.2
IRMA PROJECT – STANDARDIZATION OF A MICROBIAL CULTURE ON AGAR MEDIA AND PAYLOAD OPERATIONS FOR MINIMIZING ASTRONAUT'S MANIPULATION RISKS AND OPTIMIZING SAMPLE RETURN.
Camilo Andres Reyes Mantilla, Space Generation Advisory Council (SGAC), Qatar

IAC-23.A1.7.4 (unconfirmed)
CHLORELLA VULGARIS AND EXTREMOPHILE BACILLUS SPP. GROWTH WITH HYDRAZINE
Reut Sorek Abramovich, The Dead Sea-Arava Science Center (DSASC), Israel

IAC-23.A1.7.5
DEVELOPMENT STATUS OF A CARBON DIOXIDE REDUCTION SYSTEM "SPDU" FOR THE ISS
Kogan Ioann, NIICHIMMASH, Russian Federation

IAC-23.A1.7.6
DESIGN AND DEVELOPMENT OF AN AUTONOMOUS CAPILLARY-BASED HYDROPONIC SYSTEM FOR PLANT GROWTH FOR DEEP SPACE MISSIONS
Tanmay Sharma, Dayananda Sagar University, India

IAC-23.A1.7.7
HYGIENE WATER PROCESSING ABOARD PROSPECTIVE SPACE STATIONS
Nikolay Salnikov, NIICHIMMASH, Russian Federation

IAC-23.A1.7.8
UMIDE
Umide Macnunlu, Azerbaijan State University of Economics, Azerbaijan

IAC-23.A1.7.9
STRUCTURAL AND ARCHITECTURAL DESIGN OF THE PHAXSI LUNAR ANALOGUE HABITAT IN SALAR DE UYUNI, OVER ENVIROMMENTS SIMILAR TO THE MOON
Bernarda Loretto Sanjines, Universidad Privada Boliviana (UPB), Bolivia

IAC-23.A1.7.10
MEEVA: A SMART SYSTEM TO ESTIMATE AND MITIGATE STRESS EFFECTS DURING ANALOGUE ASTRONAUTS EVAS.
Davide Scalettari, Politecnico di Milano, Italy

IAC-23.A1.7.11
RECONSTRUCT EARTH'S KARST CAVES TO SIMULATE HUMAN LIVE IN EXTRATERRESTRIAL CAVE BASES
Gengxin Xie, Center of Space Exploration, Ministry of Education (COSE), China

IAC-23.A1.7.12
SPACE HABITAT DORMANCY TRANSITIONS: A SIMULATION-BASED INVESTIGATION OF ASSOCIATED CHALLENGES AND DESIGN CONSIDERATIONS
Luca Vaccino, Purdue University, United States

IAC-23.A1.7.13
DISRUPTIVE MATERIAL TECHNOLOGIES TO ADDRESS MICROBIAL HAZARDS FOR SPACE HUMAN EXPLORATION
Eleonora Zenobi, Fondazione E. Amaldi, Italy

A1.8. Biology in Space

October 6 2023, 13:45 — BCC B6

Co-Chair(s): Didier Chaput, Centre National d'Etudes Spatiales (CNES), France; Fengyuan Zhuang, Beihang University, China;
Rapporteur(s): Jancy McPhee, The Aerospace Corporation, United States;

IAC-23.A1.8.1
DIFFERENTIAL EXPRESSION OF GENES ENCODING ADHESION AND CELL-TO-CELL INTERACTION MOLECULES IN BONE MARROW NICHE UNDER SIMULATED MICROGRAVITY
Danila Yakubets, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-23.A1.8.2
ER STRESS IS ACTIVATED AND INVOLVED IN DISUSE-INDUCED MUSCLE ATROPHY
Xiaoping Chen, China Astronaut Research and Training Center , China

IAC-23.A1.8.3
LUNAR GRAVITY IS SUFFICIENT TO PREVENT SKELETAL MUSCLE ATROPHY, BUT NOT MUSCLE MYOFIBER TYPE TRANSITION IN MICE.
Takuto HAYASHI, University of Tsukuba, Japan

IAC-23.A1.8.4
THE MICROBIOME AND THE METABOLOME OF THE INTERNATIONAL SPACE STATION: THE 3DMM PROJECT
Fathi Karouia, National Aeronautics and Space Administration (NASA), Ames Research Center / UCSF, United States

IAC-23.A1.8.5
REPAIR OF RADIATION INDUCED DNA DAMAGE IN SPACE - PREPARATION OF THE BIOLAB EXPERIMENT LUX-IN-SPACE
Petra Rettberg, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-23.A1.8.6
INNOVATIVE ANTIOXIDANT THERAPIES FOR SPACE MEDICINE
Gianni Ciofani, Istituto Italiano di Tecnologia, Italy

IAC-23.A1.8.8
THE EXTRACELLULAR MATRIX OF STROMAL LINEAGE CELLS AS A TARGET FOR MICROGRAVITY
Ludmila Buravkova, State Scientific Center of Russian Federation, Institute of Biomedical Problems, Russian Academy of Sciences, Russian Federation

IAC-23.A1.8.9
REALISE – AUTOMATED PAYLOAD OPERATIONS ONBOARD THE LUNAR GATEWAY
Tobias Niederwieser, University of Colorado Boulder, United States

IAC-23.A1.8.10
POSSIBILITY TO EXPAND OPPORTUNITY AND BENEFIT WITH JAXA MOUSE HABITAT UNIT FOR THE INTERNATIONAL SPACE STATION AND BEYOND
Kenichi Nagamoto, Mitsubishi Heavy Industries, Ltd., Japan

IAC-23.A1.8.11
COMPARISON OF PLANT GROWTH BETWEEN SELF-WATERING POTS WITH LUNAR REGOLITH SIMULANT AND HYDROPONIC SYSTEM.
Maria Francesca Cecchi, International Space University (ISU), France

A2. IAF MICROGRAVITY SCIENCES AND PROCESSES SYMPOSIUM

Vice-Coordinator(s): Valentina Shevtsova, Université Libre de Bruxelles, Belgium; Angelika Diefenbach, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;

A2.1. Gravity and Fundamental Physics

October 2 2023, 15:15 — BCC B7

Co-Chair(s): Gabriel Pont, Centre National d'Etudes Spatiales (CNES), France; Nickolay N. Smirnov, Lomonosov Moscow State University, Russian Federation;

IAC-23.A2.1.1
ACES: THE CLOCKS ABOVE AND BEYOND. IN-FLIGHT CALIBRATION
Michele Armano, ESA - European Space Agency, The Netherlands

IAC-23.A2.1.2
ATOMIC CLOCKS AND PLASMA CRYSTALS: ADVANCEMENTS IN TIMEKEEPING AND FUNDAMENTAL PHYSICS
Debarshi Mukherjee, India

IAC-23.A2.1.3
PLASMA CRYSTALS TO STUDY MICROGRAVITY EFFECTS AND THEIR POTENTIAL APPLICATIONS IN SPACE EXPLORATION
Sharry Kapoor, India

IAC-23.A2.1.4
NUMERICAL STUDY OF GRAVITATIONAL WAVE BEHAVIOR AMONG A SYSTEM OF MASSES
Abhay Kaushik Nudurupati, University of Petroleum and Energy Studies, India

IAC-23.A2.1.5
AN UPDATED FORMALISM FOR DEGRADATION OF NEUTRON STAR'S MAGNETIC FIELD.
Sonu Yadav, India

IAC-23.A2.1.6
QUANTUM ENTANGLEMENT AND COSMIC INFLATION: THE POTENTIAL OF A MULTIVERSE
HUDA MOHAMMAD, Jain University, India

IAC-23.A2.1.8 (unconfirmed)
THE THEORY OF THE ORIGIN OF THE COSMIC VACUUM AND ITS ENERGY, MATTER AND ANTIMATTER
Sabir Mammadov, Azerbaijan

A2.2. Fluid and Materials Sciences

October 4 2023, 10:15 — BCC B7

Co-Chair(s): Nickolay N. Smirnov, Lomonosov Moscow State University, Russian Federation; Antonio Viviani, Università degli Studi della Campania "Luigi Vanvitelli", Italy;

IAC-23.A2.2.1
KEYNOTE: INVESTIGATION OF THE FLUIDS BEHAVIOR UNDER MICROGRAVITY CONDITIONS: CONDUCTING EXPERIMENTS, MATHEMATICAL MODELING AND NUMERICAL SIMULATIONS
Evgeniya Skryleva, Lomonosov Moscow State University, Russian Federation

IAC-23.A2.2.2 (unconfirmed)
INVESTIGATION OF PRESSURE DRIVEN MICROFLUIDIC FLOW IN MICROGRAVITY
Sanat Hegde, R V College of Engineering, Bengaluru, India

IAC-23.A2.2.3
INERTIAL MICROFLUIDIC MIXER FOR BIOLOGICAL CUBESATS MISSIONS
Adrianna Graja, Wroclaw University of Science and Technology, Poland

IAC-23.A2.2.4
CONCURRENT FLAME PROPAGATION OVER THE BURNING MATERIAL IN MICROGRAVITY
Lyuben Stamov, Scientific Research Institute for System Analysis, Russian Academy of Sciences (RAS), Russian Federation

IAC-23.A2.2.6
INFLUENCE OF BOUNDARY CONDITIONS ON CELLULAR DETONATION
Nickolay N. Smirnov, Lomonosov Moscow State University, Russian Federation

IAC-23.A2.2.7
BARIDI-SANA, A NEW TWO-PHASE FLOW COOLING SYSTEM FOR SPACE APPLICATIONS: DESIGN AND GROUND RESEARCH ACTIVITY FOR FUTURE ON-ORBIT OPERATIONS
Andrea Delfini, Sapienza University of Rome, Italy

IAC-23.A2.2.8
NUMERICAL SIMULATION OF BUBBLE GROWTH INDUCED BY PRESSURE AND TEMPERATURE VARIATIONS UNDER MICRO-GRAVITY CONDITIONS
Maxence Deferrez, ISAE-Supaero University of Toulouse, France

IAC-23.A2.2.9
INVESTIGATION OF THE GRAVITATIONAL INFLUENCE ON THE IMPREGNABILITY OF FIBER-THERMOPLASTICS
Alexander Köhne, Experimental Raumfahrt-Interessen Gemeinschaft e.V., Germany

IAC-23.A2.2.10
STRESS INTENSITY FACTORS FOR A POLYGONAL CRACK
Anastasia Shamina, Scientific Research Institute for System Analysis, Russian Academy of Sciences (RAS), Russian Federation

IAC-23.A2.2.11
IMPROVED ANALYSIS OF TYPE 1A SUPERNOVA USING MIXING-LENGTH THEORY
Sonu Yadav, India

IAC-23.A2.2.12
SIMULATION OF COMBUSTION IN THE COMBUSTION CHAMBER OF SOLID FUEL HYBRID ROCKET ENGINE
Lyuben Stamov, Scientific Research Institute for System Analysis, Russian Academy of Sciences (RAS), Russian Federation

A2.3. Microgravity Experiments from Sub-Orbital to Orbital Platforms

October 4 2023, 15:00 — BCC B7

Co-Chair(s): Remi Canton, Centre National d'Etudes Spatiales (CNES), France; Evgeniya Skryleva, Lomonosov Moscow State University, Russian Federation;

IAC-23.A2.3.1
IOSLAB – IN ORBIT SERVICING LABORATORY FOR MICROGRAVITY EXPERIMENTS ON SPACE RIDER. USE CASES FOR SPACE BIOLOGY, NANOTECHNOLOGY AND TECHNOLOGY DEMONSTRATION.
Inna Uwarowa, S.A.B. Aerospace Srl, Czech Republic

IAC-23.A2.3.2
SUBORBITAL EXPRESS – SOUNDING ROCKET RIDE SHARE AT ITS BEST
Stefan Krämer, Swedish Space Corporation, Sweden

IAC-23.A2.3.3
MUSA SUBORBITAL FLIGHT: A MICROGRAVITY EXPERIMENT ON BOARD OF THE SUBORBITAL EXPRESS 3 OF THE SWEDISH SPACE CORPORATION TO VALIDATE THE CRITICAL SYSTEMS FOR A DUAL CULTURE IN SPACE OF TRICHODERMA HARZIANUM AND THE PANAMA DISEASE FUNGUS
Mauricio Rodriguez, Orbital Space Technologies, Costa Rica

IAC-23.A2.3.4
MANUFACTURING FIBER-REINFORCED COMPOSITES IN MICROGRAVITY
Lars Klingenstein, Experimental Raumfahrt-Interessen Gemeinschaft e.V., Germany

IAC-23.A2.3.6
DROPPING KNOWLEDGE ON SPACE TRIBOLOGY: INSIGHTS INTO THE EFFECTS OF MICROGRAVITY ON SOLID LUBRICANTS FROM THE BREMEN TOWER DROP EXPERIMENT
Szymon Krawczuk, Gdansk University of Technology, Poland

IAC-23.A2.3.7
STUDENT-LED SPACECRAFT: THE EDUCATIONAL VALUE OF EMPOWERING STUDENTS TO DEVELOP SPACE RESEARCH PAYLOADS
Owen Marr, SEDS, United States

IAC-23.A2.3.8
DROPWISE CONDENSATION IN MICROGRAVITY: DROPLET REMOVAL BY A SHEARING AIRFLOW
Alidad Amirfazli, York University, Canada

A2.4. Science Results from Ground Based Research

October 5 2023, 10:15 — BCC B7

Co-Chair(s): Nickolay N. Smirnov, Lomonosov Moscow State University, Russian Federation; Antonio Viviani, Università degli Studi della Campania "Luigi Vanvitelli", Italy;

IAC-23.A2.4.1
A NUMERICAL ANALYSIS IN HYBRID CONTINUUM-MOLECULAR DYNAMICS OF MICROFLUIDIC FLOWS THROUGH FLUIDIC CARD GEOMETRIES
Vishal Hugar, R V College of Engineering, Bengaluru, India

IAC-23.A2.4.2
A NUMERICAL ANALYSIS OF THE XYLEM FLOW BIO-MIMIC BUBBLE REMOVAL TECHNIQUE
Shivayya Hiremath, R V College of Engineering, Bengaluru, India

IAC-23.A2.4.3
NUMERICAL SIMULATION OF SMALL FRAGMENT HYPERVELOCITY IMPACT AGAINST FLUID FILLED ELEMENT IN THREE-MATERIAL STATEMENT
Nickolay N. Smirnov, Lomonosov Moscow State University, Russian Federation

IAC-23.A2.4.4
PREDICTION OF PERFORMANCE OF MESH PHASE SEPARATORS IN GEO SATELLITE CAPILLARY INTAKE DEVICES
Oleksandr Minai, Yuzhnoye State Design Office, Ukraine

IAC-23.A2.4.5
DEVELOPMENT OF MICROGRAVITY SIMULATOR AND ITS WORKING ALGORITHM
Shubham Das, R V College of Engineering, Bengaluru, India

IAC-23.A2.4.6
SIMULATED MICROGRAVITY INHIBITS VINCULIN EXPRESSION, INTENSIFYING MYOCARDIAL REMODELING AND HEART FAILURE
Mikhail Popov, Vladimirsky Moscow Regional Clinical Research Institute, Russian Federation

IAC-23.A2.4.7
DIFFERENTIAL CELLULAR RESPONSES AND PHYSIOLOGICAL EFFECTS OF CANCER CELLS TO SIMULATED MICROGRAVITY
Alisa Sokolovskaya, Research Institute of General Pathology and Pathophysiology / Russian Academy of Medical Sciences, Russian Federation

IAC-23.A2.4.8
THE BENEFITS OF GRAVITY FIELDS VARIATION ON FLUIDS AND MATERIALS: THE REVIEW
Ivy Mayor, Sweden

IAC-23.A2.4.9
OPTIMIZING SOYBEAN PRODUCTION WITH GROUND SENSOR TERMINAL-BASED MONITORING SYSTEM
Raihana Shams Islam Antara, BRAC University, Bangladesh

A2.5. Facilities and Operations of Microgravity Experiments

October 5 2023, 15:00 — BCC B7

Co-Chair(s): Evgeniya Skryleva, Lomonosov Moscow State University, Russian Federation; Remi Canton, Centre National d'Etudes Spatiales (CNES), France;

IAC-23.A2.5.1
TOWARDS A GROUND-BASED PARTIAL-GRAVITY PLATFORM AND BIG SCIENTIFIC DATA WITH THE GRAVITOWER BREMEN PRO
Merle Cornelius, ZARM Fab GmbH, Germany

IAC-23.A2.5.2
OPTIMAL DESIGN OF AN AIRBAG SYSTEM AS A CAPSULE DECELERATOR FOR LOW GRAVITY EXPERIMENT IN KOREA DROP TOWER
Youngsuk Jung, Korea Aerospace Research Institute (KARI), Korea, Republic of

IAC-23.A2.5.5 (unconfirmed)
DEVELOPING SPACELAB – A MINIATURISED AUTOMATED LABORATORY – FOR 2D AND 3D CELL CULTURES
Katie King, United Kingdom

IAC-23.A2.5.6
TRANSCRIPTOMIC RESPONSE OF BIOENGINEERED HUMAN CARTILAGE TO PARABOLIC FLIGHT MICROGRAVITY IS SEX-DEPENDENT
Shankar Jha, University of Alberta, Canada

IAC-23.A2.5.7
MINI FLUORESCENCE MICROSCOPE: PROTOTYPE RESULTS AND FURTHER DEVELOPMENT
Kiira Tiensuu, Aboa Space Research Oy, Finland

IAC-23.A2.5.8
SPACE INNOVATION LABS: BRIDGING THE GAP BETWEEN EARTH, SPACE AND THE METAVERSE
Camilo Andres Reyes Mantilla, Space Generation Advisory Council (SGAC), Qatar

IAC-23.A2.5.9
DEVELOPMENT OF ASTRAX ZERO GRAVITY AIRCRAFT EDUCATION AND TRAINING SIMULATOR
Taichi Yamazaki, ASTRAX, Inc., Japan

A2.6. Microgravity Sciences on board of Space stations

October 6 2023, 10:15 — BCC B7

Co-Chair(s): Antonio Viviani, Università degli Studi della Campania "Luigi Vanvitelli", Italy;

IAC-23.A2.6.1
MISSION MINERVA: THE ITALIAN SPACE AGENCY EXPERIMENTS OVERVIEW
Luca Di Fino, ASI - Italian Space Agency, Italy

IAC-23.A2.6.3
OPPORTUNITIES FOR MICROGRAVITY AND HYPERGRAVITY EXPERIMENTS UNDER THE UNITED NATIONS ACCESS TO SPACE FOR ALL INITIATIVE: ACHIEVEMENTS IN 2022-2023
Hazuki Mori, United Nations Office for Outer Space Affairs, Austria

IAC-23.A2.6.4
MICROGRAVITY AS A SERVICE AND ITS ROLE ON DEMOCRATIZING THE ACCESS TO SPACE
Olivia Borgue, Luxembourg

IAC-23.A2.6.5
PROJECT DAEDALUS: REVIEW OF THE DESIGN FOR THE CHALLENGE " A COMMON RESTRAINT AND MOBILITY AID SYSTEM MULTIPLE GRAVITY ENVIROMENTS"
Guadalupe Zapata Castro, Instituto Politécnico Nacional, Mexico

IAC-23.A2.6.7
DATA GENERATION FOR SPACE DEBRIS ATTITUDE SIMULATION USING GLIDER PARABOLIC FLIGHT
Mohammad Iranmanesh, LIDE, Belgium

IAC-23.A2.6.8
AN OBSERVATIONAL CASE STUDY ON THE RESPONSE OF INSULIN-DEPENDENT DIABETES MELLITUS TO ALTERED GRAVITY CONDITIONS IN A HUMAN TEST SUBJECT
Andrew Ross Wilson, University of Strathclyde, United Kingdom

A2.7. Life and Physical Sciences under reduced Gravity

October 6 2023, 13:45 — BCC B7

Co-Chair(s): Remi Canton, Centre National d'Etudes Spatiales (CNES), France;

IAC-23.A2.7.1
VGM – A NOVEL CENTRIFUGE FOR PARTIAL GRAVITY EXPERIMENTS AND CELL SEEDING IN MICROGRAVITY
Tobias Niederwieser, University of Colorado Boulder, United States

IAC-23.A2.7.2
PAYLOAD PROPOSAL FOR EVALUATING THE EFFECT OF HYPERGRAVITY/MICROGRAVITY ON ANTIBIOTIC RESISTANCE
Avid Roman-Gonzalez, Business on Engineering and Technology S.A.C. (BE Tech), Peru

IAC-23.A2.7.3
PHARMACEUTICAL EXCIPIENT INGREDIENT STABILITY IN MICROGRAVITY CONDITIONS,PACKING AND STORING RECOMMENDATIONS IN DEEP SPACE MISSIONS
Sudarshan Patilkulkarni, Sri Jayachamarajendra College of Engineering, India

IAC-23.A2.7.4
CHALLENGES OF SURGICAL PROCEDURES IN REDUCED GRAVITY ENVIRONMENTS AND POTENTIAL SOLUTIONS UTILIZING ROBOTIC AND ARTIFICIAL INTELLIGENCE TOOLS
KangSan Kim, Space Generation Advisory Council (SGAC), Korea, Republic of

IAC-23.A2.7.5 (unconfirmed)
MANIPULATION OF BLOOD CIRCULATION BY EXTERNAL MAGNETIC FIELDS AND MAGNETIC NANOPARTICLES UNDER ZERO GRAVITY CONDITIONS
Kanan Yusif-zada, Azerbaijan

IAC-23.A2.7.6
CELLULAR RESPONSE IN THREE- DIMENSIONAL (3D) MICROENVIRONMENTS/CONSTRUCTS UNDER MICROGRAVITY
Daan Van Den Nieuwenhof, Radboud University Nijmegen, The Netherlands

IAC-23.A2.7.7
LIFE AND PHYSICAL SCIENCES UNDER REDUCED GRAVITY A DETAILED REVIEW
Akshat Mohite, India

IAC-23.A2.7.8
THE IMPACT OF MICROGRAVITY TO HUMAN BODY
Pervin Sharifzade, Azerbaijan State Pedagogical University (ASPU), Azerbaijan

IAC-23.A2.7.9
MICROGRAVITY AND ITS EFFECTS ON SLEEP AND PHYSICAL WELL-BEING ON LONG TERM SPACE MISSIONS
Astrid Juarez, Universidad Nacional Autónoma de México (UNAM), Mexico

IAC-23.A2.7.10
SPACEBIOMIMICRY: EVOLVING OCEANIC ORGANISMS IN SPACE FOR MIMICKING THEIR ADAPTATIONS FOR DEVELOPING NOVEL STRUCTURAL AND CONTROL SYSTEM
Riyabrata Mondal, TU Bergakademie Freiberg (TUBAF), Germany

A3. IAF SPACE EXPLORATION SYMPOSIUM

Coordinator(s): Vincenzo Giorgio, Thales Alenia Space Italia, Italy; Pierre W. Bousquet, Centre National d'Etudes Spatiales (CNES), France; Keyur Patel, National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States;

A3.1. Space Exploration Overview

October 2 2023, 15:15 — BCC B3

Co-Chair(s): Kathy Laurini, Osare Space Consulting Group, United States; Keyur Patel, National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States;
Rapporteur(s): Norbert Frischauf, TU Graz, Austria; Masaki Fujimoto, Japan Aerospace Exploration Agency (JAXA), Japan;

IAC-23.A3.1.1
NASA'S MOON TO MARS ARCHITECTURE UPDATES
Nujoud Merancy, National Aeronautics and Space Administration (NASA), United States

IAC-23.A3.1.2
A PERSPECTIVE FROM THE NEXT GENERATION: BUILDING A SUSTAINABLE, DIVERSE AND INCLUSIVE FUTURE FOR SPACE EXPLORATION.
Emanuele Tomassi, Politecnico di Milano, Italy

IAC-23.A3.1.3
THE RISE OF THE LUNAR ECONOMY: COMMERCIAL APPLICATIONS ENABLED BY LUNAR COMMUNICATION AND NAVIGATION
Christian Walter, European Space Agency (ESA), United Kingdom

IAC-23.A3.1.4
COSPAR PLANETARY PROTECTION POLICY: RECENT ADVANCES
Athena Coustenis, LESIA - Observatoire de Paris, France

IAC-23.A3.1.8
CHASM: FOSTERING COLLABORATION AND RESEARCH ON EARTH FOR SPACE EXPLORATION WITH SPACE ANALOGUES
Eleonore Poli, University of Cambridge, Switzerland

IAC-23.A3.1.9
SUSTAINABILITY PRINCIPLES FOR SPACE OPERATIONS ACROSS THE CENTURY
Antonio Stark, United States

IAC-23.A3.1.10
ROBOTICS IN SPACE: A REVIEW
Jahnavi Dangeti, Lovely Professional University, India

IAC-23.A3.1.11
SPACE SCIENCE AND EXPLORATION IN ASIA PACIFIC: A COMPREHENSIVE REVIEW
Kaylee Li, Space Generation Advisory Council (SGAC), Australia

A3.2A. Moon Exploration – Part 1

October 3 2023, 10:15 — BCC B3

Co-Chair(s): Bernard Foing, ILEWG "EuroMoonMars", The Netherlands; David Korsmeyer, National Aeronautics and Space Administration (NASA), Ames Research Center, United States;
Rapporteur(s): Pierre-Alexis Joumel, Airbus Defence and Space, Germany; Nadeem Ghafoor, Avalon Space, Canada;

IAC-23.A3.2A.1
SCIENCE HIGHLIGHTS OF KPLO GAMMA-RAY SPECTROMETER IN CRUISE AND THE LUNAR ORBIT
Kyeong Ja Kim, Korea Institute of Geoscience and Mineral Resources, Korea, Republic of

IAC-23.A3.2A.2
FROM QUEQIAO TO QUEQIAO-2: THE SUSTAINABLE DEVELOPMENT OF CHINESE LUNAR RELAY COMMUNICATIONS SATELLITE
Lihua Zhang, DFH Satellite Co. Ltd., China

IAC-23.A3.2A.3
VIPER: SYSTEMS INTEGRATION STATUS
Daniel Andrews, National Aeronautics and Space Administration (NASA), United States

IAC-23.A3.2A.4
ISRO'S LUNAR MISSIONS AND THE FUTURE IMPACT OF CHANDRAYAAN-3 ON THE INDIAN SPACE INDUSTRY
Darpan Byahatti, R V College of Engineering, Bengaluru, India

IAC-23.A3.2A.5
PROJECT STATUS ON LUNAR POLAR EXPLORATION (LUPEX) MISSION
Hiroyasu Mizuno, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.A3.2A.6 (unconfirmed)
RUSSIAN PROGRAM OF LUNAR INVESTIGATIONS AND EXPLORATION
Lev Zelenyi, Space Research Institute (IKI), RAS, Russian Federation

IAC-23.A3.2A.7
SYNTHESIS OF PARALLEL STRUCTURE MOON ROVER
Javad Samadzade, National Aviation Academy - Azerbaijan, Azerbaijan

IAC-23.A3.2A.8
TAIWAN'S LUNAR PAYLOAD DEVELOPMENT FOR LUNAR EXPLORATION
Shin-Fa Lin, National Space Organization, Taipei

IAC-23.A3.2A.9
LUNAR GEOLOGY ORBITER: UPDATE ON MISSION DEFINITION AND STUDY PROGRESS
Petr Bohacek, TRL Space, Czech Republic

IAC-23.A3.2A.10
EURO2MOON: LEVERAGING LUNAR RESOURCES EXPLORATION TO FOSTER INTERNATIONAL COLLABORATION AND BENEFIT SUSTAINABILITY IN SPACE AND EARTH
Pierre-Alexis Joumel, Airbus Defence and Space, Germany

IAC-23.A3.2A.11
JAXA'S ROADMAP AND CONCEPTS OF FUTURE LUNAR LANDING MISSIONS
Masaru Koga, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.A3.2A.12
A MULTI-ROBOT LUNAR AREA COVERAGE METHOD BASED ON REINFORCEMENT LEARNING
Qiming Liang, National Key Laboratory of Aerospace Flight Dynamics,Northwestern Polytechnical University, China

IAC-23.A3.2A.13
OFFWORLD'S CESLESTIAL AND TERRESTRIAL SWARM ROBOTIC AND ISRU SYSTEM
Kyle Acierno, ispace, inc., Luxembourg

A3.2B. Moon Exploration – Part 2

October 3 2023, 15:00 — BCC B3

Co-Chair(s): Bernard Foing, ILEWG "EuroMoonMars", The Netherlands; David Korsmeyer, National Aeronautics and Space Administration (NASA), Ames Research Center, United States;
Rapporteur(s): Pierre-Alexis Joumel, Airbus Defence and Space, Germany; Nadeem Ghafoor, Avalon Space, Canada;

IAC-23.A3.2B.1
THE MISSION AND SYSTEM DESIGN OF THE FIRST TURKISH LUNAR MISSION
Burak Yaglioglu, TUBITAK Uzay, Space Technologies Research Institute, Türkiye

IAC-23.A3.2B.2
AN OPTIMIZED RECONFIGURABLE ON-BOARD THERMAL IMAGES CLASSIFICATION USING AI FOR MOON SOUTH POLE ROVER MISSION
Aysha Alharam, National Space Science Agency (NSSA), Bahrain

IAC-23.A3.2B.3
MODULARITY FOR LUNAR EXPLORATION: EUROPEAN MOON ROVER SYSTEM PRE-PHASE A DESIGN AND FIELD TEST CAMPAIGN RESULTS
Fernando Gandia, GMV Aerospace & Defence SAU, Spain

IAC-23.A3.2B.4
LUNAR RESOURCE EXTRACTION AND EXPLOITATION FOR SUSTAINABLE SPACE EXPLORATION
Sahana Shastry, University of Bremen, Germany

IAC-23.A3.2B.5
LUMIO MISSION: OBSERVATION AND CHARACTERIZATION OF LUNAR METEOROID IMPACTS
Lorenzo Provinciali, Argotec, Italy

IAC-23.A3.2B.7
CONCEPT STUDY OF A SMALL-SCALE DYNAMIC LEGGED ROBOT FOR LUNAR EXPLORATION
Philip Arm, ETHZ, Switzerland

IAC-23.A3.2B.8
THE HARDGAMM SPECTROMETER PAYLOAD FOR EXTRA-TERRESTRIAL SEARCHING FOR HYDROGEN PRESENCE AND OTHER CONSTITUENTS OF INTEREST APPLYING NON-INVASIVE METHOD OF CHARACTERISTIC GAMMA PHOTON DETECTION
Michael Holik, Institute of Experimental and Applied Physics, Czech Technical University in Prague, Czech Republic

IAC-23.A3.2B.9
THE ORACLE ISRU DEMONSTRATOR PAYLOAD FOR OXYGEN EXTRACTION ON THE MOON
Francesco Latini, Italian Space Agency (ASI), Italy

IAC-23.A3.2B.10
EXOSPACEHAB-X: A TRANSPORTABLE MOON BASE FOR ANALOG MISSIONS & OUTREACH
Bernard Foing, ILEWG "EuroMoonMars", The Netherlands

IAC-23.A3.2B.11
THE HIGH EFFICIENT UHF BAND RELAY COMMUNICATION SYSTEM FOR MOON EXPLORATION
Jia Tian, China Academy of Space Technology (Xi'an), China

IAC-23.A3.2B.12
ANALYSIS OF APPROACHES TO ENSURE THE RETURN OF DESCENT VEHICLES OF VARIOUS TYPES FROM LUNAR ORBIT WITHOUT DESTRUCTION OF THEIR HEAT SHIELD COATING
Victor Leonov, Bauman Moscow State Technical University, Russian Federation

IAC-23.A3.2B.13
SMALL HOPPING ROBOT FOR LUNAR EXPLORATION
Tetsuo Yoshimitsu, Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan

A3.2C. Moon Exploration – Part 3

October 6 2023, 13:45 — BCC B3

Co-Chair(s): Bernard Foing, ILEWG "EuroMoonMars", The Netherlands; David Korsmeyer, National Aeronautics and Space Administration (NASA), Ames Research Center, United States;
Rapporteur(s): Sylvie Espinasse, European Space Agency (ESA), The Netherlands; Nadeem Ghafoor, Avalon Space, Canada;

IAC-23.A3.2C.3
STUDENT RESEARCH IN AN ANALOG LUNAR HABITAT: EUROMOONMARS & ANALOG ASTRONAUT TRAINING CENTER POLAND EMMPOL2023 CAMPAIGNS 14 &15
Ava Hutchison, ILEWG "EuroMoonMars", The Netherlands

IAC-23.A3.2C.7
PROSPECT DRILLING AND INSTRUMENTATION PACKAGE: DEVELOPMENT AND ENGINEERING MODELS ACTIVITIES
Alessandro Fumagalli, Leonardo Spa, Italy

IAC-23.A3.2C.8
LAB-BASED TESTING OF A PASSIVE REGOLITH SAMPLER IN PREPARATION FOR LUNAR SURFACE OPERATIONS
Scott Dorrington, Massachusetts Institute of Technology (MIT), United States

IAC-23.A3.2C.9
LUNAR DUST AND ITS EFFECTS ON THE FUTURE LUNAR EXPLORATION AND A SMART DOUBLE MECHANISM SOLUTION TO REPEL FROM LUNAR SPACECRAFTS AND SYSTEMS
Borja Pozo, TEKNIKER FOUNDATION, Spain

IAC-23.A3.2C.10
AUTONOMOUS IN-SITU RESOURCE UTILIZATION OF LUNAR WATER ICE ENABLED BY A PERMANENTLY OPERATING LUNAR EXPLORATION ROVER (POLER)
Alexander Huschke, Space Generation Advisory Council (SGAC), Germany

IAC-23.A3.2C.11
SCALED LUNAR ISRU PILOT PLANT FOR OXYGEN EXTRACTION THROUGH CARBOTHERMAL REDUCTION: THE ORACLE PAYLOAD.
Michèle Lavagna, Politecnico di Milano, Italy

IAC-23.A3.2C.12
LUNAR ROVER TERRAMECHANICS SIMULATION STUDY
James Hurrell, Tohoku University, Japan

IAC-23.A3.2C.13
PRELIMINARY DESIGN OF A COMPACT MOBILE WHEEL BUCKET AND TETHER SYSTEM FOR LUNAR SOIL SAMPLING
Dongseok Ryu, Korea, Republic of

IAC-23.A3.2C.14 (unconfirmed)
LUNAR DUSTY EXOSPHERE. IMPLICATIONS FOR THE MOON EXPLORATION.
Lev Zelenyi, Space Research Institute (IKI), RAS, Russian Federation

A3.3A. Mars Exploration – missions current and future

October 4 2023, 10:15 — BCC B3

Co-Chair(s): Vincenzo Giorgio, Thales Alenia Space Italia, Italy; Pierre W. Bousquet, Centre National d'Etudes Spatiales (CNES), France;
Rapporteur(s): Cheryl Reed, Northrop Grumman Innovation Systems, United States; Amalia Ercoli Finzi, Politecnico di Milano, Italy;

IAC-23.A3.3A.1
INTERNATIONAL MARS ICE MAPPER MISSION: A MULTILATERAL MODEL FOR FUTURE MARS EXPLORATION
Marilena Amoroso, Italian Space Agency (ASI), Italy

IAC-23.A3.3A.2
MARS EXPLORATION – SCIENCE, INSTRUMENTS AND TECHNOLOGIES
Raul Jafarzade, Azerbaijan

IAC-23.A3.3A.3
MARS SAMPLE RETURN AND THE CAPTURE, CONTAINMENT, AND RETURN SYSTEM NEW DESIGN AND PATH TO 2027 LAUNCH
Bruno Sarli, NASA GSFC, United States

IAC-23.A3.3A.4
THE PLANETARY PROTECTION STRATEGY OF MARS SAMPLE RETURN'S EARTH RETURN ORBITER MISSION
Giuseppe Cataldo, National Aeronautics and Space Administration (NASA), Goddard Space Flight Center, United States

IAC-23.A3.3A.5
ROSALIND FRANKLIN MISSION RECOVERY OF EXOMARS 2022 MISSION
Vincenzo Giorgio, Thales Alenia Space Italia, Italy

IAC-23.A3.3A.6
DEVELOPING, VALIDATING AND VERIFYING A FLIGHT RATED AUTONOMOUS GNC SYSTEM FOR THE ROSALIND FRANKLIN ROVER: ACHIEVEMENTS AND LESSONS LEARNT
Duncan Hamill, Airbus Defence and Space, United Kingdom

IAC-23.A3.3A.7
WATER-RICH PERMAFROST ON MARS: FREND MAPPING DATA FROM ESA'S TGO
Igor Mitrofanov, Institute for Space Research, Russian Federation

IAC-23.A3.3A.8
DIVERSIFYING MARTIAN ENERGY SOURCES: THE ROLE OF THE MARTIAN ENERGY DOME IN SUSTAINABLE HUMAN PRESENCE
Sarath Raj Nadarajan Syamala, Amity University, Dubai, United Arab Emirates

IAC-23.A3.3A.9
TESTING OPERATIONAL DESIGNS FOR A FUTURE ROBOTIC MISSION TO A MARTIAN LAVA TUBE
Jennifer Blank, National Aeronautics and Space Administration (NASA), Ames Research Center /Blue Marble Space Institute of Science, United States

IAC-23.A3.3A.10
NEW METHODS FOR MARTIAN EXPLORATION
Kamran Mahmudov, Azerbaijan State Oil and Industry University (ASOIU), Azerbaijan

IAC-23.A3.3A.11
MARS EXPLORATION: CURRENT AND FUTURE MISSIONS
Debarshi Mukherjee, India

A3.3B. Mars Exploration – Science, Instruments and Technologies

October 4 2023, 15:00 — BCC B3

Co-Chair(s): Vincenzo Giorgio, Thales Alenia Space Italia, Italy; Pierre W. Bousquet, Centre National d'Etudes Spatiales (CNES), France;
Rapporteur(s): Cheryl Reed, Northrop Grumman Innovation Systems, United States; Amalia Ercoli Finzi, Politecnico di Milano, Italy;

IAC-23.A3.3B.1
MICROLIBS: A MICRO-SCALE ELEMENTAL ANALYZER FOR MARS AND THE MOON
Charles Yana, Centre National d'Etudes Spatiales (CNES), France

IAC-23.A3.3B.2
IMPROVING SPECTRAL QUALITY IN SUPERCAM LIBS ANALYSIS THROUGH LASER FOCUSING OPTIMIZATION
Uma Cladellas Sanjuan, International Space University (ISU), Spain

IAC-23.A3.3B.3
MEMS BASED MASS SPECTROMETER
Piotr Szyszka, Wroclaw University of Science and Technology, Poland

IAC-23.A3.3B.4
THE EFFICIENT SELF-ADAPTIVE SNR ESTIMATION METHOD WITH MINIMAL RESOURCE COST FOR MARS EXPLORATION
Jia Tian, China Academy of Space Technology (Xi'an), China

IAC-23.A3.3B.5
HYDRATED MINERALS IN GALE CRATER ON MARS: JOINT ANALYSIS OF ORBITAL AND SURFACE DATA
Maya Djachkova, Space Research Institute (IKI), RAS, Russian Federation

IAC-23.A3.3B.6
DIURNAL VARIATION ON MARS: CHARACTERIZING CHANGES IN AEROSOL CONCENTRATIONS, SURFACE TEMPERATURE, AND CO2 ABSORPTIONS – COMPARISON WITH EMIRATES MARS MISSION AND CURIOSITY ROVER
Sarath Raj Nadarajan Syamala, Amity University, Dubai, United Arab Emirates

IAC-23.A3.3B.7
A COMPREHENSIVE GROUND-LEVEL MAP OF MARS CRUSTAL MAGNETISM GATHERED BY A SWARM OF WIND-DRIVEN SURFACE EXPLORATION MOBILE IMPACTORS
Luka Pikulić, Team Tumbleweed, The Netherlands

IAC-23.A3.3B.8
ROVING WITH THE BUZZARDS: A TRL5 AUTONOMY MARATHON
Róbert Marc, Airbus Defence and Space, United Kingdom

IAC-23.A3.3B.9
SYNTHESIS OF NEW LUNAR PARALLEL STRUCTURE ROBOTIC ROWERS
Nadir Atayev, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.A3.3B.10
ENABLING IN-SITU RESOURCES UTILISATION BY LEVERAGING COLLABORATIVE ROBOTICS AND ASTRONAUT-ROBOT INTERACTION
Fernando Gandia, GMV Aerospace & Defence SAU, Spain

IAC-23.A3.3B.11
EMIRATES MARS ULTRAVIOLET SPECTROMETER'S (EMUS) OBSERVATION OF THE MARTIAN THERMOSPHERE
DEEPTHA GIRIDHAR, R V College of Engineering, Bengaluru, India

A3.4A. Small Bodies Missions and Technologies (Part 1)

October 5 2023, 10:15 — BCC B3

Co-Chair(s): Cheryl Reed, Northrop Grumman Innovation Systems, United States; Stephan Ulamec, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;
Rapporteur(s): Norbert Frischauf, TU Graz, Austria; Marc D. Rayman, NASA Jet Propulsion Laboratory, United States;

IAC-23.A3.4A.1
RECENT STATUS OF HAYABUSA2 EXTENDED MISSION
Yuya Mimasu, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.A3.4A.2 (unconfirmed)
LUCY STRONG: GETTING TO A SUCCESSFUL LAUNCH IN SPITE OF A ONCE-IN-A-LIFETIME PANDEMIC
Donya Douglas-Bradshaw, NASA Goddard Space Flight Center Greenbelt MD 20771, United States

IAC-23.A3.4A.3
DESTINY+: TECHNOLOGY DEMONSTRATION FROM THE EARTH TO DEEP SPACE AND EXPLORATION OF ASTEROID 3200 PHAETHON
Hiroshi Imamura, JAXA, Japan

IAC-23.A3.4A.4
DESIGN ROUNDUP OF MARTIAN MOONS EXPLORATION (MMX)
Takane Imada, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.A3.4A.5
THE MMX PHOBOS ROVER: SCIENTIFIC PAYLOAD INTEGRATED AND GETTING READY FOR LAUNCH
Stephan Ulamec, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-23.A3.4A.6
DEIMOS MOON INVESTIGATION THROUGH REMOTE AND IN SITU SCIENCE: THE TASTE MISSION
Michèle Lavagna, Politecnico di Milano, Italy

IAC-23.A3.4A.7
COLLECTING TINY PARTICLES OFF SMALL BODIES AND WHAT WE CAN LEARN FROM THEIR IN-SITU ANALYSIS
Martin Hilchenbach, Max-Planck-Institut für Solar System Research, Germany

IAC-23.A3.4A.8
A MULTI-SCALE LABELLED DATASET FOR BOULDER SEGMENTATION AND NAVIGATION ON SMALL BODIES
Mattia Pugliatti, Politecnico di Milano, Italy

IAC-23.A3.4A.9
SMOOTH LOCOMOTION AND ADHESION CONTROL FOR A HEXAPOD ROVER OF LOW-GRAVITY CELESTIAL BODIES
Mingyue Zheng, Zhejiang University, China

A3.4B. Small Bodies Missions and Technologies (Part 2)

October 6 2023, 10:15 — BCC B3

Co-Chair(s): Stephan Ulamec, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Cheryl Reed, Northrop Grumman Innovation Systems, United States;
Rapporteur(s): Marc D. Rayman, NASA Jet Propulsion Laboratory, United States; Norbert Frischauf, TU Graz, Austria;

IAC-23.A3.4B.1
THE ESA HERA MISSION TO THE NEAR-EARTH ASTEROID BINARY (65803) DIDYMOS: DOCUMENTATION OF THE NASA DART IMPACT AND FULL CHARACTERIZATION OF THE ASTEROID SYSTEM
Patrick Michel, University of Nice-Sophia Antipolis, CNRS, Observatoire de la Cote d'Azur, France

IAC-23.A3.4B.2
RAMSES – ESA'S STUDY FOR A SMALL MISSION TO APOPHIS
Patrick Michel, University of Nice-Sophia Antipolis, CNRS, Observatoire de la Cote d'Azur, France

IAC-23.A3.4B.3
TRAJECTORY AND GNC STRATEGY DESIGN FOR A FAST DEVELOPMENT MISSION TO APOPHIS – A LESSON IN THE RE-USE OF HERA
Mariella Graziano, GMV Aerospace & Defence SAU, Spain

IAC-23.A3.4B.4
DROID: INVESTIGATING 99942 APOPHIS OVER ITS 2029 APPROACH
Pierre W. Bousquet, Centre National d'Etudes Spatiales (CNES), France

IAC-23.A3.4B.5 (unconfirmed)
DESIGN OF A STABLE ASTEROID LANDER FOR A RELIABLE SAMPLE RETRIEVAL MISSION OF 99942-APOPHIS.
Apurva Gajbhiye, University of Petroleum and Energy Studies, India

IAC-23.A3.4B.6
ADAPTIVE CONTROL METHOD FOR FLEXIBLE LANDING OF ASTEROID WITH MULTIPLE CONSTRAINTS
Zhihui Sui, Beijing Institude of technology, China

A3.5. Solar System Exploration including Ocean Worlds

October 5 2023, 15:00 — BCC B3

Co-Chair(s): Mariella Graziano, GMV Aerospace & Defence SAU, Spain; Junichiro Kawaguchi, Australian National University (ANU), Australia;
Rapporteur(s): Charles E. Cockrell Jr., National Aeronautics and Space Administration (NASA), United States; Gabriel Pont, Centre National d'Etudes Spatiales (CNES), France;

IAC-23.A3.5.1
DECAMETRIC AND METRIC SPECTRAL SOLAR RADIO OBSERVATIONS USING THE LOW-FREQUENCY RADIO TELESCOPE IN SAASST
Mohammad Musharraf, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

IAC-23.A3.5.2
SINGLE SLS LAUNCHED DUAL OUTER PLANET MISSION TO URANUS AND TO NEPTUNE
Matthew Ziglar, Boeing Defense Space & Security, United States

IAC-23.A3.5.3
EUREKA: A LOW-COST FLYBY MISSION TO EUROPA
Andrei Kolin, Israel Aerospace Industries Ltd., Israel

IAC-23.A3.5.4
A MISSION ARCHITECTURE OF A ROBOTIC SPACEFLIGHT TO ENCELADUS FOR ENABLING EXPLORATION OF ITS SURFACE AND SUBGLACIAL OCEAN.
Olga Bannova, University of Houston, United States

IAC-23.A3.5.5
EPOPEA MISSION: ADDRESSING THE CHALLENGES OF ENCELADUS' OCEAN WORLD EXPLORATION
Lucia Bianchi, Politecnico di Milano, Italy

IAC-23.A3.5.6
TITAN MISSION DESIGN OF A MULTI-USE SATELLITE STRUCTURE AND LANDER PLUS DRONE SYSTEM
Akshay Rajshekhar Hiremath, Space Generation Advisory Council (SGAC), United States

IAC-23.A3.5.7
A NOVEL CONCEPT FOR TITAN ROBOTIC EXPLORATION BASED ON SOFT MORPHING AERIAL ROBOTS
Fernando Ruiz Vincueria, University of Seville, Spain

IAC-23.A3.5.8
THE DRAGONFLY NEW FRONTIERS MISSION TO TITAN: ENVIRONMENT DEFINITION AND PRESENT STATUS
Ralph Lorenz, Johns Hopkins University Applied Physics Laboratory, United States

IAC-23.A3.5.9
DEVELOPMENT OF A GAS CHROMATOGRAPH FOR THE DRAGONFLY MISSION
Gabriel Pont, Centre National d'Etudes Spatiales (CNES), France

A4. 52nd IAA SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) – The Next Steps

Coordinator(s): Mike Garrett, University of Manchester, United Kingdom; Andrew Siemion, Berkeley SETI Research Center, United States;

A4.1. SETI 1: SETI Science and Technology

October 3 2023, 10:15 — BCC B7

Co-Chair(s): Steve Croft, University California Berkeley, United States;

IAC-23.A4.1.1
KEYNOTE: "PESEK LECTURE" - EXPANDING THE SEARCH FOR ETI THROUGH WIDE-BAND AND BROADBAND PULSED SIGNALS
Vishal Gajjar, SETI Institute, United States

IAC-23.A4.1.2
NEW CONSTRAINTS ON TECHNOSIGNATURES FROM BREAKTHROUGH LISTEN ON THE GREEN BANK TELESCOPE
Steve Croft, University California Berkeley, United States

IAC-23.A4.1.3
THE BREAKTHROUGH LISTEN SEARCH FOR INTELLIGENT LIFE: A TECHNOSIGNATURE SEARCH OF 97 GALACTIC TARGETS
Carmen Choza, University of California, Berkeley, United States

IAC-23.A4.1.4
BREAKTHROUGH LISTEN SEARCH FOR SIGNS OF INTELLIGENT LIFE NEAR THE GALACTIC CENTER AT X-BAND
Karen Perez, Columbia University, United States

IAC-23.A4.1.5
CLASSIFICATION TECHNIQUES FOR EXTRACTED CANDIDATE TECHNOSIGNATURE SIGNALS FROM RADIO TELESCOPE ARRAYS
Daniel Czech, University of California, Berkeley, United States

IAC-23.A4.1.6
NEW DEVELOPMENTS IN SETI LONG-BASELINE INTERFEROMETRY
Mike Garrett, University of Manchester, United Kingdom

IAC-23.A4.1.8
SIMULTANEOUS DUAL-SITE SETI WITH LOFAR INTERNATIONAL STATIONS
Owen Johnson, Trinity College Dublin, Ireland

IAC-23.A4.1.9 (unconfirmed)
CURRENT STATUS AND PERSPECTIVES FOR SETI SEARCHES AT THE SARDINIA RADIO TELESCOPE
Andrea Melis, INAF - Istituto Nazionale di AstroFisica, Italy

IAC-23.A4.1.12
THE FERMI PARADOX REVISITED: TECHNOSIGNATURES AND THE CONTACT ERA
Amri Wandel, Hebrew University of Jerusalem, Israel

IAC-23.A4.1.13
THE SPIDER STELLAR ENGINE: A SHOCKING EXTRATERRESTRIAL DESIGN?
Clément Vidal, University of California, Berkeley, United States

A4.2. SETI 2: SETI and Society

October 3 2023, 15:00 — BCC B7

Co-Chair(s): Kathryn Denning, York University, Canada;

IAC-23.A4.2.1
KEYNOTE: "BILLINGHAM CUTTING EDGE LECTURE" - THE HISTORY OF THE IAA SETI PERMANENT COMMITTEE - 1990 TO 1999
Lori Walton, Consultant, Canada

IAC-23.A4.2.2
THE SETI POST-DETECTION HUB: PREPARING HUMANITY FOR CONTACT
Kate Genevieve, University of Sussex, United Kingdom

IAC-23.A4.2.3
REVISING THE SETI POST-DETECTION PROTOCOLS FOR THE 2020S AND BEYOND: A REPORT ON WORK IN PROGRESS
Carol Oliver, University of New South Wales, Australia

IAC-23.A4.2.4
THE OCEAN CALLS - SETI, LUNAR ASTRONOMY AND SCENARIOS AT THE 21-CM HYDROGEN LINE
Kate Genevieve, University of Sussex, United Kingdom

IAC-23.A4.2.6
ASTROBIOLOGY AND SETI IN PERU: RECENT AND FUTURE ADVANCES
Paolo Musso, InCosmiCon Research Center, Italy

IAC-23.A4.2.7
INSIGHTS FOR SETI FROM LINGUISTICS STUDIES IN THE PERUVIAN AMAZON
Paolo Musso, InCosmiCon Research Center, Italy

IAC-23.A4.2.11
MOON FARSIDE PROTECTION FOR THE BENEFIT OF SETI, ASTROBIOLOGY, COSMOLOGY AND PLANETARY DEFENSE
Claudio Maccone, International Academy of Astronautics (IAA) and Istituto Nazionale di Astrofisica (INAF), Italy

A5. 26th IAA SYMPOSIUM ON HUMAN EXPLORATION OF THE SOLAR SYSTEM

Coordinator(s): Christian Sallaberger, Canadensys Aerospace Corporation, Canada; Maria Antonietta Perino, Thales Alenia Space Italia, Italy;

A5.1. Human Exploration of the Moon and Cislunar Space

October 4 2023, 10:15 — HAC Hall A

Co-Chair(s): Nadeem Ghafoor, Avalon Space, Canada; Greg Chavers, National Aeronautics and Space Administration (NASA), United States;
Rapporteur(s): Marc Haese, DLR, German Aerospace Center, Germany; Henrik Petersson, Swedish Space Corporation (SSC), Sweden;

IAC-23.A5.1.1
QUASI-SOLAR SYNCHRONOUS ORBIT AROUND THE MOON BASED ON SPATIAL DISTANT RETROGRADE ORBITS
Yuying Liang, ISAS, JAXA, China

IAC-23.A5.1.2
TECHNOLOGICAL AND LEGAL PERSPECTIVES \\FOR SUSTAINABLE HUMAN PRESENCE ON THE MOON
Veronika Stihler, International Space University (ISU), Australia

IAC-23.A5.1.3
A MISSION DESIGN FOR LUNAR ORBITAL MODULE DELIVERY AND IT'S USE TO SUPPORT "EARTH-MOON" TRANSPORTATION.
Dmitry Zarubin, Space Research Institute (IKI), Russian Academy of Sciences (RAS), Russian Federation

IAC-23.A5.1.4
MOBILE SYSTEM FOR WATER EXTRACTION FROM ICY REGOLITH USING A THERMAL METHOD
Iryna Husarova, Yuzhnoye State Design Office, Ukraine

IAC-23.A5.1.5
ADDITIVE MANUFACTURED PATCH ANTENNA DESIGN FOR LUNAR SURFACE TELEMETRY, TRACKING AND COMMAND LINK AND UPSTREAM.
Anand Nagesh, Big Dipper Exploration Technologies, India

IAC-23.A5.1.7
LUNAR REGOLITH SHRINKAGE CAUSED BY THE OF EXTRACTION OF WATER ICE
Nicholas Barnett, University of New South Wales, Singapore, Republic of

IAC-23.A5.1.8
FROM ABSTRACT TO MISSION: SELECTING AND IMPLEMENTING EXTERNAL PROJECTS INTO THE SIMULATED LUNAR MISSION CONDITIONS OF ASCLEPIOS III
Arnault Monoyer, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland

IAC-23.A5.1.9
RESEARCH OVERVIEW OF THE CHILL-ICE 2 CAMPAIGN, AUGUST 2022, HALLMUNDARHRAUN, ICELAND
Marc Heemskerk, ESA BIC Prague, Norway

IAC-23.A5.1.10
LUNAR LAVA TUBE INFRASTRUCTURE AND INNOVATIVE TECHNOLOGIES TESTING THROUGH SPELEOLOGY ANALOG MISSION: THE SAPIENZA GEA PROJECT
Angelo Fabbrizi, Sapienza University of Rome, Italy

A5.2. Human Exploration of Mars

October 4 2023, 15:00 — HAC Hall A

Co-Chair(s): Maria Antonietta Perino, Thales Alenia Space Italia, Italy; Mariella Graziano, GMV Aerospace & Defence SAU, Spain;
Rapporteur(s): Nadeem Ghafoor, Avalon Space, Canada;

IAC-23.A5.2.1
HUMAN MARS EXPLORATION MISSION ARCHITECTURE AND THE CORRESPONDING SPACE TRANSPORTATION SYSTEM
Xiaowei WANG, China Academy of Launch Vehicle Technology (CALT), China

IAC-23.A5.2.2
IDENTIFICATION OF HUMAN LANDING SITES ON MARS WITH A SWARM OF WIND-DRIVEN MOBILE IMPACTORS
Danny Tjokrosetio, Delft University of Technology, The Netherlands

IAC-23.A5.2.3
AN OUTPOST FOR THE FIRST HUMAN MARS MISSIONS
Giancarlo Genta, Politecnico di Torino, Italy

IAC-23.A5.2.5
HABITATION OVER MARS ENVIRONMENT: A CONCEPTUAL RESEARCH AND RESOURCE UTILIZATION
SHAMBHAVI A S, Nitte Meenakshi Institute of Technology, India

IAC-23.A5.2.6
SURFACE ENERGY PRODUCTION ISSUES FOR THE REFUELING OF STARSHIPS
Jean-Marc Salotti, Laboratoire de l'Intégration du Matériau au Système, France

IAC-23.A5.2.7
DEPLOYABLE HEAT SHIELD SOLUTIONS FOR A HUMAN MARS LANDER
Stefano Coco, Politecnico di Torino - Thales Alenia Space Italia - ISAE Supaero Toulouse, Italy

IAC-23.A5.2.8
MARTIAN MISSION CONTROL: A NOVEL CONCEPT FOR MANNED INTERPLANETARY MISSIONS.
Paolo Mangili, Sasakawa International Center for Space Architecture, United States

IAC-23.A5.2.10
FRAMEWORK FOR LOW-COST, LARGE-SCALE MARS ANALOG MISSIONS
Madelyn Hoying, Massachusetts Institute of Technology (MIT), United States

IAC-23.A5.2.11 (unconfirmed)
POTENTIAL SPINOFFS FROM FUTURE MARTIAN TECHNOLOGY
Niravkumar Patel, France

IAC-23.A5.2.12
THE SEARCH FOR LIFE ON MARS
Narmina Gahirmanova, Baku State University, Azerbaijan

A5.3-B3.6. Human and Robotic Partnerships in Exploration - Joint session of the IAF Human Spaceflight and IAF Exploration Symposia

October 5 2023, 10:15 — BCC A7

Co-Chair(s): Pierre-Alexis Joumel, Airbus Defence and Space, Germany; Mark Hempsell, The British Interplanetary Society, United Kingdom;
Rapporteur(s): Juergen Schlutz, European Space Agency (ESA), Germany; Scott Ritter, University of Bern, Switzerland;

IAC-23.A5.3-B3.6.1 (unconfirmed)
IN SPACE ASSEMBLY: OVERVIEW AND TECHNICAL CHALLENGES
Jean-Pascal Lutze, DLR (German Aerospace Center), Germany

IAC-23.A5.3-B3.6.4
ROBOTICS IN THE SPACE EXPLORATION
Ilkin Abdullayev, Azerbaijan State Oil and Industry University (ASOIU), Azerbaijan

IAC-23.A5.3-B3.6.6
INTEGRATION OF AUTONOMOUS ROBOTIC SYSTEMS FOR HUMAN SPACE EXPLORATION: INSIGHTS FROM EAR ANALOG MISSION IN HADEES-C HABITAT
David Andres Diaz Alvarez, Universidad de Antioquia, Colombia

A5.4. Deep Space Habitats and Resources

October 2 2023, 15:15 — HAC Balcony 2

Co-Chair(s): Vittorio Netti, Sasakawa International Center for Space Architecture, Italy; Monika Lipinska, Lund University, Sweden;
Rapporteur(s): Manuela Aguzzi, Space Applications Services, Belgium; Frank Preud'homme, QinetiQ Space nv, Belgium;

IAC-23.A5.4.1
NUCLEAR POWER GENERATION USING MODULAR HELIUM COOLED REACTORS FOR SUSTAINABLE LUNAR BASES AND MOON HABITATS
Ugur Guven, UN CSSTEAP, United Kingdom

IAC-23.A5.4.2
THE PRODUCTION AND DEVELOPMENT OF GEL PROPELLANT FOR IN-SITU LUNAR AND MARTIAN TERRESTRIAL OPERATIONS
Shreyansh Dubey, University of Petroleum and Energy Studies, India

IAC-23.A5.4.3
THE SPACE BRICK FLAME RETARDANT EXPANDED POLYPROPYLENE MODULAR ELEMENT FOR SPACE BUILDING
Diego Cagna, Italy

IAC-23.A5.4.4 (unconfirmed)
DEVELOPMENT OF NOVEL SENSING CAPABILITY FOR ISRU RESOURCE CHARACTERISATION
Molly Kirkpatrick, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia

IAC-23.A5.4.6
SUSTAINABLE WHOLISTIC SPACE IN-SITU FARMING UTILIZING NUTRITION FROM DIVERSE MICROGREENS AND AFRICAN GIANT SNAILS
Mac Malkawi, Blinc- Borderless lab, United States

A6. 21st IAA SYMPOSIUM ON SPACE DEBRIS

Coordinator(s): Christophe Bonnal, Centre National d'Etudes Spatiales (CNES), France; Mark A. Skinner, The Aerospace Corporation, United States; Pierre Omaly, CNES, France;

A6.1. Space Debris Detection, Tracking and Characterization - SST

October 6 2023, 13:45 — BCC A6

Co-Chair(s): Mark A. Skinner, The Aerospace Corporation, United States; Vladimir Agapov, , Russian Federation;
Rapporteur(s): Thomas Schildknecht, SwissSpace Association, Switzerland;

IAC-23.A6.1.1
FLAT FIELD CALIBRATION OF OPPORTUNISTIC SENSORS FOR IN-SPACE SITUATIONAL AWARENESS
Aishling Dignam, Astroscale Ltd, United Kingdom

IAC-23.A6.1.2
LARID: CHARACTERIZING AN IN-SITU SPACE DEBRIS DETECTOR'S RESPONSE TO NOISE
Noah Ledford, Fraunhofer EMI, Germany

IAC-23.A6.1.3
LIMITING FACTORS FOR ON-ORBIT DEBRIS DETECTION USING COMMERCIAL STAR TRACKERS
Allan Shtofenmakher, Massachusetts Institute of Technology (MIT), United States

IAC-23.A6.1.4
LASER RANGING TO SPACE DEBRIS: OVERCOMING CHALLENGES
Julian Rodriguez-Villamizar, Astronomical Institute University of Bern (AIUB), Switzerland

IAC-23.A6.1.5
OBSERVATION STRATEGY TO CATALOGUING, MONITORING AND CLASSIFYING OBJECTS IN MOLNIYA ORBIT THROUGH OPTICAL OBSERVATION
Simone Varanese, Sapienza University of Rome, Italy

IAC-23.A6.1.6
SPACE DEBRIS SURVEILLANCE IN THE UAE: INSIGHTS FROM THE UAEMMN'S FIRST FIVE YEARS OF OPERATION
Maryam Sharif, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

IAC-23.A6.1.7
IMPROVING BALLISTIC COEFFICIENT ESTIMATION OF RESIDENT SPACE OBJECTS IN LOW EARTH ORBIT
Nicola Cimmino, University of Naples "Federico II", Italy

IAC-23.A6.1.8
A SUFFICIENT GROUND-BASED MEASUREMENT SYSTEM CONFIGURATION TO ACHIEVE SPACE SAFETY REQUIREMENTS
Sanat K Biswas, IIIT Delhi, India

IAC-23.A6.1.9
NEW STATUS OF ISON — AN OPEN INTERNATIONAL PRIVATE PROJECT
Igor Molotov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

A6.2. Modeling and Risk Analysis

October 4 2023, 15:00 — BCC A6

Co-Chair(s): Marlon Sorge, The Aerospace Corporation, United States; Dan Oltrogge, COMSPOC Corp., United States;
Rapporteur(s): Carmen Pardini, ISTI-CNR, Italy;

IAC-23.A6.2.1
MULTI-PERSPECTIVE ANALYSIS OF SUSTAINABILITY METRICS CHARACTERISING THE DEBRIS ENVIRONMENT
Lorenz Böttcher, TU Braunschweig, Institute of Space Systems, Germany

IAC-23.A6.2.2
EVALUATION OF THE EFFECTIVENESS OF 5-YEAR RULE -- IMPACT ON THE ORBITAL ENVIRONMENT AT EACH ALTITUDE BY REDUCING THE POST-MISSION DISPOSAL LIFETIME
Satomi Kawamoto, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.A6.2.3
USING MACHINE LEARNING TO PREDICT HYPERVELOCITY FRAGMENT PROPAGATION OF SPACE DEBRIS COLLISIONS
Katharine Larsen, Embry-Riddle Aeronautical University, United States

IAC-23.A6.2.4
EXTENSION OF ESA'S SURVIVAL AND RISK ANALYSIS TOOL WITH HEMISPHERE AND LATTICE SHAPES
MARTIN SPEL, France

IAC-23.A6.2.5
QUANTIFYING THE INDUCED AND ENCOUNTERED RISK OF SPACE MISSIONS
Callum Wilson, University of Strathclyde, United Kingdom

IAC-23.A6.2.6
LARGE-SCALE MAPPING AND ANALYSIS OF COLLISION AVOIDANCE MANOEUVRES WITH SEMI-ANALYTICAL MODELS
Camilla Colombo, Politecnico di Milano, Italy

IAC-23.A6.2.8
COLLISION RISK ESTIMATION IN MULTI-EVENT SCENARIOS
Óscar González Martínez, GMV Aerospace & Defence SAU, Spain, Spain

IAC-23.A6.2.9
SWARM INTELLIGENCE COLLISION AVOIDANCE METHOD FOR LEO COMMUNICATION SATELLITES
Kubra Mammadova, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.A6.2.10
DYNAMIC CHARACTERISATION OF SPACE DEBRIS POSITION AND VELOCITY PROBABILITY DENSITY FUNCTIONS AND THEIR IMPACT ON TRACKING PERFORMANCE
Sanat K Biswas, IIIT Delhi, India

A6.3. Impact-Induced Mission Effects and Risk Assessments

October 4 2023, 10:15 — BCC A6

Co-Chair(s): Zizheng Gong, Beijing Institute of Spacecraft Environment Engineering, China Academy of Space Technology (CAST), China; Yukihito Kitazawa, Japan Aerospace Exploration Agency (JAXA), Japan;
Rapporteur(s): Jean-Claude Traineau, Office National d'Etudes et de Recherches Aérospatiales (ONERA), France;

IAC-23.A6.3.1
KEYNOTE: PROGRESS IN CHINA'S SPACE DEBRIS PROTECTION RESEARCH-RETROSPECT AND PROSPECT
Zizheng Gong, Beijing Institute of Spacecraft Environment Engineering, China Academy of Space Technology (CAST), China

IAC-23.A6.3.2
RISK ASSESSMENT OF HYPERVELOCITY IMPACT-INDUCED ELECTRICAL ANOMALIES ON SPACECRAFT
Tayyar Shirinli, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.A6.3.3
INVESTIGATION ON SHOCK HUGONIOT OF POLYIMIDE VIA ALL-ATOM MOLECULAR DYNAMICS SIMULATION
Tao Liu, China

IAC-23.A6.3.4
AN OVERVIEW ON SMART BALLISTIC OPTIMIZATION FOR REPAIRING OF AEROSPACE EXOSTRUCTURES USING 3D PRINTED KEVLAR
Leonardo Barilaro, Malta

IAC-23.A6.3.5
SIMULATING IMPACT-INDUCED SATELLITE BREAKUPS WITH A DISCRETE ELEMENT METHOD
Noah Ledford, Fraunhofer EMI, Germany

IAC-23.A6.3.6
INVESTIGATION OF ALUMINIUM WHIPPLE SHIELD RESPONSE TO HYPERVELOCITY IMPACTS CLOSE TO BALLISTIC LIMIT BETWEEN 2.5 AND 5 KM/S
Lorenzo Olivieri, CISAS "G. Colombo" - University of Padova, Italy

IAC-23.A6.3.7
GLANCING IMPACT ON A PICOSATELLITE MOCK-UP: TEST RESULTS
Lorenzo Olivieri, CISAS "G. Colombo" - University of Padova, Italy

IAC-23.A6.3.9
A STUDY ON THE HAZARDS OF SPACE DEBRIS FOR LUNAR MISSIONS: A REVIEW
Shreyansh Dubey, University of Petroleum and Energy Studies, India

IAC-23.A6.3.10
HYPERVELOCITY IMPACT CHARACTERISTICS OF MULTILAYER REACTIVE MATERIAL BUMPER SHIELD AGAINST LARGE SIZE PROJECTILES
Zizheng Gong, Beijing Institute of Spacecraft Environment Engineering, China Academy of Space Technology (CAST), China

A6.4. Mitigation - Tools, Techniques and Challenges - SEM

October 3 2023, 15:00 — BCC A6

Co-Chair(s): Pierre Omaly, CNES, France; Satomi Kawamoto, Japan Aerospace Exploration Agency (JAXA), Japan;
Rapporteur(s): Holger Krag, European Space Agency (ESA), Germany;

IAC-23.A6.4.1
ADVANCES IN SPACEBORNE LED PAYLOADS ATTITUDE DETERMINATION AND AUTONOMOUS UNITS DESIGN FOR SPACE TRAFFIC MANAGEMENT
Paolo Marzioli, Sapienza University of Rome, Italy

IAC-23.A6.4.2
EVOLUTION OF SPACE DEBRIS MITIGATION PRACTICES IN ESA'S DEBRIS MITIGATION FACILITY
Vitali Braun, IMS Space Consultancy, Germany

IAC-23.A6.4.3
ESTABLISHMENT OF DEBRIS INDEX EVALUATION CRITERIA AND COMPARISON OF INDEX EFFECTS
Ryusuke Harada, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.A6.4.4
STATISTICAL LEARNING OF CONJUNCTION DATA MESSAGES THROUGH A BAYESIAN NON-HOMOGENEOUS POISSON PROCESS
Marta Guimaraes, Neuraspace, Portugal

IAC-23.A6.4.5
IMPACT OF THE BALLISTIC COEFFICIENT ESTIMATION ON ORBITAL LIFETIME PREDICTIONS OF ROCKET BODIES
Lucía Ayala Fernández, Technische Universität Braunschweig, Germany

IAC-23.A6.4.6
POSSIBLE DISPOSAL STRATEGIES FOR THE O3B AND SKIF SATELLITE SYSTEMS
Sergey Ivanov, Bauman Moscow State Technical University, Russian Federation

IAC-23.A6.4.7
ON THE NEED TO ASSESS AND MITIGATE THE RISK FROM UNCONTROLLED RE-ENTRIES OF ARTIFICIAL SPACE OBJECTS IN VIEW OF THE CURRENT AND FUTURE DEVELOPMENTS IN SPACE ACTIVITIES
Carmen Pardini, ISTI-CNR, Italy

IAC-23.A6.4.8
DISPOSAL AND FLIGHT SAFETY IN CISLUNAR SPACE: SHORTFALLS IN CURRENT GUIDELINES AND A WAY FORWARD
Joseph Gangestad, The Aerospace Corporation, United States

IAC-23.A6.4.9
ENABLING ATTITUDE-BASED APPLICATIONS IN THE DEBRIS MITIGATION FACILITY (DMF)
Simone Centuori, Deimos Space SLU, Spain

IAC-23.A6.4.10
ENABLING SPACECRAFT REUSABILITY: AN OVERVIEW OF REQUIREMENTS FOR REUSABILITY AS OBSERVED IN OTHER INDUSTRIES.
Bernd M. Weiss, Luleå University of Technology, Sweden

A6.5. Post Mission Disposal and Space Debris Removal 1 - SEM

October 5 2023, 10:15 — BCC A6

Co-Chair(s): Balbir Singh, Manipal Institute of Technology, Manipal Academy of Higher Education, India; Roberto Opromolla, University of Naples "Federico II", Italy;
Rapporteur(s): Laurent Francillout, CNES, France;

IAC-23.A6.5.2
COSMIC (UK ADR) - TOWARDS THE REMOVAL OF 2 UK-OWNED DEFUNCT SATELLITES
Jason Forshaw, Astroscale Ltd, United Kingdom

IAC-23.A6.5.3
LOW-COST MISSION TO DE-ORBIT A SPENT STAGE OF A ROCKET USING 250-KG SPACECRAFT PLATFORM
Pranav Keskar, Bellatrix Aerospace Private Limited, India

IAC-23.A6.5.4
MISSION PLAN OF STARS-X MICRO SATELLITE FOR DEMONSTRATION OF SPACE TETHER TECHNOLOGY FOR DEBRIS CAPTURE
Masahiro Nohmi, Shizuoka University, Japan

IAC-23.A6.5.5
A NOVEL ADAPTIVE CAPTURE DEVICE AND CONTROL METHOD FOR SPACE DEBRIS
Jiale Chen, Northwestern Polytechnical University;National Key Laboratory of Aerospace Flight Dynamics, China

IAC-23.A6.5.6
A NON-SINGULAR FIXED-TIME COMPLIANCE CONTROL OF SPACE ROBOT WITH SDBD CAPTURING DEBRIS OPERATION
An Zhu, Fuzhou University, China

IAC-23.A6.5.7
ANALYSIS OF THE SOLUTIONS PROPOSED FOR THE MULTI-TARGET ADR MISSION OPTIMIZATION PROBLEM
Dmitriy Grishko, Bauman Moscow State Technical University, Russian Federation

IAC-23.A6.5.8
LIDAR-BASED NAVIGATION STRATEGIES FOR A NON-COOPERATIVE TARGET CONSIDERING RENDEZVOUS TRAJECTORY
Taisei Nishishita, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.A6.5.9
3D RECONSTRUCTION OF A SPACE DEBRIS FROM IN SITU INSPECTION EXPLOITING CUBESATS
Luca Lion, CISAS – "G. Colombo" Center of Studies and Activities for Space, University of Padova, Italy

IAC-23.A6.5.10
E. INSPECTOR: MULTI-SPECTRAL IMAGING THE VESPA DEBRIS IN PREPARATION TO ACTIVE REMOVAL
Michèle Lavagna, Politecnico di Milano, Italy

A6.6. Post Mission Disposal and Space Debris Removal 2 - SEM

October 5 2023, 15:00 — BCC A6

Co-Chair(s): Marko Jankovic, Airbus Defence and Space, Germany; Dmitriy Grishko, Bauman Moscow State Technical University, Russian Federation;
Rapporteur(s): Jason Forshaw, Astroscale Ltd, United Kingdom;

IAC-23.A6.6.1
BEYOND ELSA-D – DEVELOPING COMMERCIAL VIABILITY OF MULTI-CLIENT SERVICING WITH ELSA-M
Alex Godfrey, Astroscale Ltd, United Kingdom

IAC-23.A6.6.3
MULTISPECTRAL VISION-BASED RELATIVE NAVIGATION TO ENHANCE SPACE DEBRIS PROXIMITY OPERATIONS
Massimiliano Bussolino, Politecnico di Milano, Italy

IAC-23.A6.6.4
VISUAL-BASED POSE DETERMINATION OF UNCONTROLLED SPACE TARGETS USING RETROREFLECTIVE MARKERS FOR DEBRIS REMOVAL OPERATIONS
Giuseppe Napolano, University of Naples "Federico II", Italy

IAC-23.A6.6.5
RESEARCH ON SHAPE-MAINTENANCE CONTROL SYSTEM OF INFLATABLE DRAG BALLOON
Ruonan Zhang, Beijing Institute of Technology, China

IAC-23.A6.6.6
MISSION LIFETIME OPTIMISATION WITH SELF OR ASSISTED DISPOSAL.
Andrew Monham, EUMETSAT, Germany

IAC-23.A6.6.9
ANALYSIS OF SPACE DEBRIS MITIGATION AND REMOVAL TECHNIQUES FOR SMALL SATELLITES IN LOW EARTH ORBIT IN PURVIEW OF THE GUIDELINES ISSUED BY THE FCC
Eugene Rotherham, Space Generation Advisory Council (SGAC), United Kingdom

IAC-23.A6.6.10
SYSTEMS LEVEL PARAMETERIZED INVESTIGATIONS FOR ACTIVE DEBRIS REMOVAL USING A HIGHLY UNDER ACTUATED ADHESIVE BASED TENTACLED GRIPPER
David Barnhart, Arkisys Inc., United States

A6.7. Operations in Space Debris Environment, Situational Awareness - SSA

October 2 2023, 15:15 — BCC A6

Co-Chair(s): Vincent Martinot, Thales Alenia Space France, France; T.S. Kelso, CelesTrak, United States;
Rapporteur(s): Noelia Sanchez Ortiz, Arribes Enlightenment, Spain;

IAC-23.A6.7.1
SENSITIVITY AND COMPARISON OF ORBITAL STATE-BASED MANEUVER DETECTION APPROACHES
Lorenzo Perugino, University of Naples "Federico II", Italy

IAC-23.A6.7.2
FEASIBILITY ASSESSMENT OF AN AUTONOMOUS COLLISION AVOIDANCE SYSTEM FOR SATELLITES
Giulio Campiti, Politecnico di Bari, Italy

IAC-23.A6.7.3
ENABLING EFFICIENT SATELLITE MISSION DESIGN WITH RULE-BASED COLLISION AVOIDANCE
Simon Burgis, TU Darmstadt, Germany

IAC-23.A6.7.4
AUTONOMOUS ORBIT CONTROL FOR ON-BOARD COLLISION MANAGEMENT: ASTERIA
Jerome Thomassin, Centre National d'Etudes Spatiales (CNES), France

IAC-23.A6.7.5
PREDICTING THE POSITION UNCERTAINTY AT THE TIME OF CLOSEST APPROACH WITH DIFFUSION MODELS
Marta Guimaraes, Neuraspace, Portugal

IAC-23.A6.7.6
SPACECRAFT AUTONOMOUS DECISION-PLANNING FOR COLLISION AVOIDANCE: A REINFORCEMENT LEARNING-BASED APPROACH
Adam Abdin, CentraleSupélec, France

IAC-23.A6.7.7
ANALYSIS OF REQUIRED THRUST LEVEL AND WARNING TIME TO PERFORM COLLISION AVOIDANCE MANOEUVRES FOR LOW-THRUST SATELLITES
Frank de Veld, INRIA, France

IAC-23.A6.7.8
ADVANCED NUMERICAL OPTIMISATION ENVIRONMENT FOR OPERATIONAL COLLISION AVOIDANCE
Jack McHugh, GMV Aerospace & Defence SAU, United Kingdom

IAC-23.A6.7.9
COLLISION AVOIDANCE MANEUVERS OPTIMIZATION USING EVOLUTIONARY ALGORITHMS
Guilherme Neves, INPE - National Institute for Space Research, Brazil

IAC-23.A6.7.10
TOWARDS REINFORCEMENT LEARNING-BASED COLLISION AVOIDANCE IN LOW-EARTH ORBIT: AN INITIAL STUDY
Salman Ali Thepdawala, Universität der Bundeswehr München, Germany

A6.8-E9.1. Policy, Legal, Institutional, Economic and Security Aspects of Debris Mitigation, Debris Remediation and STM

October 6 2023, 10:15 — BCC A6

Co-Chair(s): David Spencer, The Aerospace Corporation, United States; Andrea Capurso, LUISS Guido Carli University, Italy;
Rapporteur(s): Maruska Strah, Space Sustainability Rating, Switzerland;

IAC-23.A6.8-E9.1.1
ESA'S ZERO DEBRIS APPROACH: A RESPONSIBLE PATH TO MITIGATE SPACE DEBRIS IN VALUABLE ORBITS
Tiago Soares, European Space Agency (ESA), The Netherlands

IAC-23.A6.8-E9.1.2
ORBITAL DEBRIS MITIGATION IMPLEMENTATION BETWEEN THE U.S. AND INTERNATIONAL COMMUNITY
Aline McNaull, United States

IAC-23.A6.8-E9.1.3
SPACE ENVIRONMENTAL GOVERNANCE: A COMPREHENSIVE FRAMEWORK FOR ENSURING SECURITY, STABILITY AND SUSTAINABILITY OF SPACE ACTIVITIES
Hui Du, Institute of Spacecraft System Engineering,China Academy of Space Technology (CAST), China

IAC-23.A6.8-E9.1.4
FOSTERING MULTI-STAKEHOLDER COLLABORATION FOR SPACE SUSTAINABILITY THROUGH AN INCENTIVE-BASED MECHANISM
Emmanuelle David, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland

IAC-23.A6.8-E9.1.5
INTERNATIONAL APPROACH TO SPACE SITUATIONAL AWARENESS AND COLLISION AVOIDANCE
Diego Guerra, Blue Origin LLC, United States

IAC-23.A6.8-E9.1.10
TOWARDS A BOTTOM-UP APPROACH TO SPACE DEBRIS REMOVAL: ON THE ECONOMIC CONVENIENCE BEHIND DEBRIS MITIGATION STRATEGIES
Clelia Iacomino, SEE Lab - SDA Bocconi School of Management, Italy

A6.9. Orbit Determination and Propagation - SST

October 3 2023, 10:15 — BCC A6

Co-Chair(s): Jan Siminski, ESA - European Space Agency, Germany; Juan Carlos Dolado Perez, Centre National d'Etudes Spatiales (CNES), France;
Rapporteur(s): Paolo Marzioli, Sapienza University of Rome, Italy;

IAC-23.A6.9.2
IMPROVING ORBIT PREDICTION IN LEO WITH MACHINE LEARNING USING EXOGENOUS VARIABLES
Francisco Caldas, Faculdade de Ciências e Tecnologia - UNL, Portugal

IAC-23.A6.9.3
ENHANCEMENT OF ORBIT PREDICTION ACCURACY USING TRANSFORMER
Sajjad Kazemi, University of Waterloo, Canada

IAC-23.A6.9.4
GEO OPTICAL MEASUREMENT CORRELATION AND ANGLES-ONLY ORBIT DETERMINATION
Simone Varanese, Sapienza University of Rome, Italy

IAC-23.A6.9.5
RADIATIVE ACCELERATION ACTING ON NON-SPHERICAL OBJECTS IN NEAR- EARTH SPACE
Aleksandr Kuznetsov, Moscow Institute of Physics and Technology (MIPT), Russian Federation

IAC-23.A6.9.6
ON A HIGH-PERFORMANCE INTEGRATOR OF THE EQUATIONS OF ORBITAL MOTION OF BODIES IN NEAR-EARTH SPACE
Ilya Fukin, Moscow Institute of Physics and Technology (MIPT), Russian Federation

IAC-23.A6.9.7
DEBRIS MITIGATION AND ATMOSPHERIC DEORBITING ANALYSIS FOR LUNAR L2 NRHO DEPARTING SPACECRAFT
Carmela Marika Accettura, Politecnico di Torino, Italy

IAC-23.A6.9.8
EVALUATING THE ACCURACY AND ROBUSTNESS OF INITIAL ORBIT DETERMINATION METHODS FOR SSA IN LOW EARTH ORBIT USING REAL OBSERVATION DATA
Süleyman Altınışık, Türkiye

IAC-23.A6.9.9
VARIABLE CALCULATION DOMAIN AERODYNAMIC NUMERICAL METHOD FOR SPACECRAFT DEBRIS REENTRY DISINTEGRATION
Jingjiang Chu, China Academy of Aerospace Aerodynamics (CAAA), China

IAC-23.A6.9.10
SPACECRAFT CONJUNCTION ASSESSMENT OPTIMIZATION USING DEEP LEARNING ALGORITHMS APPLIED TO CONJUNCTION DATA MESSAGES (CDMS)
Jose Javier Rosales Ruiz, Cranfield University, Cranfiel UK, United Kingdom

A7. IAF SYMPOSIUM ON ONGOING AND NEAR FUTURE SPACE ASTRONOMY AND SOLAR-SYSTEM SCIENCE MISSIONS

Coordinator(s): Andrew Court, TNO, The Netherlands; Alessandra Di Cecco, Agenzia Spaziale Italiana (ASI), Italy;

A7.1. Space Astronomy missions, strategies and plans

October 5 2023, 10:15 — BCC Auditorium Balcony

Co-Chair(s): Eric Wille, ESA, The Netherlands; Alessandra Di Cecco, Agenzia Spaziale Italiana (ASI), Italy;
Rapporteur(s): Andrew Court, TNO, The Netherlands;

IAC-23.A7.1.1
THE ITALIAN PARTICIPATION TO THE CSES-1 AND CSES-2 MISSIONS: RECENT RESULTS AND FUTURE PERSPECTIVES
Pietro Ubertini, INAF, Italy

IAC-23.A7.1.2
GLADYSCALE: A STRATEGIC TOOL FOR ASSESSING SATELLITE IMPACT ON GROUND-BASED ASTROPHYSICS AND PLANNING FUTURE ASTROPHYSICS MISSIONS
Emma Louden, Yale University, United States

IAC-23.A7.1.4
ASTRONOMY FROM THE MOON: PERSPECTIVES AND PREPARATION
Bernard Foing, ILEWG "EuroMoonMars", The Netherlands

IAC-23.A7.1.5
BEYOND EARTH: INVESTIGATING THE MOONS OF JUPITER AND SATURN FOR SIGNS OF LIFE
Garima Saroj, Ajay Kumar Garg Engineering College, India

IAC-23.A7.1.6
PROPOSAL TO LAUNCH A CONSTELLATION OF HELIOCENTRIC INFRA-RED TELESCOPE SATELLITES (CHIRTS)
Matthew Ziglar, Boeing Defense Space & Security, United States

IAC-23.A7.1.7
A LIFE EXTENSION MISSION FOR THE JAMES WEBB SPACE TELESCOPE
Diego Saikin, Astroscale Ltd, Israel

IAC-23.A7.1.8
PROJECT FOR CONSTRUCTION OF COSMIC RELIC NEUTRINO TELESCOPE
Vali Huseynov, Institute of Physics of the Ministry of Science and Education of the Republic of Azerbaijan, Azerbaijan

A7.2. Science Goals and Drivers for Future Exoplanet, Space Astronomy and Space Physics

October 6 2023, 10:15 — BCC Auditorium Balcony

Co-Chair(s): Pietro Ubertini, INAF, Italy; Maria Cristina Falvella, Italian Space Agency (ASI), Italy;

IAC-23.A7.2.1
THE ROLE OF SPACE-BASED TELESCOPES IN UNRAVELING THE EXISTENCE OF DARK MATTER: (FROM HUBBLE TO NANCY GRACE ROMAN TELESCOPE)
Noora Alameri, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

IAC-23.A7.2.2
SUPERMASSIVE BLACK HOLE BINARIES AS TARGETS FOR PROSPECTIVE SPACEBORNE VLBI AND GRAVITATIONAL WAVE OBSERVATORIES
Leonid Gurvits, The Netherlands

IAC-23.A7.2.3
RECENT SURVEY ON BLACK HOLE-NEUTRON STAR MERGERS
Maryam Alqasimi, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

IAC-23.A7.2.4
COSMIC GOLD RUSH: AN INTERNATIONAL COLLABORATIVE AND ASTRONOMICAL EFFORT WITH GRANDMA
Nariman Ismayilov, Shamakhy Astrophysical Observatory, Azerbaijan

IAC-23.A7.2.5
A 1.4 GHZ SURVEY OF 46 GIANT RADIO SOURCES
Mohammad Musharraf, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

IAC-23.A7.2.6
A MISSION CONCEPT FOR UNVEILING EVIDENCE OF LIFE ON TRAPPIST-1E
HUDA MOHAMMAD, Jain University, India

IAC-23.A7.2.7
FIRST LIGHT OF SHARJAH-SAT-1: POTENTIAL TARGETS AND EARLY SCIENCE
Antonios Manousakis, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

IAC-23.A7.2.8 (unconfirmed)
CIRCUMSTELLAR ACTIVITY IN AE/BE HERBIG STARS: HD 31648 AND HD 53367
Bayram Rustamov, Baku State University, Azerbaijan

IAC-23.A7.2.9
SPECTRAL CLASSIFICATION OF SELECTED STELLAR X-RAY SOURCES IN THE SMALL MAGELLANIC CLOUD (SMC)
Fatima Alkhateri, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

A7.3. Technology Needs for Future Missions, Systems, and Instruments

October 6 2023, 13:45 — BCC Auditorium Balcony

Co-Chair(s): Eric Wille, ESA, The Netherlands; Andrew Court, TNO, The Netherlands;
Rapporteur(s): Maria Cristina Falvella, Italian Space Agency (ASI), Italy;

IAC-23.A7.3.1
ADVANCING CRYOGENIC SYSTEMS FOR THE NEXT GENERATION OF ASTROPHYSICS DISCOVERIES
Hannah Rana, Harvard University, United States

IAC-23.A7.3.3
BLACK HOLE TARGET OBSERVATION MANAGER - A NEW TOOL FOR AUTOMATIC TIME-DOMAIN ASTRONOMY
Nariman Ismayilov, Shamakhy Astrophysical Observatory, Azerbaijan

IAC-23.A7.3.4
MAGNETO-TELLURIC LOW-FREQUENCY SOUNDING OF THE LUNAR SUBSURFACE STRUCTURE (≤1-10 MHZ) - METHODOLOGICAL AND EXPERIMENTAL POSSIBILITIES FOR DETERMINING THE THRESHOLD (NOISE) CHARACTERISTICS FOR LONG-WAVE RADIO ASTRONOMY ON THE LUNAR SURFACE
Yuri Ozorovich, Space Research Institute (IKI), RAS, Russian Federation

IAC-23.A7.3.5
REQUIRED TECHNOLOGIES FOR A MISSION OF A GAMMA RAY OBSERVATION BY FORMATION FLYING SPACECRAFT IN SEL2 HALO ORBIT: FF-LAGRAN
Tomoki Mochizuki, University of Tokyo, Japan

IAC-23.A7.3.6
QUALIFICATION OF 3D PRINTED POLYMERIC STRUCTURE IN HEPD-02 INSTRUMENT
Marianna Rinaldi, ASI - Italian Space Agency, Italy

IAC-23.A7.3.7
A FEASIBILITY ASSESSMENT FOR A LOW-COST FLIGHT AND SPACE SIMULATOR
Sara Trawneh, Jordan University of Science & Technology, Jordan

IAC-23.A7.3.8
DESIGN AND DEVELOPMENT OF A METAMORPHIC SPACE TELESCOPE BASED ON A 6U CUBESAT FOR ASTRONOMICAL OBSERVATIONS
Deep Anand, Vellore Institute of Technology, India

IAC-23.A7.3.9 (unconfirmed)
CCD PHOTOMETR WITH 5 BAND FOR 235-MM TELESCOPE OF BAKU STATE UNIVERSITY
Gojalar Rashad, Baku State University, Azerbaijan

B1. IAF EARTH OBSERVATION SYMPOSIUM

Coordinator(s): Harry A. Cikanek, National Oceanic and Atmospheric Administration (NOAA), United States; Luís Ferreira, Airbus Defence and Space, Germany

B1.1. International Cooperation in Earth Observations

October 2 2023, 15:15 — BCC B1

Co-Chair(s): Mukund Kadursrinivas Rao, , India; José Gavira Izquierdo, European Space Agency (ESA), The Netherlands;
Rapporteur(s): Charles Wooldridge, National Oceanic and Atmospheric Administration (NOAA), United States;

IAC-23.B1.1.1
KEYNOTE: COMMITTEE ON EARTH OBSERVATION SATELLITES (CEOS): 2023 REPORT OF ACTIVITIES TO THE 74TH INTERNATIONAL ASTRONAUTICAL CONGRESS
Tanita Suepa, Geo-Informatics & Space Technology Development Agency (GISTDA), Thailand

IAC-23.B1.1.2
THE COPERNICUS SPACE COMPONENT COORDINATION MODEL, BETWEEN ADAPTABILITY AND RIGOR
Giancarlo Filippazzo, European Space Agency (ESA), Italy

IAC-23.B1.1.3
NASA'S EARTH SYSTEM OBSERVATORY FORMULATION PROGRESS
Karen St. Germain, National Aeronautics and Space Administration (NASA), United States

IAC-23.B1.1.4
GLOBAL EFFORT ON TURKEY KAHRAMANMARAS EARTHQUAKE AND EVALUATION OF SATELLITE IMAGING
Samir SFARNI, Technology Innovation Institute (TII), United Arab Emirates

IAC-23.B1.1.5
MICROSATELLITE CONSTELLATION-BASED HIGH-RESOLUTION EARTH OBSERVATION APPLICATION SYSTEM IN KOREA
Hyun-Ok Kim, Korea Aerospace Research Institute (KARI), Korea, Republic of

IAC-23.B1.1.6
THE ESA GLOBAL DEVELOPMENT ASSISTANCE INITIATIVE ON MARINE ENVIRONMENT & BLUE ECONOMY
Angelo Amodio, Planetek Italia, Italy

IAC-23.B1.1.7
DEVELOPMENT OF ONGOING COLLABORATIVE OPPORTUNITIES SURROUNDING EARTH OBSERVATION DATA IN AFRICA AND THE MIDDLE EAST
Kaitlyn Holm, University of Pennsylvania, United States

IAC-23.B1.1.8
OCEANS, RESOURCES, AND CLIMATE APPLICATIONS FROM SPACE: INTERNATIONAL GOVERNANCE AND DATA SHARING MODEL FOR EARTH OBSERVATION CONSTELLATION
Natalia Gorina, International Space University (ISU), The Netherlands

B1.2. Earth Observation Systems

October 3 2023, 15:00 — BCC B1

Co-Chair(s): Annamaria Nassisi, Thales Alenia Space Italia, Italy; Timo Stuffler, OHB System AG, Germany;
Rapporteur(s): Gunter Schreier, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;

IAC-23.B1.2.1
METEOSAT THIRD GENERATION (MTG) SPACE SEGMENT DEVELOPMENT PROGRESS INCLUDING MTG-I1 LAUNCH AND PERFORMANCE
Donny M.A. Aminou, ESA, The Netherlands

IAC-23.B1.2.2
MISSION STATUS AND PERFORMANCE OF THE SURFACE WATER AND OCEAN TOPOGRAPHY PROJECT FOR OCEANOGRAPHY AND HYDROLOGY
Parag Vaze, National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States

IAC-23.B1.2.3
RADARSAT CONSTELLATION MISSION OVERVIEW AND STATUS
Guennadi Kroupnik, Canadian Space Agency, Canada

IAC-23.B1.2.4
CURRENT STATUS, APPLICATIONS AND BENEFITS OF THE JOINT POLAR SATELLITE SYSTEM
Satya Kalluri, NOAA/NESDIS, United States

IAC-23.B1.2.5
UNIFIED MULTI BAND & MULTISPECTRAL REMOTE SENSING FOR MICRO SATELLITES – ADVANTAGES AND TECHNICAL CHALLENGES
Uri Greisman Ran, Elbit Systems Aerospace Division, Israel

IAC-23.B1.2.6
HIGH-PRECISION CONTROL EXPERIMENTS WITH OPTICAL SYSTEM FOR SYNTHETIC APERTURE TELESCOPE USING FORMATION FLYING MICRO-SATELLITES FOR GEO REMOTE SENSING
Ryo Suzumoto, ArkEdge Space Inc., Japan

IAC-23.B1.2.7
THE SPACE PLASMA NANOSATELLITE EXPERIMENT (SPNEX) CUBESAT.
Hassan Nooreldeen, Egyptian Space Agency (EgSA), Egypt

IAC-23.B1.2.8
A NOVEL RADAR REMOTE SENSING ORBITING SYSTEM USING TETHERED SATELLITES
Stefano Aliberti, Politecnico di Torino, Italy

IAC-23.B1.2.10
USING GIS PROCESSING SOFTWARE'S FOR DETECTION CHANGES IN LARGE AREAS
Ilgar Musayev, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

B1.3. Earth Observation Sensors and Technology

October 4 2023, 10:15 — BCC B1

Co-Chair(s): Andrew Court, TNO, The Netherlands; Kate Becker, National Oceanic and Atmospheric Administration (NOAA), United States;

IAC-23.B1.3.1
MULTI-TERRAIN DRONES FOR END-TO-END OCEAN MONITORING AND PROTECTION
Md. Mahbub Ul Haque, BRAC University, Bangladesh

IAC-23.B1.3.2
CUBESAT-BASED HYPERSPECTRAL MISSION FOR MINING RESOURCE EXPLORATION: A PRELIMINARY STUDY
Imène TALEB, Agence Spatiale Algérienne (ASAL), Algeria

IAC-23.B1.3.3
FROM PRISMA LEONARDO DERIVES A COMPACT HYPERSPECTRAL PAYLOAD "BEST-IN-CLASS" FOR ENVIRONMENTAL AND COMMERCIAL APPLICATIONS
Alessandro Fumagalli, Leonardo Spa, Italy

IAC-23.B1.3.5
THE ATMO DEVICE: ALL-IN-ONE SOLUTION FOR EARTH MONITORING AND OBSERVATION
Federico Toson, CISAS "G. Colombo" - University of Padova, Italy

IAC-23.B1.3.6
THE ESA METEOSAT THIRD GENERATION LIGHTNING IMAGER PROVIDES KEY DATA FOR WEATHER NOWCASTING AND SAFETY OF AIR TRAFFIC
Enrico Suetta, Leonardo S.p.A., Italy

IAC-23.B1.3.7
MULTISPECTRAL INFRARED LARGE BAND SPACE CAMERA CORE FOR EARTH OBSERVATION
Sylvain Gatti, INO, Canada

IAC-23.B1.3.8
TASK-BASED IMAGING – A NOVEL PARADIGM CHALLENGING THE TRADITIONAL PUSH BROOM CONCEPT
Uri Greisman Ran, Elbit Systems Aerospace Division, Israel

IAC-23.B1.3.9
CALIBRATION OF ON-ORBIT MAGNETOMETER DATA OBSERVED BY 6U CUBESAT KITSUNE USING GENETIC ALGORITHM
Withanage Dulani Chamika, Kyushu Institute of Technology, Japan

IAC-23.B1.3.10
FLAT-SAT HIGH RESOLUTION TELESCOPE CONCEPT
Pawel Knapkiewicz, Wroclaw University of Science and Technology, Poland

B1.4. Earth Observation Data Systems and Technology

October 4 2023, 15:00 — BCC B1

Co-Chair(s): Gunter Schreier, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; James Graf, Jet Propulsion Laboratory, United States;
Rapporteur(s): Ana-Mia Louw, Simera Sense, South Africa;

IAC-23.B1.4.1
ACCESS AND PROCESSING OF SATELLITE DATA WITHIN THE COPERNICUS DATA SPACE ECOSYSTEM
Marcin Niemyjski, CloudFerro, Poland

IAC-23.B1.4.2
A WEB HUB FOR COLLABORATIVE RESEARCH THROUGH ONLINE ANALYSIS AND VISUALIZATION OF EARTH OBSERVATION SATELLITES DATA
WEI WAN, China Aerospace Science and Technology Corporation (CASC), China

IAC-23.B1.4.3
POLYTOPE: FEATURE EXTRACTION FOR IMPROVED ACCESS TO PETABYTE-SCALE EARTH OBSERVATION DATACUBES
Mathilde Leuridan, Germany

IAC-23.B1.4.5
AI SUPER RESOLUTION IMAGES FROM IAI OPTICAL EO SATELLITES
Andrei Kolin, Israel Aerospace Industries Ltd., Israel

IAC-23.B1.4.6
SYNTHESIZING PHOTOREALISTIC SATELLITE IMAGERY WITH SEMANTIC LAYOUT CONDITIONING USING DENOISING DIFFUSION PROBABILISTIC MODELS
Orkhan Baghirli, Syn10, Estonia

IAC-23.B1.4.7
DENOISING AND SUPER-RESOLUTION OF MULTI-SOURCE REMOTE SENSING IMAGES USING DEEP LEARNING TECHNIQUES
Kaige Wang, China Aerospace Science and Technology Corporation (CASC), China

IAC-23.B1.4.8
INVESTIGATING THE USE OF CHATGPT IN SATELLITE IMAGE ANALYSIS FOR AERONAUTICAL ENGINEERING APPLICATIONS
Dahyun Lee, Korea Aerospace Research Institute (KARI), Korea, Republic of

B1.5. Earth Observation Societal and Economic Applications, Challenges and Benefits

October 5 2023, 10:15 — BCC B1

Co-Chair(s): Masami Onoda, Japan Aerospace Exploration Agency (JAXA), United States; Na Yao, Qian Xuesen Laboratory of Space Technology, China Academy of Space Technology (CAST), China;
Rapporteur(s): Michael Kern, ESA, France;

IAC-23.B1.5.1
PUBLIC HEALTH STUDY BASED ON SATELLITE IMAGES: CASE - MALARIA IN PERU 2015
Avid Roman-Gonzalez, Business on Engineering and Technology S.A.C. (BE Tech), Peru

IAC-23.B1.5.2
ASSESSING AND PREDICTING RENEWABLE ENERGY POTENTIAL IN AZERBAIJAN USING HIGH-RESOLUTION AEROSPACE DATA
Fuad Mammadov, Azerbaijan National Aerospace Agency, Azerbaijan

IAC-23.B1.5.3
A FRAMEWORK FOR MAPPING EARTH OBSERVATION CAPABILITIES TO THE OHCHR INDICATORS
Seonaid Rapach, University of Strathclyde / Mechanical and Aerospace Engineering, United Kingdom

IAC-23.B1.5.4
GIS-BASED SUITABILITY ANALYSIS TO IDENTIFY RENEWABLE ENERGY POTENTIAL. CASE STUDY - LIBERATED AREAS OF AZERBAIJAN.
Saleh Nabiyev, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.B1.5.5
DATA ENABLED GOVERNANCE AND FARMER ADVISORY - EO IS A CRITICAL COMPONENT – APPLICATIONS FROM INDIA
Mukund Kadursrinivas Rao, India

IAC-23.B1.5.6
INTEGRATING METAVERSE TECHNOLOGIES WITH SATELLITE EARTH OBSERVATION: A CONCEPTUAL FRAMEWORK
Camilo Andres Reyes Mantilla, Space Generation Advisory Council (SGAC), Qatar

IAC-23.B1.5.7
FOOD SECURED: SATELLITE IMAGING MODELS TO IMPROVE SMALLHOLDER FARM EFFICIENCIES
Owen Marr, SEDS, United States

IAC-23.B1.5.8
ACCURATE CROP YIELD PREDICTION THROUGH REMOTE SENSING AND MACHINE LEARNING TECHNIQUES
Rahat Tufail, Alma Mater Studiorum - University of Bologna, Italy

IAC-23.B1.5.9
USE OF SATELLITE IMAGE FOR CROP CLASSIFICATION IN ANGOLA
Luciano Costa Dembue Lupedia, Angolan National Space Program Management Office (GGPEN), Angola

IAC-23.B1.5.10
SYSTEMS ARCHITECTURE AS A TOOL FOR DEVELOPING DECISION SUPPORT SYSTEMS: ANGOLAN DROUGHT
Katlyn Turner, Massachusetts Institute of Technology (MIT), United States

IAC-23.B1.5.11
MONITORING LAND SUBSIDENCE FROM SENTINEL-1A DATA USING PERSISTENT SCATTERER INTERFEROMETRY (PSI) – A CASE STUDY OF QUETTA VALLEY, PAKISTAN
Salman Ahmed, Pakistan Space and Upper Atmosphere Research Commission (SUPARCO), Pakistan

IAC-23.B1.5.12
NATURE FIRST: FORENSIC INTELLIGENCE AND REMOTE SENSING TECHNOLOGIES FOR NATURE CONSERVATION
Tessa Buckley, Stichting dotSPACE, The Netherlands

IAC-23.B1.5.13
PROPOSAL OF AN INTEGRATED REMOTE SENSING SYSTEM FOR DETECTION OF DRUG TRAFFICKING ORGANIZATIONS OPERATIONS IN LATIN AMERICA
Angelo Espinoza Valles, Samara National Research University (Samara University), Russian Federation

B1.6. Assessing and Mitigating the Global Freshwater Crisis

October 5 2023, 15:00 — BCC B1

Co-Chair(s): Parag Vaze, National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States; Elizabeth Seward, , United Kingdom;
Rapporteur(s): Chen Xiaoli, Beijing Institute of Space Mechanics & Electricity, China Academy of Space Technology (CAST), China;

IAC-23.B1.6.2
WATER SECURITY IN THE FACE OF CLIMATE CHANGE: THE ROLE OF SPACE ASSETS
Uma Cladellas Sanjuan, International Space University (ISU), Spain

IAC-23.B1.6.3
CASE STUDY ON HOW TO USE HR SATELLITE IMAGERY TO MONITOR FRESHWATER
Sapar Satayev, China HEAD Aerospace Technology Co., France

IAC-23.B1.6.4
GLOBAL MEASUREMENTS OF FRESH WATER FROM THE SWOT MISSION
Shailen Desai, Jet Propulsion Laboratory - California Institute of Technology, United States

IAC-23.B1.6.5
EXPLORATION AND MAPPING OF WATER RESOURCES BY AEROSPACE METHODS. THE DEVELOPMENT OF SCIENCE AND TECHNOLOGY, THE INCREASE AND DAY-BY-DAY INTENSIFICATION OF FORMS OF HUMAN INTERFERENCE WITH NATURE MAKE THE RESEARCH AND ANALYSIS OF ENVIRO
Kamina Agayeva, National Aerospace Agency (NASA) of Azerbaijan Republic, Azerbaijan

IAC-23.B1.6.6
SPACE DATA APPLICATIONS IN PREDICTING, MONITORING AND MITIGATING CLIMATE CHANGE IN AFRICA
Babagana BABAGANA, KANURI DEVELOPMENT ASSOCIATION, Nigeria

IAC-23.B1.6.7
SPACEBORNE L-BAND SAR REMOTE SENSING FOR POTABLE WATER LEAK DETECTION: A NOVEL SOLUTION FOR ADDRESSING THE GLOBAL WATER CRISIS
Yuval Lorig, ASTERRA, Israel

IAC-23.B1.6.8
DIMINISHING TERRESTRIAL AND SUB-TERRESTRIAL RESOURCES IN ZIMBABWE. A CASE STUDY OF ZIMBABWEAN FRESHWATER BODIES,PRESENT AND FUTURE.
Beverley Chelsea Saungweme, Russian Federation

IAC-23.B1.6.9
APPLICATION OF RADAR REMOTE SENSING DATA FOR MONITORING OIL POLLUTION IN THE CASPIAN SEA
Elman Alaskarov, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.B1.6.10
DETECTING AND MONITORING POLLUTION IN THE CASPIAN SEA BY USING REMOTE SENSING TECHNOLOGIES
Chinara Badirkhanova, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.B1.6.12
HIVE, A LAND SURFACE TEMPERATURE MONITORING MISSION, ADDRESSING THE SUSTAINABILITY OF WATER SUPPLY IN AGRICULTURE.
Mohammad Iranmanesh, constellr GmbH, Belgium

B1.7. Earth Observations to address Earth's Environment and Climate Challenges

October 6 2023, 10:15 — HAC Museum GA

Co-Chair(s): Ole Morten Olsen, Norwegian Space Agency (NOSA), Norway; Shimrit Maman, Ben-Gurion University of the Negev, Israel;
Rapporteur(s): Patrick Castillan, Centre National d'Etudes Spatiales (CNES), France;

IAC-23.B1.7.1
EVALUATION OF THE IMPACT OF ILLEGAL MINING ON VEGETATION IN THE VENEZUELAN AMAZON THROUGH MULTISPECTRAL IMAGERY
David Serrano, International Space University (ISU), France

IAC-23.B1.7.2
NOVEL APPROACH FOR CO2 AND CH4 MAPPING USING MICRO-LIDAR AND SMALL SATELLITE CONSTELLATION
Daria Stepanova, Germany

IAC-23.B1.7.3
UPPER TROPOSPHERE AND LOWER STRATOSPHERE CHARACTERIZATION FOR EXTREME SURFACE CLIMATE
Mikel Iturbe, Spain

IAC-23.B1.7.5 (unconfirmed)
A VIEW FROM ABOVE: HARNESSING EARTH OBSERVATION, HUMAN MOBILITY, AND ANIMAL ECOLOGY DATA TO MONITOR MARINE CHANGE IN THE ANTHROPOCENE
Alexandra Loveridge, United Kingdom

IAC-23.B1.7.6
ASSESSMENT OF FUEL EFFICIENCY IN AIR TRAFFIC MANAGEMENT
Bahruz Malikov, National Aviation Academy - Azerbaijan, Azerbaijan

IAC-23.B1.7.7
DETECTION OF HARMFUL ALGAL BLOOMS IN GULF OF MEXICO FROM SATELLOGIC HYPERSPECTRAL SATELLITE IMAGERY
Tatsuyuki Sekine, ELSPINA VEINZ INC., Japan

IAC-23.B1.7.8
CNN HYBRID ALGORITHM FOR SEGMENTING ASH DISPERSION AS A PAYLOAD OF THE "GXIBA-1" CUBESAT
Hector Simon Vargas Martinez, Universidad Popular Autónoma del Estado de Puebla, Mexico

IAC-23.B1.7.9
L-BAND SAR SOIL MOISTURE MAPPING FOR CLIMATE RESILIENCY
Yuval Lorig, ASTERRA, Israel

IAC-23.B1.7.10
NOVEL MACHINE LEARNING METHODOLOGIES FOR DAMAGE DETECTION OF FLOOD EVENTS USING SATELLITE IMAGERY.
Bakhtiyar Babashli, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

B2. IAF SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM

Coordinator(s): Rita Lollock, The Aerospace Corporation, United States; Morio Toyoshima, National Institute of Information and Communications Technology (NICT), Japan;

B2.1. Advances in Space-based Navigation Technologies

October 3 2023, 15:00 — BCC B2

Co-Chair(s): Peter Buist, European Union Agency for the Space Programme (EUSPA), The Netherlands; Joe M. Straus, The Aerospace Corporation, United States;
Rapporteur(s): Sanat K Biswas, IIIT Delhi, India;

IAC-23.B2.1.1
KEY BENEFITS OF EGNOS FOR AZERBAIJAN
Huseyn Babayev, National Aviation Academy - Azerbaijan, Azerbaijan

IAC-23.B2.1.2
DEEP LEARNING BASED APPROACH FOR VISION BASED SPACECRAFT NAVIGATION AND GUIDANCE FOR ASTEROID EXPLORATION MISSIONS
May Hammad, Deep Space Initiative, Canada

IAC-23.B2.1.3
AUTONOMOUS ONE-WAY TIME TRANSFER ON THE LUNAR SOUTH POLE SURFACE USING HIGH SENSITIVE GNSS RECEIVER
Carmine Di Lauro, Thales Alenia Space Italia, Italy

IAC-23.B2.1.4
EXPLORING ALTERNATIVE SPACE-BASED NAVIGATION SYSTEMS FOR UAVS OTHER THAN GNSS
Sarkhan Aghadadashov, National Aviation Academy - Azerbaijan, Azerbaijan

IAC-23.B2.1.6
MODEL-BASED VISUAL 3D POSE TRACKING OF NON-COOPERATIVE SPACECRAFT IN CLOSE RANGE
Chang Liu, Chinese Academy of Sciences, China

IAC-23.B2.1.7
TIME-TRANSFER AND CLOCK-SYNCHRONIZATION TECHNIQUE FOR MICROSATELLITES IN THE LUNAR REGION
Ludovica Bozzoli, Argotec, Italy

IAC-23.B2.1.8
ANGLES-ONLY RELATIVE NAVIGATION IN NEAR-GEOSTATIONARY ORBITS CONSIDERING PERIODIC CORRECTIONS OF LUNISOLAR PERTURBATIONS
JIAWEI WU, Beijing Institude of technology, China

IAC-23.B2.1.9
SPACE QUALIFIED VPU BENCHMARKING OF CRATER MATCHING ODTS SOLUTIONS BASED ON CONVOLUTIONAL NEURAL NETWORKS
Federica Biancucci, Thales Alenia Space, Italy

B2.2. Advances in Space-based Communication Systems and Services, Part 1

October 4 2023, 10:15 — BCC B2

Co-Chair(s): Robert D. Briskman, Sirius XM Radio, United States; Laszlo Bacsardi, Hungarian Astronautical Society (MANT), Hungary;
Rapporteur(s): Dunay Badirkhanov, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan;

IAC-23.B2.2.1
SATELLITE NETWORK DESIGN FOR EFFECTIVE INTEGRATION WITH FUTURE 6G TERRESTRIAL MOBILE COMMUNICATION SYSTEMS
Prasad Rathod, India

IAC-23.B2.2.2
TOWARD AUTONOMOUS COOPERATION IN HETEROGENEOUS NANOSATELLITE CONSTELLATIONS USING DYNAMIC GRAPH NEURAL NETWORKS
Joan Ruiz-de-Azua, i2CAT, Spain

IAC-23.B2.2.3
MAXIMIZING THE POTENTIAL OF SATELLITE NETWORKS IN COMBINATION WITH TERRESTRIAL NETWORKS FOR RELIABLE CONNECTIVITY
Gunkhan Ibrahimli, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.B2.2.4
NEXT GENERATION AUDIO BROADCAST SATELLITES
Robert D. Briskman, Sirius XM Radio, United States

IAC-23.B2.2.5
A STUDY ON ADOPTING NETWORK SLICING TO MULTILAYERED SATELLITE AND TERRESTRIAL INTERCONNECTED SYSTEMS
Mariko Sekiguchi, National Institute of Information and Communications Technology (NICT), Japan

IAC-23.B2.2.6
STRATEGIES TO MITIGATE WEATHER IMPACT ON LEO KA-BAND LINK AVAILABILITY FOR GSAAS OPERATORS
Nadia Lamera, Leaf Space s.r.l., Italy

IAC-23.B2.2.7
ENHANCING THROUGHPUT OF THE GEO SATELLITE AT C/KU BANDS
Ghulam JAFFER, University of Luxembourg, Luxembourg

IAC-23.B2.2.10
VIRTUAL SATELLITE NETWORK SIMULATOR (VSNES) - A SIMULATION ENGINE TO VIRTUALIZE NON-TERRESTRIAL NETWORKS
Joan Adrià Ruiz de Azúa Ortega, i2CAT, Spain

IAC-23.B2.2.11
LINK BUDGET CONSIDERATIONS AND NETWORK ARCHITECTURE FOR VARIOUS APPLICATIONS OF CARRIER-IN-CARRIER TECHNIQUE IN SATELLITE COMMUNICATIONS
Babak Aslanov, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

B2.3. Advances in Space-based Communication Systems and Services, Part 2

October 4 2023, 15:00 — BCC B2

Co-Chair(s): Otto Koudelka, Joanneum Research, Austria; Morio Toyoshima, National Institute of Information and Communications Technology (NICT), Japan;
Rapporteur(s): Steven Shumsky, Millennium Space Systems, A Boeing Company, United States;

IAC-23.B2.3.1 (unconfirmed)
KEYNOTE: OPTICAL AND QUANTUM COMMUNICATION – BRIDGING THE FINAL FRONTIERS TO SPACE. WHERE WE ARE AND WHERE WE MIGHT BE GOING
Christopher Vasko, European Space Agency (ESA), The Netherlands

IAC-23.B2.3.2
NANOCRYPTO - QUANTUM-BASED OPTICAL CRYPTOGRAPHIC KEY AND DATA DISTRIBUTION SYSTEM
Marek Krawczyk, EXATEL SA, Poland

IAC-23.B2.3.4
HIGH-SPEED SOURCE FOR SATELLITE QUANTUM KEY DISTRIBUTION
Federico Berra, University of Padova, Italy

IAC-23.B2.3.5
SECURE CUBESAT-TO-CUBESAT COMMUNICATION USING QUANTUM KEY DISTRIBUTION FOR INFORMATION UPDATES AND RISK ALERTS
Priyank Dubey, University of Luxembourg, Luxembourg

IAC-23.B2.3.6
IMPLEMENTATION OF A PROTOCOL STACK WITH DTN PROTOCOLS FOR IOT SERVICES DEPLOYED FROM NON-TERRESTRIAL NETWORKS
Joan Adrià Ruiz de Azúa Ortega, i2CAT, Spain

IAC-23.B2.3.7
DEVELOPMENT OF A MODULARIZED SIMULATOR OF A LOW EARTH ORBIT RADIO-OPTICAL HYBRID COMMUNICATION SATELLITE CONSTELLATION FOR SYSTEM-LEVEL DESIGN STUDIES
Shunichiro Nomura, University of Tokyo, Japan

IAC-23.B2.3.8
RESULTS FROM THE CLICK-A LASER COMMUNICATION EXPERIMENT
Paul Serra, Massachusetts Institute of Technology (MIT), United States

IAC-23.B2.3.10
PROSPECTIVE ONBOARD NETWORKS FOR NEW-GENERATION SPACECRAFT
Valentin Olenev, Saint Petersburg State University of Aerospace Instrumentation, Russian Federation

IAC-23.B2.3.12
DEPLOYMENT OF NB-IOT NTN CORE NETWORK FUNCTIONS ON SOFTWARE DEFINED RADIO (SDR) NANOSATELLITES: APPROACH AND PERFORMANCE ASSESSMENT
Víctor Montilla Gispert, i2CAT, Spain

B2.4. Advances in Space-based Communication Systems and Services, Part 3

October 5 2023, 10:15 — BCC B2

Co-Chair(s): Dipak Srinivasan, The John Hopkins University Applied Physics Laboratory, United States; Ramon P. De Paula, National Aeronautics and Space Administration (NASA), United States;
Rapporteur(s): Sara AlMaeeni, Mohammed Bin Rashid Space Centre (MBRSC), United Arab Emirates;

IAC-23.B2.4.1
CALIBRATION AND PERFORMANCE MEASUREMENTS FOR THE NASA DEEP SPACE NETWORK LUNAR EXPLORATION UPGRADE (DLEU)
Remi LaBelle, National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States

IAC-23.B2.4.2
HIERARCHICAL COMMUNICATION ARCHITECTURE AND NETWORK PROTOCOL FOR CISLUNAR CONSTELLATION
Jionghui Li, Beijing Institute of Spacecraft System Engieering, China

IAC-23.B2.4.3
UNSUPERVISED ANOMALY DETECTION THROUGH MULTI-MODEL ENSEMBLE METHOD
Armando La Rocca, AIKO S.r.l., Italy

IAC-23.B2.4.4
DEVELOPMENT OF A MODULAR HALF-DUPLEX FREQUENCY-AGILE X-BAND TRANSCEIVER FOR CUBESATS AND ROBOTIC SPACECRAFT
Robin Bonny, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland

IAC-23.B2.4.7 (unconfirmed)
A COMPREHENSIVE APPROACH TO SPECTRUM ALLOCATION FOR DOMESTIC SPACE LAUNCH IN AUSTRALIA: INTERNATIONAL PERSPECTIVES ON LICENSING LAUNCH VEHICLE TRANSMISSIONS
Eamon Lawson, Australia

IAC-23.B2.4.8
CAVE ENVIRONMENT WAVEGUIDE-BASED SYSTEM FOR LUNAR EXPLORATION WIRELESS TELECOMMUNICATION
Alessia Di Giacomo, Sapienza University of Rome, Italy

IAC-23.B2.4.9
HIGH SENSITIVITY CRYOGENICALLY COOLED ULTRAFAST DETECTORS FOR OPTICAL AND NEAR-INFRARED COMMUNICATIONS RECEIVERS
Philip Mauskopf, Arizona State University, United States

B2.5. Advances in Space-based Communication Technologies, Part 1

October 5 2023, 15:00 — BCC B2

Co-Chair(s): Debra Emmons, The Aerospace Corporation, United States; Amane Miura, National Institute of Information and Communications Technology (NICT), Japan;
Rapporteur(s): Nader Alagha, ESA, The Netherlands;

IAC-23.B2.5.1
VDES - CHALLENGES AND APPLICATIONS OF THE NEXT GENERATION MARITIME NARROWBAND SATELLITE COMMUNICATION SYSTEM
JinHui Zhao, China HEAD Aerospace Technology Co., China

IAC-23.B2.5.2
THE NOVEL DESIGN AND DEVELOPMENT OF INTER SATELLITE LINK SUBSYSTEM FOR LOW EARTH ORBIT SATELLITES.
Somaia Mohamed, Egyptian Space Agency (EgSA), Egypt

IAC-23.B2.5.4 (unconfirmed)
SATELLITE TELE-COMMAND TRANSFER FRAME LENGTH OPTIMIZATION METHODOLOGY FOR IMPROVING SPACE UPLINK EFFICIENCY
Bosung Kim, Korea Aerospace Industries, Ltd, Korea, Republic of

IAC-23.B2.5.5
DRIFT RATE ANALYSIS OF THE KPLO X-BAND CENTER FREQUENCY
Hyeon-Cheol Lee, Korea Aerospace Research Institute (KARI), Korea, Republic of

IAC-23.B2.5.6
BENCHMARKING SPACE-GRADE AND COTS HIGH-PERFORMING, LOW-MASS, AND LOW-COST COMPUTING PRODUCED AT SCALE FOR DEEP SPACE TUMBLEWEED SCIENCE MISSIONS
Mihir Kapadia, Team Tumbleweed, The Netherlands

IAC-23.B2.5.7
SIMULTANEOUS LASER COMMUNICATIONS AND RANGING TERMINALS ON NANOSATELLITES
Hannah Tomio, Massachusetts Institute of Technology (MIT), United States

IAC-23.B2.5.8
PROTOTYPE DESIGN AND VALIDATION OF SPACE-GRADE WDM-BASED HPA/LNA MODULES FOR SMALL SATELLITE PLATFORMS
Hideaki Kotake, National Institute of Information and Communications Technology (NICT), Japan

IAC-23.B2.5.9
SATELLITE FREQUENCY-HOPPING COMMUNICATION SYNCHRONIZATION ALGORITHM BASED ON INTERFERENCE COGNITION AND MATCHED FILTERING
Chengjun Guo, University of Electronic Science and Technology of China (UESTC), China

IAC-23.B2.5.10
DESIGN A SOFTWARE-DEFINED RADIO PLATFORM TO SUPPORT MULTI-FREQUENCY COMMUNICATIONS AND TUNING FOR SATELLITE SYSTEMS
Mohammad Fahim Sultan Anoy, BRAC University, Bangladesh

B2.6. Advances in Space-based Communication Technologies, Part 2

October 6 2023, 10:15 — BCC B2

Co-Chair(s): Elemer Bertenyi, Canadian Aeronautics and Space Institute, Canada; Enrique Pacheco Cabrera, Incomspace, Mexico;
Rapporteur(s): K.R. Sridhara Murthi, NIAS, India; Steven Shumsky, Millennium Space Systems, A Boeing Company, United States;

IAC-23.B2.6.1
KEYNOTE: X-BAND PLASMA-BASED REFLECTIVE SURFACE
Mirko Magarotto, University of Padova, Italy

IAC-23.B2.6.4
ANTENNA PLACEMENT AND ARCHITECTURE FOR A WIND-DRIVEN, SPHEROID TUMBLEWEED ROVER ON MARS
Felix Abel, Germany

IAC-23.B2.6.5
NOVEL X-BAND ACTIVE ANTENNA DESIGN ENHANCES LEO TO GROUND COMMUNICATION
Antonino Tobia, Airbus Defence & Space, Italy

IAC-23.B2.6.7
CONCEPTUAL DESIGN OF A COMMUNICATION NANOSATELLITE MODEL WITH A NEW GENERATION LASER BEAM CONTROL AND ACTIVE TRANSPONDER SYSTEM
Nadir Atayev, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.B2.6.8
ARCHITECTURAL DEFINITION OF ON-BOARD ANTENNA ARRAYS FOR DIVERSE BEAM-HOPPING ILLUMINATION SCHEMES IN 5G/6G NTN SCENARIOS
Ramón Martínez Rodríguez-Osorio, Universidad Politécnica de Madrid, Spain

IAC-23.B2.6.9
DEEP LEARNING BASED SPACECRAFT ATTITUDE DETERMINATION AND CONTROL SYSTEM
Gautam Ramachandra, Bellatrix Aerospace Private Limited, India

IAC-23.B2.6.10
A NOVEL SPACE MISSION PLANNING AND NAVIGATION METHODOLOGY UTILIZING RADIO SIGNAL CLASSIFICATION AND ARTIFICIAL INTELLIGENCE
PRATYAKSHA SHETTY, India

IAC-23.B2.6.11
LASER RELAY SATELLITE NETWORK FOR REAL-TIME MISSION OPERATION ON MOON, MARS AND BEYOND !
Anand Nagesh, Big Dipper Exploration Technologies, India

IAC-23.B2.6.12
PERFORMANCE OF MULTI-ANTENNA TERRESTRIAL RECEIVERS IN LEO SATELLITE BASED OFDM TRANSMISSION SYSTEMS
Aimal Siraj, Void inc., Japan

B2.7. Advances in Space-based Navigation Systems, Services, and Applications

October 3 2023, 10:15 — BCC B2

Co-Chair(s): Raj Thilak Rajan, Technical University of Delft, The Netherlands; Giovanni B. Palmerini, Sapienza University of Rome, Italy;
Rapporteur(s): Norbert Frischauf, TU Graz, Austria; Joshua Critchley-Marrows, The University of Sydney, Australia;

IAC-23.B2.7.1
IONOSPHERIC EFFECTS TOWARDS GBAS STATION AT KUALA LUMPUR INTERNATIONAL AIRPORT, MALAYSIA
Brelveenraj Kaur Rajwant Singh, Universiti Sains Malaysia, Malaysia

IAC-23.B2.7.2
ASSESSING THE USABILITY OF GNSS ON THE WAY TO THE MOON: GETTING THE LUGRE PAYLOAD READY TO FLY
Andrea Nardin, Politecnico di Torino, Italy

IAC-23.B2.7.5
AUTONOMOUS ORBIT DETERMINATION USING GNSS RECEIVER FOR ORBITAL RANDEZVOUS
Carmine Di Lauro, Thales Alenia Space Italia, Italy

IAC-23.B2.7.6
SIMULATION OF DEEP-SPACE AUTONOMOUS LINE-OF-SIGHT NAVIGATION USING SYNTHETIC IMAGES IN THE LOOP
Stefano Casini, TU Delft, The Netherlands

IAC-23.B2.7.7
SATELLITE CLOCK SYNCHRONIZATION PROTOCOL FOR SCHEDULER-RELATED DELAYS
Aarya Chaumal, College of Engineering Pune, India

IAC-23.B2.7.8
A NAVIGATION ENHANCEMENT TECHNOLOGY BASED ON COMMUNICATION SATELLITE
Peng Lyu, Tianjin 764 Communication Navigation Technology Co., Ltd., China

IAC-23.B2.7.9
RECENT RESULTS ON A RUBIDIUM PULSED OPTICALLY PUMPED CLOCK FOR SPACE APPLICATIONS
Enrico Suetta, Leonardo S.p.A., Italy

IAC-23.B2.7.10
A NEW ORIENTATION METHOD BASED ON SINGLE SHORT BASELINE OF NAVIGATION SATELLITE SIGNAL
Hua Zhang, Jiuquan Satellite Launch Center, China

IAC-23.B2.7.11
CONVOLUTIONAL NEURAL NETWORK BASED STAR TRACKER FOR HIGH-PRECISION SPACECRAFT NAVIGATION
Farid Guliyev, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.B2.7.12
A TRACKING SOLUTION VIA A NETWORK OF BEACONS ON THE SURFACE OF MARS USING THE TUMBLEWEED MOBILE IMPACTORS
Elemer San Miguel, Team Tumbleweed, The Netherlands

B2.8-GTS.3. Space Communications and Navigation Global Technical Session

October 2 2023, 15:15 — BCC B5

Co-Chair(s): Kevin Shortt, Airbus Defence & Space, Germany; Joshua Critchley-Marrows, The University of Sydney, Australia;

IAC-23.B2.8-GTS.3.2
THE WORLD FIRST DTN COMMUNICATIONS EXPERIMENT IN THE LUNAR ORBIT USING KOREAN PATHFINDER LUNAR ORBITER(DANURI)
Byoung-Sun LEE, Electronics and Telecommunications Research Institute (ETRI), Korea, Republic of

IAC-23.B2.8-GTS.3.3
RECEIVING TESTS OF NEW THREE DIMENSIONAL PHASED ARRAY ANTENNA
Nobuyuki Kaya, Kobe University, Japan

IAC-23.B2.8-GTS.3.4
ANALYZING A MULTI-SATELLITE QUANTUM COMMUNICATION NETWORK
Barnabás Ifkovics, Budapest University of Technology and Economics, Hungary

IAC-23.B2.8-GTS.3.5
REPORT ON THE FIRST HUNGARIAN SHORT RANGE FREE SPACE QKD LINK
Laszlo Bacsardi, Hungarian Astronautical Society (MANT), Hungary

IAC-23.B2.8-GTS.3.6
INNOVATIVE TDOA-BASED LAUNCHER TRACKING WITH SOFTWARE-DEFINED TECHNOLOGIES AND SYNCHRONIZATION: AN ANALYTICAL STUDY
Silvia Urbinati, University of Rome "La Sapienza", Italy

IAC-23.B2.8-GTS.3.8
DEVELOPMENT OF RELIABLE AND EFFICIENT GROUND SEGMENT FOR PICOSATELLITE-AGRICULTURE TECHNOLOGY: A CASE STUDY OF SPACEIN SDN BHD
Muhammad Aizzat Iqbal Abd Rashid, SpaceIn Sdn Bhd, Malaysia

IAC-23.B2.8-GTS.3.9
ANOMALOUSLY HIGH AMPLITUDE SCINTILLATION OBSERVED FROM GLONASS SATELLITES DURING LOW SOLAR ACTIVITY
Manar Abusirdaneh, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

IAC-23.B2.8-GTS.3.10
VIBRATION SUPPRESSION OF A THREE-AXIS FLEXIBLE SATELLITE USING COMPOSITE CONTROL
jalal eddine Benmansour, Agence Spatiale Algérienne (ASAL), Algeria

B3. IAF HUMAN SPACEFLIGHT SYMPOSIUM

Coordinator(s): Kevin D. Foley, The Boeing Company, United States; Igor V. Sorokin, S.P. Korolev Rocket and Space Corporation Energia, Russian Federation; Peter Batenburg, Netherlands Space Society (NVR), The Netherlands;

B3.1. Governmental Human Spaceflight Programmes (Overview)

October 2 2023, 15:15 — BCC A7

Co-Chair(s): Sam Scimemi, National Aeronautics and Space Administration (NASA), United States; Juergen Schlutz, European Space Agency (ESA), Germany;
Rapporteur(s): Antonio Fortunato, European Space Agency (ESA), Germany;

IAC-23.B3.1.1
KEYNOTE: IMPLEMENTING AN INCLUSIVE DEEP SPACE ECOSYSTEM
James (Jim) Free, National Aeronautics and Space Administration (NASA), United States

IAC-23.B3.1.2
JAXA'S ACCOMPLISHMENTS AND CHALLENGES FOR HUMAN SPACE FLIGHTS PROGRAM
Hiroshi Sasaki, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.B3.1.3 (unconfirmed)
NASA'S PLAN FOR CONTINUITY IN LOW-EARTH ORBIT
Ken Bowersox, National Aeronautics and Space Administration (NASA), United States

IAC-23.B3.1.4
TERRAE NOVAE: AN UPDATE AND OUTLOOK ON ESA'S HUMAN EXPLORATION PROGRAMME
Daniel Neuenschwander, European Space Agency (ESA), France

IAC-23.B3.1.6
ARTEMIS I: TEST FLIGHT BUYS DOWN RISK FOR HUMANITY'S RETURN TO THE MOON
Michael Sarafin, National Aeronautics and Space Administration (NASA), United States

IAC-23.B3.1.7
ARTEMIS III AND BEYOND
Steve Creech, National Aeronautics and Space Administration (NASA), United States

IAC-23.B3.1.8
GATEWAY PROGRAM DEVELOPMENT PROGRESS
Sean Fuller, National Aeronautics and Space Administration (NASA), Johnson Space Center, United States

IAC-23.B3.1.9 (unconfirmed)
LUNAR GATEWAY ESPRIT FEATURES, STATUS AND OUTLOOK
Luca Stagnaro, ESA - European Space Agency, The Netherlands

IAC-23.B3.1.10
NASA'S HUMAN LANDING SYSTEM: A SUSTAINING PRESENCE ON THE MOON
Kent Chojnacki, NASA Marshall Space Flight Center, United States

B3.2. Commercial Human Spaceflight Programmes

October 3 2023, 10:15 — BCC A7

Co-Chair(s): Sergey K. Shaevich, Khrunichev State Research & Production Space Center, Russian Federation; Kevin D. Foley, The Boeing Company, United States; Michael E. Lopez Alegria, MLA Space, LLC, United States;

IAC-23.B3.2.1
NASA'S CAPABILITIES AND RESOURCES POTENTIALLY NEEDED IN COMMERCIAL LOW-EARTH ORBIT DESTINATIONS (CLDS) FACILITIES
Camille Alleyne, NASA, United States

IAC-23.B3.2.3
FEASABILITY STUDY OF A EUROPEAN COMMERCIAL SPACE STATION IN LOW EARTH ORBIT
Alessandro Peluso, Politecnico di Torino - Thales Alenia Space Italia - ISAE Supaero Toulouse, Italy

IAC-23.B3.2.4
NASA SUPPORT FOR COMMERCIAL CREW LAUNCH CAPABILITIES
Rajiv Doreswamy, NASA, United States

IAC-23.B3.2.6
COMMERCIAL HUMAN SPACE FLIGHT TRAINING
Glenn King, The National AeroSpace Training And Research Center (THE NASTAR CENTER), United States

IAC-23.B3.2.7
VAST SPACE: NEAR-TERM DEVELOPMENT OF CREWED ARTIFICIAL GRAVITY STATIONS
Molly McCormick, Vast Space, United States

B3.3. Utilization & Exploitation of Human Spaceflight Systems

October 3 2023, 15:00 — BCC A7

Co-Chair(s): Eleanor Morgan, Lockheed Martin Space Systems, United States; Kavya K. Manyapu, Department of Space Studies, University of North Dakota, United States; Thomas A.E. Andersen, Danish Aerospace Company A/S, Denmark;

IAC-23.B3.3.1
ARTIFICIAL GRAVITY ORBITAL STATION (AGOS)-THE SIMULATION OF GRAVITY IN A ROTATING SPACE STATION
Werner Grandl, Space Renaissance International, Austria

IAC-23.B3.3.2
BIONIC DESIGN OF A SOFT ROBOTIC ARM FOR IMPROVED SERVICES AND MAINTENANCE IN THE SPACE STATION CABIN
Ke Ma, School of aeronautics and astronautics, Sun Yat-Sen University Guangzhou, China

IAC-23.B3.3.3
DEVELOPING PAYLOADS FOR GATEWAY
Nadine Boersma, European Space Agency (ESA), The Netherlands

IAC-23.B3.3.4
EFFORTS TOWARD REALIZATION OF MHI'S LUNAR SOCIETY CONCEPT
Koichi Abe, Mitsubishi Heavy Industries, Ltd., Japan

IAC-23.B3.3.5
DESIGN OF MOLECULAR SCREEN GENERATING ULTRA-HIGH VACUUM FOR PRODUCTION OF SEMICONDUCTOR MATERIALS USING MOLECULAR BEAM EPITAXY TECHNOLOGY ON THE CHINESE SPACE STATION
Hao Liu, Tsinghua University, China

IAC-23.B3.3.6
PARADIGM CHANGE IN SPACE UTILIZATION: CONCEPTUAL DESIGN STUDY OF A LUNAR SPACE STATION FOR IN-SPACE MANUFACTURING
Nadim Maraqten, University of Stuttgart, Germany

B3.4-B6.4. Flight & Ground Operations aspects of Human Spaceflight - Joint Session of the IAF Human Spaceflight and IAF Space Operations Symposia

October 4 2023, 10:15 — BCC A7

Co-Chair(s): Annamaria Piras, Thales Alenia Space Italia, Italy; Thomas A.E. Andersen, Danish Aerospace Company A/S, Denmark;

IAC-23.B3.4-B6.4.1
NASA DEEP SPACE NETWORK SUPPORT DURING ARTEMIS I MISSION OPERATIONS
Kathleen Harmon, Jet Propulsion Laboratory - California Institute of Technology, United States

IAC-23.B3.4-B6.4.3
AUTOMATED AND MANUAL APPROACH TO RUSSIAN ORBITAL STATION: REASONABLE COMPROMISE
Nikita Chudinov, Rocket Space Corporation Energia, Russian Federation

IAC-23.B3.4-B6.4.5
ENHANCED METHOD TO PERFORM CREW EARTH OBSERVATION ONBOARD THE ISS WITH USE OF RELOCATABLE CAMERAS
Sergey Bronnikov, S.P. Korolev Rocket and Space Corporation Energia, Russian Federation

IAC-23.B3.4-B6.4.6
ESA CREW CONFERENCE OPERATIONS DURING THE COVID-19 PANDEMIC
Daniel Feeney, GMV Innovating Solutions, Germany

IAC-23.B3.4-B6.4.7
DMS-MOD: MODERNISING THE DATA MANAGEMENT SUBSYSTEM IN THE COLUMBUS MODULE OF THE ISS
Matej Poliacek, Space Generation Advisory Council (SGAC), Slovak Republic

IAC-23.B3.4-B6.4.8
FLIGHT MODE DESIGN METHOD OF MULTI-CONFIGURATION COMBINATION BASED ON COMPLEX MISSION
LIU MIN, China Academy of Space Technology (CAST), China

IAC-23.B3.4-B6.4.9
APICES (ASTROLAND PROJECT INSIDE CAVES FOR EARTH-BASED SPACE EXPLORATION): A 130-HOUR SUBSURFACE ANALOGUE ASTRONAUT MISSION
Aditi Sathe, ATG Europe B.V., The Netherlands

IAC-23.B3.4-B6.4.10
OPERABILITY AS AN EARLY STAGE DESIGN METRIC FOR HUMAN SPACEFLIGHT VEHICLES
Srinivasa Bhattaru, Blue Origin LLC, United States

B3.5. Astronaut Training, Accommodation, and Operations in Space

October 4 2023, 15:00 — BCC A7

Co-Chair(s): Igor V. Sorokin, S.P. Korolev Rocket and Space Corporation Energia, Russian Federation; Alan T. DeLuna, American Astronautical Society (AAS), United States;
Rapporteur(s): Keiji Murakami, Japan Aerospace Exploration Agency (JAXA), Japan; Andrea Boyd, European Space Agency (ESA), Germany;

IAC-23.B3.5.1
EXPERIMENTAL RESEARCH OF TECHNOLOGIES OF COSMONAUT PROFESSIONAL ACTIVITY CARRIED OUT DURING THE IMPLEMENTATION OF A MANNED EXPEDITION TO MARS
Maksim Kharlamov, Gagarin Cosmonaut Training Center, Russian Federation

IAC-23.B3.5.2
A QUANTITATIVE HUMAN SPACECRAFT DESIGN EVALUATION MODEL FOR ASSESSING CREW ACCOMMODATION AND UTILIZATION
Akshat Mohite, India

IAC-23.B3.5.4 (unconfirmed)
EXTREME UNDERWATER SPACE TRAINING
Guadalupe Espinoza Gastelum, International Institute for astronautical Sciences (IIAS), United States

IAC-23.B3.5.5
DEVELOPMENT OF THE COSMONAUT REMOTE TRAINING TECHNOLOGY USING LIMITED COMMUNICATION FACILITIES WITH THE SIMULATION OF WORK IN LONG-DURATION INTERPLANETARY FLIGHTS
Anna Kikina, Gagarin Cosmonaut Training Center, Russian Federation

IAC-23.B3.5.7
ASTRONAUTS WITH DISABILITIES: RESEARCH AND EXPERIMENT ON THE DISABILITY INCLUSION IN THE HUMAN SPACE PROGRAM
Tania Gres, Space Generation Advisory Council (SGAC), Italy

IAC-23.B3.5.8
OPTIMIZING ALGORITHMS FOR VISUAL AND INSTRUMENTAL OBSERVATIONS TAKEN BY THE CREW OF THE RUSSIAN SEGMENT OF THE INTERNATIONAL SPACE STATION
Pavel Borovikhin, Korolev RSC Energia, Russian Federation

B3.6-A5.3. Human and Robotic Partnerships in Exploration - Joint session of the IAF Human Spaceflight and IAF Exploration Symposia

October 5 2023, 10:15 — BCC A7

Co-Chair(s): Pierre-Alexis Joumel, Airbus Defence and Space, Germany; Mark Hempsell, The British Interplanetary Society, United Kingdom;
Rapporteur(s): Jan Marius Bach, DLR (German Aerospace Center), Germany; Scott Ritter, University of Bern, Switzerland;

IAC-23.B3.6-A5.3.8
CEREBELLUM-INSPIRED TRACKING CONTROL OF UNKNOWN MODELS FOR SPACE IN-CABIN SERVICE ROBOTS WITH DUAL CONTINUUM ARMS
Hui Wang, School of aeronautics and astronautics, Sun Yat-Sen University Guangzhou, China

IAC-23.B3.6-A5.3.9
A BIO-INSPIRED 3D OLFACTORY NAVIGATION ALGORITHM APPLIED TO THE SPACE STATION
Qin Lin, School of aeronautics and astronautics, Sun Yat-Sen University Guangzhou, China

IAC-23.B3.6-A5.3.10
EMOTIONALLY INTELLIGENT ROBOTS: ADVANCEMENTS IN SOCIAL AND COGNITIVE COMPUTING TOWARDS IMPROVING HUMAN-ROBOT INTERACTION IN SPACE
Faith Tng, Space Generation Advisory Council (SGAC), Singapore, Republic of

B3.7. Advanced Systems, Technologies, and Innovations for Human Spaceflight

October 5 2023, 15:00 — BCC A7

Co-Chair(s): Michele Gates, NASA Headquarters, United States; Sebastien Barde, Centre National d'Etudes Spatiales (CNES), France; Mauro Augelli, UK Space Agency, United Kingdom;
Rapporteur(s): Gi-Hyuk Choi, Korea Aerospace Research Institute (KARI), Korea, Republic of;

IAC-23.B3.7.1
A DIGITAL ENGINEERING APPROACH TO ASSESSING THE MOON TO MARS ARCHITECTURE
Alanna Carnevale, The Aerospace Corporation, United States

IAC-23.B3.7.2
DIGITAL TWIN SIMULATIONS OF CHINA SPACE STATION
Suquan Ding, Beijing Space Quest Ltd., China

IAC-23.B3.7.4
ROSAS – THE FUTURE OF HUMAN SPACEFLIGHT
Jateen Rathod, R V College of Engineering, Bengaluru, India

IAC-23.B3.7.6
CONCEPTUAL DESIGN FOR THE ADVANCEMENT OF MECHANICAL COUNTER PRESSURE SPACESUITS
Michelle Kostin, Imperial College London, United Kingdom

IAC-23.B3.7.7
RESEARCH ON THE PRACTICE AND EFFICIENCY IMPROVEMENT OF THE EXTRAVEHICULAR ACTIVITY MISSION SUPPORTED BY CHINA SPACE STATION MANIPULATOR
CHAO ZHU, China Academy of Space Technology (CAST), China

IAC-23.B3.7.8
REDUCTION OF LOSS OF TIME IN SPACE USING INNOVATIVE TECHNOLOGIES
Fidan Azimova, National Aviation Academy - Azerbaijan, Azerbaijan

IAC-23.B3.7.9
NEW WORLDS
Mehemmed Rehimov, Azerbaijan Technical University, Azerbaijan

IAC-23.B3.7.10
POTENTIAL OF ARTIFICIAL INTELLIGENCE CENTAURS FOR MEDICAL DIFFERENTIAL DIAGNOSIS IN HUMAN SPACEFLIGHT
KangSan Kim, Space Generation Advisory Council (SGAC), Korea, Republic of

IAC-23.B3.7.11
THE IMPROVEMENT OF THE CARDIOPULMONARY RESUSCITATION METHOD IN MICROGRAVITY BASED ON AN INNOVATIVE CONSTRUCTION CMRS - MOBILE MEDICAL MODULE (MMM) - AND THE SIMULATION IN NEUTRAL BUOYANCY.
Arkadiusz Trzos, Jagiellonian University, Poland

B3.8. Human Space & Exploration

October 6 2023, 10:15 — BCC A7

Co-Chair(s): Dan King, MDA Corporation, Canada; Tara Ruttley, Blue Origin LLC, United States;
Rapporteur(s): Joost van Tooren, ArianeGroup SAS, France;

IAC-23.B3.8.1
ENABLING ARTEMIS: DEVELOPING THE SYSTEMS FOR HUMAN EXPLORATION OF THE LUNAR SOUTH POLE
Tamra George, NASA, United States

IAC-23.B3.8.2
ARTEMIS I MISSION: TASI CONTRIBUTION AND MAIN RESULTS
Matteo Maria Lamantea, Thales Alenia Space, Italy

IAC-23.B3.8.5
QUALITATIVE ANALYSIS OF THE PRESENCE OF END-POSITION NYSTAGMUS IN ASTRONAUTS AFTER LONG TERM SPACE FLIGHTS. RESULTS OF "FIELD TEST" EXPERIMENT
Maria Bekreneva, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-23.B3.8.7
DEVELOPING PERSONAL MOBILITY DEVICES FOR ASTRONAUTS ON MARS AND THE MOON
Shreyansh Dubey, University of Petroleum and Energy Studies, India

IAC-23.B3.8.8
VENUS HUMAN FLYBY MISSION DESIGN AND BENEFITS
Matthew Ziglar, Boeing Defense Space & Security, United States

IAC-23.B3.8.10
CIS-LUNAR AND SURFACE MISSIONS: HEALTH RISKS AND POTENTIAL SURGICAL CONDITIONS
Dora Babocs, University of Texas Health Science Center at Houston, United States

B3.9-GTS.2. Human Spaceflight Global Technical Session

October 6 2023, 13:45 — BCC B5

Co-Chair(s): Guillaume Girard, Zero2infinity, Spain; Andrea Jaime, Isar Aerospace Technologies GmbH, Germany;
Rapporteur(s): Joao Lousada, GMV Aerospace & Defence SAU, Germany;

IAC-23.B3.9-GTS.2.1
PROJECT AURORA: ESTABLISHING A LONG-TERM HUMAN OUTPOST SUPPORTING PLANETARY EXPLORATION
Marcos Eduardo Rojas Ramirez, Space Generation Advisory Council (SGAC), France

IAC-23.B3.9-GTS.2.2
A REVIEW ON ADVANCEMENTS IN SPACESUITS FOR ASTRONAUTS DURING MARS EXPLORATIONS
Darpan Byahatti, R V College of Engineering, Bengaluru, India

IAC-23.B3.9-GTS.2.3
ENHANCING LUNAR EVA EXPLORATION THROUGH VIRTUAL MAPPING, MISSION PLANNING, AND TRAINING
Mac Malkawi, Blinc- Borderless lab, United States

IAC-23.B3.9-GTS.2.4
STUDY OF THE ASTRONAUT'S PROFILE EVOLUTION SINCE 1961: WHAT MAKES A GOOD ASTRONAUT SINCE THEN AND HOW DID SOCIETY IMPACT IT?
Yumna Majeed, Space Generation Advisory Council (SGAC), Pakistan

IAC-23.B3.9-GTS.2.5
THE IMPORTANCE OF EEG SIGNAL ANALYSIS FOR SPACE MISSIONS
Josue Airton Lopez Cabrejos, Peru

IAC-23.B3.9-GTS.2.7
REACHING MARS: MEDICAL RISKS AND POTENTIAL SURGICAL CONDITIONS IN THE MARTIAN ENVIRONMENT AND ONBOARD
Dora Babocs, University of Texas Health Science Center at Houston, United States

B4. 30th IAA SYMPOSIUM ON SMALL SATELLITE MISSIONS

Coordinator(s): Alex da Silva Curiel, Surrey Satellite Technology Ltd (SSTL), United Kingdom; Jian Guo, Delft University of Technology (TU Delft), The Netherlands;
Support(s): Rhoda Shaller Hornstein, , United States;

B4.1. 24th Workshop on Small Satellite Programmes at the Service of Developing Countries

October 3 2023, 10:15 — BCC A2

Co-Chair(s): Sias Mostert, Space Commercial Services Holdings (Pty) Ltd, South Africa; Nathalie RICARD, United Nations Office for Outer Space Affairs, Austria; Taiwo Raphael Tejumola, International Space University, France;
Rapporteur(s): Danielle Wood, Massachusetts Institute of Technology (MIT), United States; Pierre Molette, , France;

IAC-23.B4.1.1
OPPORTUNITIES FOR CUBESAT-RELATED CAPACITY-BUILDING UNDER THE UNITED NATIONS ACCESS TO SPACE FOR ALL INITIATIVE: ACHIEVEMENTS IN 2022-2023
Hazuki Mori, United Nations Office for Outer Space Affairs, Austria

IAC-23.B4.1.2
ON-ORBIT RESULTS AND LESSONS LEARNED FROM SEVEN YEARS OF ALSAT-1N OPERATIONS
Abdelmadjid Lassakeur, Agence Spatiale Algérienne (ASAL), Algeria

IAC-23.B4.1.3
INITIATIVES OF THE PERUVIAN SPACE AGENCY (CONIDA) TO BOOST THE GROWTH OF THE PERUVIAN AEROSPACE ECOSYSTEM
George Steve Fajardo Soria, Agencia Espacial del Peru (CONIDA), Peru

IAC-23.B4.1.5
INSTITUTIONALIZING UPSTREAM SPACE TECHNOLOGY DEVELOPMENT FROM THE UNIVERSITY TO THE PHILIPPINE SPACE AGENCY
Julie Ann Banatao, Philippine Space Agency, The Philippines

IAC-23.B4.1.6
SPACE SCIENCE AND TECHNOLOGY CAPACITY BUILDING THROUGH INDIGENOUS AI-BASED MULTISPECTRAL CAMERA PAYLOAD DESIGN
Raihana Shams Islam Antara, BRAC University, Bangladesh

IAC-23.B4.1.7
THE DEVELOPMENT OF SURYA SATELLITE-1: PIONEERING INDONESIA NANOSATELLITE
Wahyudi Hasbi, Research Center for Satellite Technology, National Research and Innovation Agency (BRIN), Indonesia

IAC-23.B4.1.8
ASEAN MULTINATION COLLABORATION PROJECT: CRAFTING INDIGENOUS SPACE PROGRAM IN MALAYSIA
Mohamad Huzaimy Jusoh, Universiti Teknologi MARA (UITM), Malaysia

IAC-23.B4.1.9 (unconfirmed)
PROPOSAL FOR A SMALL SATELLITE CONSTRUCTION PLATFORM USED FOR ACADEMIC PURPOSES
Lídia Nkula, Angola

IAC-23.B4.1.10
A SMALL SATELLITE PLATFORM PROPOSAL FOR STUDIES ON THE ASPARAGUS FARMING
Avid Roman-Gonzalez, Business on Engineering and Technology S.A.C. (BE Tech), Peru

IAC-23.B4.1.11
BLINCSAT – IOT SATELLITE MONITORING FOR COMBATING ILLEGAL WILDLIFE HUNTING IN NON-SERVICE AREAS IN JORDAN: SAFEGUARDING BIODIVERSITY THROUGH INNOVATIVE TECHNOLOGY
Diana ALjbour, Blinc- Borderless lab, Jordan

IAC-23.B4.1.12
OPEN-SOURCING OF CUBESAT BUS FOR CAPACITY BUILDING AIMED TO ACQUIRE INDIGENOUS SPACE DEVELOPMENT CAPABILITY
Tetsuhito Fuse, Kyushu Institue of Technology, Japan

IAC-23.B4.1.13
SPACE CAPACITY BUILDING PROGRAMMES IN DOMINICAN REPUBLIC AND PANAMA: LESSONS LEARNED FROM THE FIRST NANO-SATELLITE DESIGN AND MISSION CONTROL CENTER DEVELOPMENT
Paolo Marzioli, Sapienza University of Rome, Italy

B4.2. Small Space Science Missions

October 2 2023, 15:15 — BCC A2

Co-Chair(s): Larry Paxton, The John Hopkins University Applied Physics Laboratory, United States; Norbert M.K. Lemke, OHB System AG - Oberpfaffenhofen, Germany;
Rapporteur(s): Roberta Mugellesi-Dow, European Space Agency (ESA), United Kingdom; Oana van der Togt, Antwerp Space, The Netherlands;

IAC-23.B4.2.1
AN ESA NANOSATELLITE CONSTELLATION TO MONITOR SPACE WEATHER EFFECTS
Steve Eckersley, Surrey Satellite Technology Ltd (SSTL), United Kingdom

IAC-23.B4.2.2
HELIOSPHERIC PIONEER FOR SOLAR AND INTERPLANETARY THREATS DEFENCE (HENON) MISSION: SPACE WEATHER MONITORING AND FORECASTING
Lorenzo Provinciali, Argotec, Italy

IAC-23.B4.2.3
DEEP SPACE MISSION REMEC FOR GCR MONITORING
Robert Filgas, Czech Technical University In Prague (CTU), Czech Republic

IAC-23.B4.2.4
A NANOSATELLITE OPERATING IN THE VAN ALLEN BELT: THE LESSON LEARNED FROM THE ASTROBIO CUBESAT MISSION
Stefano Carletta, Sapienza University of Rome, Italy

IAC-23.B4.2.5
MEC – MAGNETOSPHERE MONITORING BY HETEROGENEOUS CONSTELLATION DESIGN
Davide Russo, Politecnico di Milano, Italy

IAC-23.B4.2.6
MISSION OF SAMSAT-ION FOR STUDY OF GEOPHYSICAL FIELDS: CONCEPT AND REALIZATION
Igor V. Belokonov, Samara National Research University (Samara University), Russian Federation

IAC-23.B4.2.7
SLAVIA (SPACE LABORATORY FOR ADVANCED VARIABLE INSTRUMENTS AND APPLICATIONS) AS A LOW-COST ASTEROID PROSPECTION MISSION.
Inna Uwarowa, S.A.B. Aerospace Srl, Czech Republic

IAC-23.B4.2.9
ON-ORBIT RESULT OF ONBOARD PROCESSING OF UHF RANGING SIGNAL FROM THE GROUND FOR TOTAL ELECTRON CONTENT MEASUREMENT OF SPATIUM PROJECT
Makiko Kishimoto, LaSEINE, Kyushu Institute of Technology, Japan

IAC-23.B4.2.10
NANOSWAI: A NANOSATELLITE FOR ASTROPARTICLE PARTICLE PHYSICS WITH ONBOARD AI AIDED CONTROL
Gustavo Medina Tanco, Universidad Nacional Autónoma de México (UNAM), Mexico

IAC-23.B4.2.11 (unconfirmed)
THE FUTURE OF ASTRONOMY: ADVANCEMENTS IN CUBESAT TECHNOLOGY
Rameela Ramesh, United Arab Emirates

B4.3. Small Satellite Operations

October 3 2023, 15:00 — BCC A2

Co-Chair(s): Andreas Hornig, AerospaceResearch.net, Germany; Nijin Jose Thykkathu, Science and Technology Facilities Council, United Kingdom; Stephan Roemer, Antwerp Space, Belgium;
Rapporteur(s): Lynette Tan, Singapore Space and Technology LTD (SSTL), Singapore, Republic of;

IAC-23.B4.3.1
DEVELOPMENT OF SUSTAINABLE AUTONOMY OF SMALL SATELLITE CONSTELLATIONS FOR CISLUNAR SPACE
Mohammed Irfan Rashed, Korea Advanced Institute of Science and Technology (KAIST), Korea, Republic of

IAC-23.B4.3.2
LESSONS LEARNED FROM THE GREENCUBE 3U CUBESAT OPERATIONS IN MEDIUM EARTH ORBIT
Paolo Marzioli, Sapienza University of Rome, Italy

IAC-23.B4.3.3
STREAMLINING OF THE ROUTINE TASKS OF SPHERE-1 EYE OPERATION REALIZED BY ITS FLIGHT SOFTWARE FUNCTIONS
Yutaro Ito, University of Tokyo, Japan

IAC-23.B4.3.4
A HIERARCHICAL MODE CONCEPT TO ENABLE AUTONOMY FOR SMALL SPACECRAFT
Mario Starke, Technische Universität Berlin, Germany

IAC-23.B4.3.5
AN INNOVATIVE BUSINESS MODEL OF JILIN-1 SATELLITE CONSTELLATION IN FIXED ASSET INVESTMENT STATISTICS
YuanXiu Zhou, Chang Guang Satellite Technology Co., Ltd., China

IAC-23.B4.3.6
ACTIVE SPECTROMETER FOR SMALL SATELLITES (ASTROSS)
Samuel Cano, University of Arkansas, United States

IAC-23.B4.3.7
DEEP REINFORCEMENT LEARNING FOR UNDER-ACTUATED SATELLITE ATTITUDE CONTROL AND REACTION WHEEL DESATURATION USING SOLAR RADIATION PRESSURE
Alessandro Balossino, Argotec, Italy

IAC-23.B4.3.8
ON-ORBIT SERVICER DESIGN USING MANIPULATOR ARM FOR POWER ENHANCEMENTS
Arnon Spitzer, Astroscale Ltd, Israel

IAC-23.B4.3.10
REVOLUTIONIZING SMALL SATELLITE TECHNOLOGY WITH ADVANCED DEPLOYABLE STRUCTURAL SYSTEMS
ISHITA SHARMA, University of Swansea, United Kingdom

B4.4. Small Earth Observation Missions

October 4 2023, 10:15 — BCC A2

Co-Chair(s): Carsten Tobehn, European Space Agency (ESA), The Netherlands; Larry Paxton, The John Hopkins University Applied Physics Laboratory, United States; Eugene D Kim, Satrec Initiative, Korea, Republic of;
Rapporteur(s): Werner R. Balogh, European Space Agency (ESA), France; Marco Gomez Jenkins, , United Kingdom;

IAC-23.B4.4.1
HYPERSCOUT; STATE OF THE ART HYPERSPECTRAL IMAGER DEMONSTRATING IMAGE PROCESSING IN SPACE, AND ITS FUTURE IN ADDRESSING CLIMATE AND ENVIRONMENTAL CHANGES
James Harpur, Cosine Remote Sensing B.V., The Netherlands

IAC-23.B4.4.2
THE PAST AND THE FUTURE OF SMALLSAT CONSTELLATIONS - A SUCCESS STORY
Rene Griesbach, Planet Labs Germany GmbH, Germany

IAC-23.B4.4.3
EARTHNEXT: A VERY LOW EARTH ORBIT CUBESAT MISSION FOR MULTISPECTRAL EARTH OBSERVATION
Giuseppe Leccese, ASI - Italian Space Agency, Italy

IAC-23.B4.4.4
DEVELOPMENT OF THE HYDROGNSS MISSION, INSTRUMENT AND SCIENCE OBJECTIVES WITHIN THE NEWSPACE ESA SCOUT PROGRAMME
Alex da Silva Curiel, Surrey Satellite Technology Ltd (SSTL), United Kingdom

IAC-23.B4.4.5
THE FEASIBILITY STUDY OF BUILDING A SUSTAINABLY NATIONAL SPACE TECHNOLOGY THROUGH EOS THEOS-3 MISSION
LIKHIT WARANON, Geo-Informatics and Space Technology Development Agency (Public Organization), Thailand

IAC-23.B4.4.6
THE FIRE LOCALISATION AND MITIGATION FOR EMERGENCIES SATELLITES (FLAMES), A CONSTELLATION OF CUBESATS IN LEO FOR MONITORING WILDFIRES IN NEAR REAL-TIME.
Benjamin Verbeek, Uppsala University, Sweden

IAC-23.B4.4.7
THE BALKAN CONSTELLATION - COPERNICUS CONTRIBUTION MISSION WITH REGIONAL IMPACT
Viktoriya Dimov, EnduroSat AD, Bulgaria

IAC-23.B4.4.8
THE TROLL: PRIVATELY FUNDED MISSION FOR INNOVATIVE SATELLITE INTEGRATION, HYPERSPECTRAL SENSING AND LIDAR IN-ORBIT DEMONSTRATION
Jakub Zíka, TRL Space, Czech Republic

IAC-23.B4.4.9
VULCAIN: A SMALLSAT FORMATION FLYING MISSION FOR VOLCANOES SURVEY AND MONITORING WITH MULTISPECTRAL OBSERVATIONS
Michèle Lavagna, Politecnico di Milano, Italy

IAC-23.B4.4.10
THE WORLD'S LIGHTEST OPERATIONAL IN-ORBIT 0.5M SATELLITE: GF04
Xiaoran Xu, Chang Guang Satellite Technology Co., Ltd., China

IAC-23.B4.4.12
DESIGN AND TEST OF A DEPLOYABLE BROADBAND ANTENNA FOR LOW FREQUENCY SYNTHETIC APERTURE INTERFEROMETRIC RADIOMETRY FROM SMALL SATELLITES
Lewis Raymond Williams, University of Oslo, Norway

IAC-23.B4.4.13
OIRTHIRSAT: A STUDENT NANOSATELLITE MISSION DEMONSTRATING IN-ORBIT PROCESSING FOR THE STUDY OF COASTAL DYNAMISM
Marialina Tsinidis, University of Glasgow, United Kingdom

IAC-23.B4.4.14
DESIGN OF LOW GROUND SAMPLING DISTANCE (GSD) IMAGING SYSTEM PAYLOAD FOR 1U-SIZED CUBESAT APPLICATION
FATIMAH ZAHARAH ALI, Universiti Teknologi MARA (UITM), Malaysia

IAC-23.B4.4.15
ANALYSIS OF SUITABLE PAYLOAD INSTRUMENTS FOR CUBESAT INTENDED TO DETECT AND INVESTIGATE THE TRANSIENT LUMINOUS EVENTS (TLES)
Safura Mirzayeva, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

B4.5. Access to Space for Small Satellite Missions

October 4 2023, 15:00 — BCC A2

Co-Chair(s): Yves Gerard, Airbus Defence & Space, France; Philip Davies, Surrey Satellite Technology Ltd (SSTL), United Kingdom;
Rapporteur(s): Jeff Emdee, The Aerospace Corporation, United States; Carlos Niederstrasser, Northrop Grumman Corporation, United States;

IAC-23.B4.5.2
DO NOT ABANDON YOUR CUBESATS!
Marta Ceccaroni, Cranfield University, United Kingdom

IAC-23.B4.5.3
INVESTIGATION OF DIFFERENT STRATEGIES FOR ACCESS TO SPACE OF SMALL SATELLITES ON A DEFINED LEO ORBIT
Francesco Barato, University of Padova - DII/CISAS, Italy

IAC-23.B4.5.4 (unconfirmed)
ION SERVICE FOR UNIVERSITIES: ENABLING AFFORDABLE AND RELIABLE ACCESS TO SPACE FOR EDUCATIONAL CUBESATS
MATTEO ZENI, Politecnico di Milano, Italy

IAC-23.B4.5.5
SMALLSAT LAUNCH SERVICES IN THE ASIA PACIFIC: TRENDS, CHALLENGES, AND FUTURE OPPORTUNITIES
Sindhu Belki, The University of Alabama, United States

IAC-23.B4.5.6
MARKET COMPETITIVENESS ANALYSIS FOR AIR LAUNCH SYSTEMS IN THE ASIA-PACIFIC SMALLSAT LAUNCH SECTOR
KangSan Kim, Space Generation Advisory Council (SGAC), Korea, Republic of

IAC-23.B4.5.7
OPENING NEW FRONTIERS: SMALLSAT LAUNCHES IN ASIA-PACIFIC
ISHITA SHARMA, University of Swansea, United Kingdom

B4.5A-C4.8. Joint Session between IAA and IAF for Small Satellite Propulsion Systems

October 5 2023, 15:00 — BCC A8

Co-Chair(s): Jeff Emdee, The Aerospace Corporation, United States; Arnau Pons Lorente, Space Generation Advisory Council (SGAC), United States;
Rapporteur(s): Elena Toson, Space Generation Advisory Council (SGAC), Italy; Vito Salvatore, CIRA Italian Aerospace Research Center, Capua, Italy;

IAC-23.B4.5A-C4.8.5
UNISAT-8: A STABLE SATELLITE FORMATION USING ELECTRIC PROPULSION
Filippo Graziani, G.A.U.S.S. Srl, Italy

IAC-23.B4.5A-C4.8.7
STUDY, DEVELOPMENT, IMPLEMENTATION AND TESTING OF A WATER RESISTOJET PROPULSION SYSTEM FOR CUBESATS
Federico Larizza, Sapienza University of Rome, Italy

IAC-23.B4.5A-C4.8.13
QUALIFICATION CAMPAIGN FOR A CENTRE-TRIGGERED PULSED CATHODIC ARC THRUSTER
Patrick Neumann, Australia

B4.6A. Generic Technologies for Small/Micro Platforms

October 6 2023, 13:45 — BCC A2

Co-Chair(s): Philip Davies, Surrey Satellite Technology Ltd (SSTL), United Kingdom; Joost Elstak, Airbus Defence and Space Netherlands, The Netherlands;
Rapporteur(s): Jian Guo, Delft University of Technology (TU Delft), The Netherlands; Thomas Terzibaschian, DLR, German Aerospace Center, Germany;

IAC-23.B4.6A.1
FINAL RESULTS OF THE NOVEL ACS DEVELOPMENT PROJECT FERRAC
Manfred Ehresmann, Institute of Space Systems, University of Stuttgart, Germany

IAC-23.B4.6A.2
COMMERCIAL DATA RELAY SERVICES IN THE CIS-LUNAR ENVIRONMENT WITH LUNAR PATHFINDER
Philip Davies, Surrey Satellite Technology Ltd (SSTL), United Kingdom

IAC-23.B4.6A.3
A SOFTWARE DEFINITION SATELLITE ARCHITECTURE BASED ON POWERFUL COMPUTING PLATFORM
Lianxiang Jiang, China Academy of Space Technology (CAST), China

IAC-23.B4.6A.5 (unconfirmed)
DEVELOPMENT OF MINIATURIZED INTEGRATED AVIONICS PACKAGE FOR SMALL SATELLITES
Harshit Kumar, U R RAO SATELLITE CENTRE (URSC), India

IAC-23.B4.6A.6
RESEARCH ON LIGHTWEIGHT SLAM ALGORITHM FOR AUTONOMOUS SENSING OF ON-ORBIT-SERVICE ROBOT
Zhihao Zhang, National Key Laboratory of Aerospace Flight Dynamics,Northwestern Polytechnical University,Xi'an, China

IAC-23.B4.6A.7
TETHER-BASED SOFT RENDEZVOUS AND DOCKING FOR MICROSATELLITES: DESIGN, CONTROL AND EXPERIMENT
Mingyue Zheng, Zhejiang University, China

IAC-23.B4.6A.8
RESEARCH ON AN INNOVATIVE HIGH-RELIABILITY ATTITUDE MEASUREMENT UNIT OF MICRO/NANOSATELLITE
Xiaozhou Yu, Dalian University of Technology (DUT), China

IAC-23.B4.6A.9
TECHNOLOGY CHALLENGES OF VERY HIGH RESOLUTION IMAGING FROM A SMALL SATELLITE MISSION
Robert Elliott, Surrey Satellite Technology Ltd (SSTL), United Kingdom

IAC-23.B4.6A.10
XSPANCION: MODULAR SATELLITE PLATFORM DESIGN FOR SCALABLE AND ADAPTIVE PRODUCTION
Lian Ming Goh, Clyde Space Ltd., United Kingdom

IAC-23.B4.6A.11
IMPLEMENTATION OF THE GALILEO HIGH ACCURACY SERVICE ON AN ACCURATE GNSS RECEIVER FOR LEO
Sergiu-Ştefan Mihai, Romanian InSpace Engineering SRL, Romania

IAC-23.B4.6A.12
STRATEGY AND LESSON LEARNT IN TELECOM SUBSYSTEM TESTING: THE HERMES CUBESAT CONSTELLATION CASE
Ivan Troisi, Politecnico di Milano, Italy

B4.6B. Generic Technologies for Nano/Pico Platforms

October 5 2023, 10:15 — BCC A2

Chairman(s): Andy Vick, RAL Space, United Kingdom;
Co-Chair(s): Zeger de Groot, Innovative Solutions in Space BV, The Netherlands;
Rapporteur(s): Martin von der Ohe, Lacuna Space, Germany;

IAC-23.B4.6B.1
DEVELOPMENT OF AN EMBEDDED SOFTWARE PLATFORM FOR THE GW-SAT CUBESAT ADCS
Giancarlo Vargas-Villegas, Instituto Tecnológico de Costa Rica (TEC), Costa Rica

IAC-23.B4.6B.2 (unconfirmed)
DEMONSTRATING THE FEASIBILITY OF A 500 MHZ SYNTHETIC APERTURE INTERFEROMETRIC RADIOMETER ONBOARD A CUBESAT PLATFORM TO RETRIEVE SEA SURFACE SALINITY MEASUREMENTS OVER THE ARCTIC REGIONS
Marco Grasso, University of Oslo, Norway

IAC-23.B4.6B.3
NEURAL NETWORK BASED FAULT DETECTION IN CUBESAT TELEMETRY - A LUNAR EXPLORATION CASE STUDY
Angelo Cervone, Delft University of Technology (TU Delft), The Netherlands

IAC-23.B4.6B.4
FEASIBILITY STUDY ON ENABLING TECHNOLOGIES FOR DESIGNING A SYNTHETIC APERTURE RADAR PAYLOAD ON A NANOSATELLITE FOR MONITORING WATER LEVELS IN FLOOD PRONE AREAS OF NIGERIA.
Maren Mashor, Space Generation Advisory Council (SGAC), Nigeria

IAC-23.B4.6B.6
A COTS BASED SPACE ENVIRONMENT INSTRUMENT FOR CUBESATS
Bernhard Seifert, FOTEC Forschungs- und Technologietransfer GmbH, Austria

IAC-23.B4.6B.7
REMOTE SYSTEM-ON-CHIP RECONFIGURATION FRAMEWORK FOR FLEXIBLE UPDATE AND REPAIR OF NANOSATELLITE FIRMWARE IN-ORBIT
Víctor Eduardo Vásquez-Ortiz, OroraTech, Germany

IAC-23.B4.6B.8
A FLAT-SAT PLATFORM FOR THE DEVELOPMENT AND TESTING OF THE 3U HERMES CONSTELLATION SATELLITES
Stefano Silvestrini, Politecnico di Milano, Italy

IAC-23.B4.6B.9
IN-ORBIT THERMAL CHARACTERIZATION OF A 3U CUBESAT AND VALIDATION OF AN IN-HOUSE DEVELOPED TOOL FOR THERMAL ANALYSIS
Luisa Iossa, Politecnico di Torino, Italy

IAC-23.B4.6B.10
INTERNET-OF-THINGS SENSOR APPLICATIONS ON THE SAPIENZA S5LAB CUBESATS: FROM WILDLIFE MONITORING TO INTER-SATELLITE LINK RESEARCH
Paolo Marzioli, Sapienza University of Rome, Italy

IAC-23.B4.6B.11
LONG-TERM IN-ORBIT TESTING OF PEROVSKITE SOLAR CELLS ON A 1U CUBESAT: AN OPEN-SOURCE DESIGN APPROACH
Alessio Prosperi, Politecnico di Milano, Italy

IAC-23.B4.6B.12
VERSATILE CUBESAT PLATFORM AS A SOLUTION FOR CHALLENGING EO AND SATCOM MISSIONS
Julian Scharnagl, EnduroSat AD, Germany

B4.7. Constellations and Distributed Systems

October 5 2023, 15:00 — BCC A2

Co-Chair(s): Rainer Sandau, International Academy of Astronautics (IAA), Germany; Michele Grassi, University of Naples "Federico II", Italy;
Rapporteur(s): Jaime Esper, National Aeronautics and Space Administration (NASA), United States; Maria Daniela Graziano, University of Naples "Federico II", Italy;

IAC-23.B4.7.1
BISS CUBESAT FOR A BI-DIRECTIONAL INTERNET OF THINGS SATELLITE SERVICE: AN OVERVIEW OF THE DEVELOPMENT STATUS
Giuseppe Leccese, ASI - Italian Space Agency, Italy

IAC-23.B4.7.2
REINFORCEMENT LEARNING FOR PLANNING AND TASK COORDINATION IN A SWARM OF CUBESATS: OVERCOMING PROCESSOR LIMITATION CHALLENGES
Mohammadamin Alandihallaj, University of Luxembourg, Luxembourg

IAC-23.B4.7.3
A NOVEL FEMTOSATELLITE SENSOR ARRAY FOR DECONVOLVING TIME AND SPACE MEASUREMENTS OF TRANSIENT PHENOMENON IN EARTH ORBIT
Christopher Teale, School of Engineering, University of Glasgow, United Kingdom

IAC-23.B4.7.4
A FEMTOSAT SWARM MISSION IN LEO: DIFFERENTIAL DRAG CONTROL UNDER POWER AND COMMUNICATION CONSTRAINTS
Shamil Biktimirov, Technology Innovation Institute (TII), Russian Federation

IAC-23.B4.7.5
INITIAL FORMULATION OF A TIME VARYING DYNAMIC GRAPH DECENTRALIZED OPTIMIZATION FRAMEWORK FOR SCALED SATELLITE NETWORK INFRASTRUCTURE OPERATIONS
Vincenzo Messina, Technische Universität München, Germany

IAC-23.B4.7.6
OPTIMAL ORBITAL CONFIGURATIONS OF SPACEBORNE OPTICAL SENSORS CONSTELLATIONS FOR SPACE SURVEILLANCE
Antonio D'Anniballe, Cranfield University, United Kingdom

IAC-23.B4.7.7
MODELING AND CONTROL OF INTER-SATELLITE GEOCENTRIC ANGLE BOUNDARY FOR MEGA CONSTELLATION REGIONAL COVERAGE
Yun Xu, Zhejiang University, China

IAC-23.B4.7.8
OBSERVATION CONFIGURATION CONSTRAINED PREDICTIVE COLLISION AVOIDANCE GUIDANCE FOR LOW THRUST MEGA-SATELLITE CONSTELLATION
Kun Xu, Beijing Institute of Technology, China

IAC-23.B4.7.9
SUMMARY OF A PHASE 0/A STUDY REPORT FOR A COMMUNICATION SATELLITE CONSTELLATION FOR DIANA LUNAR INFRASTRUCTURE
Denis Acker, University of Stuttgart, Germany

IAC-23.B4.7.10
A SMALLSAT CONSTELLATION FOR F10.7 AND F30 CM SOLAR RADIO FLUX MEASUREMENTS
Zaina Abu-Shaar, Skolkovo Institute of Science and Technology, Russian Federation

IAC-23.B4.7.11
CONNECTED NETWORK – A NON-TERRESTRIAL STANDARDISED COMMUNICATION ARCHITECTURE FOR NEW IOT BUSINESS MODELS
Andre Guerra, SIMPLYCONNECTED Lda (CONNECTED), Portugal

IAC-23.B4.7.12
MAGAL CONSTELLATION: SMALL SATELLITES FOR OCEAN RADAR ALTIMETRY
Yaroslav Mashtakov, University of Beira Interior, Portugal

IAC-23.B4.7.13
PRELIMINARY PRODUCT AND SYSTEM OBSERVATIONAL REQUIREMENTS FOR RODIO MISSION
Antonio Gigantino, Università degli Studi di Napoli "Federico II", Italy

IAC-23.B4.7.14
FORMATION TECHNOLOGY IN THE CLOUDCT MISSION TO USE COMPUTED TOMOGRAPHY FOR CHARACTERIZING THE INTERIOR OF CLOUDS TO ACHIEVE IMPROVED CLIMATE PREDICTION
Ilham Mammadov, Zentrum für Telematik, Germany

IAC-23.B4.7.15
IN-ORBIT DEMONSTRATION OF PROPELLANT-LESS FORMATION FLIGHT THROUGH SEPARATION OF JOINTED TWO CUBESATS IN THE MAGNARO MISSION
Takaya Inamori, Nagoya University, Japan

B4.8. Small Spacecraft for Deep-Space Exploration

October 6 2023, 10:15 — BCC A2

Co-Chair(s): Leon Alkalai, Mandala Space Ventures, United States; Rene Laufer, Luleå University of Technology, Sweden;
Rapporteur(s): Amanda Stiles, Rocket Lab, United States; Jaime Esper, National Aeronautics and Space Administration (NASA), United States;

IAC-23.B4.8.1
DEEP SPACE NETWORK OBSERVATIONS DURING CISLUNAR AND DEEP SPACE CUBESATS SUPPORT
Sami Asmar, Jet Propulsion Laboratory - California Institute of Technology, United States

IAC-23.B4.8.2
LESSONS LEARNED FROM CUBESAT MOON LANDER OMOTENASHI
Tatsuaki Hashimoto, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.B4.8.3
INITIAL OPERATION RESULTS OF EQUULEUS ADCS: WHEEL UNLOADING STRATEGIES FOR A DEEP SPACE 6U CUBESAT
Hirotaka Sekine, University of Tokyo, Japan

IAC-23.B4.8.4
LUNAR PATHFINDER - A COMMERCIALLY-DRIVEN LUNAR DATA RELAY SATELLITE, 2 YEARS UNTIL LAUNCH
Philip Davies, Surrey Satellite Technology Ltd (SSTL), United Kingdom

IAC-23.B4.8.5
DESIGN, ANALYSIS AND VALIDATION OF THE ADCS FOR THE LUMIO MISSION
Felice Piccolo, Politecnico di Milano, Italy

IAC-23.B4.8.6
THE HIGH SENSITIVITY SELF-ADAPTIVE ACQUISITION METHOD FOR SMALL MOON MISSION
Jia Tian, China Academy of Space Technology (Xi'an), China

IAC-23.B4.8.7
FREQUENT DEEP-SPACE ACCESS STRATEGY FOR VENUS AERONOMIC EXPLORATION MISSION USING EARTH-SYNCHRONOUS ORBITS
Daichi Ito, The Graduate University for Advanced Studies, Japan

IAC-23.B4.8.8
MODEL PREDICTIVE TRAJECTORY GENERATION AND CONTROL FOR BALLISTIC LANDER DEPLOYMENT ON SMALL BODIES FROM SMALL-SAT PLATFORMS: THE TASTE MISSION CASE STUDY
Enrico Belloni, Politecnico di Milano, Italy

IAC-23.B4.8.9
JUVENTAS CUBESAT IN SUPPORT OF HERA MISSION TO DIDYMOS ASTEROID SYSTEM: MECHANICAL AND THERMAL DESIGN VALIDATION
Zoe Townsend, GomSpace Aps, Denmark

IAC-23.B4.8.10
LICIACUBE: TECHNICAL CHALLENGES OF PIONEERING DEEP-SPACE EXPLORATION WITH MICRO-SATELLITES
Alessandro Balossino, Argotec, Italy

IAC-23.B4.8.11
CONCEPT STUDY OF AN ASTEROID LANDING MISSION WITH CONTROL USING NEURAL NETWORK ALGORITHMS
Fatima Alnaqbi, Technology Innovation Institute (TII), United Arab Emirates

IAC-23.B4.8.12
HIGH-TECHNOLOGY OPERATION FOR PLANETARY EXPLORATION - URANIAN MOONS IMPACTOR (HOPE-ROAR) MISSION: AN INNOVATIVE IN-DEPTH STUDY OF THE URANIAN SATELLITES
Serena Campioli, Space Exploration Project group, Space Generation Advisory Council (SGAC), Italy

B4.9-GTS.5. Small Satellite Missions Global Technical Session

October 5 2023, 15:00 — BCC B5

Co-Chair(s): Matthias Hetscher, DLR (German Aerospace Center), Germany; Norbert M.K. Lemke, OHB System AG - Oberpfaffenhofen, Germany;
Rapporteur(s): Alex da Silva Curiel, Surrey Satellite Technology Ltd (SSTL), United Kingdom; Victoria Barabash, Luleå University of Technology, Sweden;

IAC-23.B4.9-GTS.5.1
TESTING STANDARD FOR LEAN SATELLITE CONSTELLATIONS
MENGU CHO, Kyushu Institute of Technology, Japan

IAC-23.B4.9-GTS.5.3
THE GROWTH OF THE CUBESAT INDUSTRY IN THE ARABIAN GULF
Yousuf Faroukh, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

IAC-23.B4.9-GTS.5.4
FOUR MONTHS TO ORBIT: FAST-TRACKING CUBESAT DEVELOPMENT FOR RELIABILITY THROUGH IN-ORBIT-DEMONSTRATIONS
Robin Bonny, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland

IAC-23.B4.9-GTS.5.5
BIRDS-X SATELLITE PROJECT "DRAGONFLY".
Jorge Rubén Casir Ricaño, Kyushu Institute of Technology, Japan

IAC-23.B4.9-GTS.5.6
SATELLITES REFLECTANCE AND BRIGHTNESS TESTING FACILITY FOR REDUCING SPACECRAFT CONSTELLATIONS LIGHT POLLUTION
Gaia Lorenzi, Sapienza University of Rome, Italy

IAC-23.B4.9-GTS.5.7
ESA YPSAT: A YOUNG PROFESSIONALS-LED EXPERIMENTAL SPACECRAFT FOR THE INAUGURAL FLIGHT OF ARIANE 6
Daniel Wischert, European Space Agency (ESA), The Netherlands

IAC-23.B4.9-GTS.5.8
APP4AD, THE ADVANCED PAYLOAD DATA PROCESSING FOR AUTONOMY & DECISION AGENT FOR FUTURE EO AND PLANETARY EXPLORATION MISSIONS
Vito Fortunato, Planetek Italia, Italy

IAC-23.B4.9-GTS.5.10
DEVELOPMENT OF A HIGH-ENERGY ASTROPHYSICS PAYLOAD WITH POLARIMETRIC CAPABILITIES FOR CUBESATS.
José Sousa, LIP, Portugal

IAC-23.B4.9-GTS.5.11
STRATEGIC AUTONOMOUS APPROACHES TO EFFICIENTLY UTILIZE CISLUNAR SPACE FOR MOON TO MARS TRANSIT
Mohammed Irfan Rashed, Korea Advanced Institute of Science and Technology (KAIST), Korea, Republic of

IAC-23.B4.9-GTS.5.12
VESPER: MULTI-SMALL SATELLITE MISSION ARCHITECTURE FOR VENUS EXPLORATION
Thibaut POUGET, Federation Open Space Makers, France

B5. IAF SYMPOSIUM ON INTEGRATED APPLICATIONS

Coordinator(s): Jeanne Holm, City of Los Angeles, United States; Roberta Mugellesi-Dow, European Space Agency (ESA), United Kingdom;

B5.1. Tools and Technology in Support of Integrated Applications

October 2 2023, 15:15 — BCC B2

Co-Chair(s): Jeanne Holm, City of Los Angeles, United States; Roberta Mugellesi-Dow, European Space Agency (ESA), United Kingdom;
Rapporteur(s): Marion Allayioti, European Space Agency (ESA), United Kingdom;

IAC-23.B5.1.1
INTELLECTUAL SYSTEM OF PROCESSING AEROSPACE DATA FOR MODERN MANAGEMENT AZERBAIJAN NATIONAL SPATIAL DATA
Sevda R. Ibrahimova, National Aviation Academy - Azerbaijan, Azerbaijan

IAC-23.B5.1.2
USE OF SPACE TO MITIGATE THE IMPACT OF CLIMATE CHANGE ON AERONAUTICS AND AVIATION
Alfonso Pagani, Associazione Italiana di Aeronautica e Astronautica (AIDAA), Italy

IAC-23.B5.1.3
CIVIL SECURITY AND CRISIS RESPONSE FROM SPACE
Christopher Topping, European Space Agency (ESA), The Netherlands

IAC-23.B5.1.4 (unconfirmed)
LEVERAGING THE DATA AND REASONING FABRIC FOR SPACE SITUATIONAL AWARENESS
Supreet Kaur, NASA Ames Research Center, United States

IAC-23.B5.1.5
DEVELOPING A TOOLKIT FOR EFFICIENT ANALYSIS OF CADI IONOSONDE DATA
Sultan Halawa, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

IAC-23.B5.1.6
THE SHARJAH VERY LONG RADIO INTERFEROMETER – A UNIQUE RADIO OBSERVATORY IN THE MENA REGION
Ilias Fernini, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

IAC-23.B5.1.7 (unconfirmed)
ASSESSMENT OF WATER SOIL EROSION USING GEOWEPP MODEL. CASE STUDY: JWILIN WATERSHED – SOUTH WEST SYRIA
Ahmad Yaghi, Germany

IAC-23.B5.1.9
PREPARATION OF PROJECT ON REGIONAL NETWORK OF GPS/GLONASS GROUND RECEIVERS IN THE TERRITORY OF THE REPUBLIC OF AZERBAIJAN
Alchin Shirin-zade, Azerbaijan National Aerospace Agency, Azerbaijan

IAC-23.B5.1.10
GRAVISAT IS A SPACE SYSTEM FOR MONITORING THE GRAVITATIONAL FIELD AND PREDICTING SEISMIC ACTIVITY.
Sergiy Matviyenko, JSC "RPC "KURS", Ukraine

IAC-23.B5.1.11
DEVELOPING TECHNOLOGY FOR DRINKING CHILLED CARBONATED BEVERAGES IN SPACE
Taichi Yamazaki, ASTRAX, Inc., Japan

B5.2. Integrated Applications End-to-End Solutions

October 4 2023, 15:00 — BCC A5

Co-Chair(s): Boris Penne, OHB System AG, Germany; Roberta Mugellesi-Dow, European Space Agency (ESA), United Kingdom;
Rapporteur(s): Marion Allayioti, European Space Agency (ESA), United Kingdom;

IAC-23.B5.2.1
SAVING LIVES BY INTEGRATING SPACE-BASED SOLUTIONS
Tessa Buckley, Stichting dotSPACE, The Netherlands

IAC-23.B5.2.2
CREATING GLOBAL DIGITAL TWINS TO MODEL URBAN AIR MOBILITY
Jeanne Holm, City of Los Angeles, United States

IAC-23.B5.2.6
RECOGNITION AND LOCATION OF PEOPLE IN DANGEROUS SITUATIONS IN DISASTER AREAS FOR RESCUE TASKS USING EMERGING TECHNOLOGIES.
Erik Francisco-Agustín, Instituto Nacional de Astrofísica, Óptica y Electrónica, Mexico

IAC-23.B5.2.7
SPACE-BASED SOLUTIONS FOR SMART CITIES
Julian Rothenbuchner, Team Tumbleweed, The Netherlands

IAC-23.B5.2.8
SDG INDICATORS INDEXING AT VILLAGE GRANULARITY – HOW EO MAINSTREAMS WITH MANY OTHER DATASETS IN A DATA ANALYTICS APPROACH
Mukund Kadursrinivas Rao, India

IAC-23.B5.2.9
INSURTECH INNOVATION: NEW USE CASES ENABLED BY SPACE TECHNOLOGIES
Valerio Roscani, Fondazione E. Amaldi, Italy

IAC-23.B5.2.10
APPLICATION AND CASE OF MULTI-SOURCE SATELLITE COLLABORATIVE MONITORING TECHNOLOGY IN PINE WILT DISEASE
Wei Sun, China HEAD Aerospace Technology Co., France

IAC-23.B5.2.11
STUDY TO INTEGRATE DELAY-TOLERANT NETWORK PROTOCOLS IN IOT LEO CONSTELLATIONS FOR FLOOD PREVENTION
Joan Adrià Ruiz de Azúa Ortega, i2CAT, Spain

B5.3. Satellite Commercial Applications

October 5 2023, 10:15 — BCC A5

Co-Chair(s): John M. Horack, The Ohio State University College of Engineering, United States; Dengyun Yu, China Aerospace Science and Technology Corporation (CASC), China;
Rapporteur(s): Samuel Malloy, The Ohio State University, United States;

IAC-23.B5.3.1
CONNECTING 4,000,000 PEOPLE TO SPACE-BASED SERVICES
Jeanne Holm, City of Los Angeles, United States

IAC-23.B5.3.2
ADAPTIVE SCHEDULING OF SPACE-GROUND INTEGRATED NETWORK RESOURCES BASED ON COMPETITIVE DQN
Changhao Li, Sun Yat-sen University (Zhuhai Campus), China

IAC-23.B5.3.3
GREEN FINANCE: USE CASES AND COMMERCIAL OPPORTUNITIES
Sascha Deutsch, ESA, France

IAC-23.B5.3.4
CYBERSECURITY AS A DIGITAL TRANSFORMATION CHALLENGE: ESA BUSINESS APPLICATIONS AMBASSADOR PLATFORM FOR ITALY AS AN ENABLER OF SPACE-BASED SOLUTIONS
Giorgia D'Agostinis, Fondazione E. Amaldi, Italy

IAC-23.B5.3.5
EUSPA INTEGRATED APPLICATIONS END-TO-END SOLUTIONS
Christina Giannopapa, European Union Agency for the Space Programme (EUSPA), Czech Republic

IAC-23.B5.3.6
NEPAL'S MUNAL HIGH SCHOOL 1U CUBESAT: SATELLITE SYSTEM-ON-CHIP PAYLOAD DEMONSTRATION FOR STORE AND FORWARD MISSION
Eliza Sapkota, Nepal Space Foundation, Nepal

IAC-23.B5.3.7
HUMAN IMPACT RESEARCH: A DEEP LEARNING PIPELINE SINGULARLY DEVELOPED FOR SPATIAL DATA FOCUSED ON SOCIAL SENSING AND PUBLIC POLICY ADVANCEMENT
Sagarika Rao Valluri, Space Generation Advisory Council (SGAC), India

B6. IAF SPACE OPERATIONS SYMPOSIUM

Coordinator(s): Andreas Rudolph, European Space Agency (ESA), Germany; Otfrid G. Liepack, National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States; Zeina Mounzer, Telespazio VEGA Deutschland GmbH, Germany;

B6.1. Ground Operations - Systems and Solutions

October 5 2023, 15:00 — BCC A5

Co-Chair(s): Sean Burns, EUMETSAT, Germany; Claude AUDOUY, Centre National d'Etudes Spatiales (CNES), France;
Rapporteur(s): Keyur Patel, National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States; Regina Mosenkis, Airbus Defence & Space, Germany;

IAC-23.B6.1.1
A UNIQUE MULTI-BANDS S-X-KA FEED COMPLIANT TO FUTURE EESS AND LUNAR STANDARDS
ARNAUD ROBERT, SAFRAN, France

IAC-23.B6.1.5
ERMES MISSION PLANNER: A MULTI-MISSION PLANNING SW
Cristoforo Abbattista, Planetek Italia, Italy

IAC-23.B6.1.6
PROJECT PRESENTATION FOR IMPLEMENTING THE NEW WAY OF OPERATING THE CNES NETWORK OPERATIONS CENTER
Julie GUIRAUD, Centre National d'Etudes Spatiales (CNES), France

IAC-23.B6.1.7
WRDMS: WEB-BASED REAL-TIME DATA MONITORING SYSTEM FOR MULTI-SPACECRAFT
Haiyang Chu, China Academy of Space Technology (CAST), China

IAC-23.B6.1.8
JAXA 3-WAY DOPPLER SUPPORT TO ARTEMIS 1 MISSION
Timothy Pham, Jet Propulsion Laboratory, United States

IAC-23.B6.1.9
ALGORITHMS AND DATA STRUCTURES IN SPACE TECHNOLOGIES
Shahin Abdullayev, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.B6.1.10
OPEN-SOURCE GROUND SEGMENT AND SATELLITE COMMUNICATION EMPLOYING GNURADIO, LORA AND SDR TECHNOLOGIES
João Pedro Polito Braga, Federal University of São João Del-Rei, Brazil

IAC-23.B6.1.11
SOUTH KOREA'S NEW SATELLITE OPERATION CENTER
Eunghyun Kim, Korea Aerospace Research Institute (KARI), Korea, Republic of

IAC-23.B6.1.12
MODEL-BASED SYSTEM ENGINEERING TO LEVERAGE GROUND SEGMENT DEVELOPMENT OF SPACE MISSIONS.
Antonio Cassiano Julio Filho, Instituto Nacional de Pesquisas Espaciais (INPE), Brazil

B6.2. Innovative Space Operations Concepts and Advanced Systems

October 6 2023, 10:15 — BCC A5

Co-Chair(s): Andreas Rudolph, European Space Agency (ESA), Germany; Mario Cardano, Thales Alenia Space France, Italy; Andreas Ohndorf, DLR (German Aerospace Center), Germany;
Rapporteur(s): Yuichiro Nogawa, Japan Manned Space Systems Corporation (JAMSS), Japan; Jackelynne Silva-Martinez, NASA, United States;

IAC-23.B6.2.2
ONBOARD ADAPTIVE SPACECRAFT MODEL FOR OPTIMIZED SCHEDULING
Johannes Bachmann, Universität der Bundeswehr München, Germany

IAC-23.B6.2.3
THE MOXIE FLATSAT: A GROUND-BASED ISRU OPERATIONAL TESTBED
Shravan Hariharan, Blue Origin LLC, United States

IAC-23.B6.2.4
AI-BASED SPACECRAFT OPERATIONS AND THE ISSUE OF LACKING TRUST - FIRST RESULTS OF AN AI TRUSTABILITY SURVEY IN THE SPACE DOMAIN
Maren Hülsmann, Universität der Bundeswehr München, Germany

IAC-23.B6.2.5
SPACE SETTLEMENTS AND THE ULTIMATE HUMAN-MADE ECOSYSTEM: A FOUNDATIONAL FRAMEWORK FOR CLOSED LOOP WASTE MANAGEMENT SYSTEMS FOR FUTURE LUNAR HABITATS
Nadia Khan, Massachusetts Institute of Technology (MIT), United States

IAC-23.B6.2.7
TOWARD COMPREHENSIVE AI-BASED ONBOARD FDIR: SYSTEM DESIGN AND FIRST RESULTS
Gianluca Maria Campagna, AIKO S.r.l., Italy

IAC-23.B6.2.8
COLLISION AVOIDANCE IN GEO: THE CHALLENGES OF ORBIT DETERMINATION FOR ELECTRIC PROPULSION SATELLITES VIA OPTICAL GROUND BASED OBSERVATIONS
Antonio Vito Montalbò, Italian Ministry of Defense, Italy

IAC-23.B6.2.9
DEVELOPING AN IN-ORBIT SERVICING DEMO MISSION
Maria Antonietta Perino, Thales Alenia Space Italia, Italy

IAC-23.B6.2.10
AI FOR SPACE OPERATIONS: THE NEXT GENERATION OF MISSION OPERATIONS FOR EARTH OBSERVATION CONSTELLATIONS
Baptiste Schandeler, Airbus Defence & Space, France

IAC-23.B6.2.12
A LEARNING-BASED ROBOTIC REFUELING CONTROL SYSTEM FOR ON-ORBIT SERVICE
Yong Chun Xie, Beijing Institute of Control Engineering, China Academy of Space Technology (CAST), China

B6.3. Mission Operations, Validation, Simulation and Training

October 3 2023, 15:00 — BCC A5

Co-Chair(s): Andreas Rudolph, European Space Agency (ESA), Germany; Zeina Mounzer, Telespazio VEGA Deutschland GmbH, Germany;
Rapporteur(s): Borre Pedersen, Kongsberg Satellite Services AS, Norway; Matthew Duggan, The Boeing Company, United States;

IAC-23.B6.3.1
THE CDO: AN INNOVATIVE, FLEXIBLE AND MODERN OPERATIONS CONTROL CENTRE FOR EUROPE'S SPACEPORT, FRENCH GUIANA: GROUND SYSTEM ARCHITECTURE, RESILIENCE & OPERATIONAL EXCELLENCE
Sandra STEERE, Centre National d'Etudes Spatiales (CNES), French Guiana

IAC-23.B6.3.2
INTEGRATED GROUND SEGMENT FOR GREENHOUSE GAS EMISSIONS MONITORING CONSTELLATION
Igor Alonso Portillo, Kongsberg Satellite Services AS, Norway

IAC-23.B6.3.3
ROBUST PLAN EXECUTION STRATEGY WITH UNCERTAINTY FOR AUTONOMOUS ASTEROID PROBE
Shizhen Li, Beijing Institude of technology, China

IAC-23.B6.3.4
METOP-SG MISSION ROUTINE DUMPS OPERATION PREPARATION
Nigar Mehraliyeva, HE Space Operations, Germany

IAC-23.B6.3.5
LOOK MA, NO GROUND TRUTH! ON BUILDING SUPERVISED ANOMALY DETECTION FROM OPS-SAT TELEMETRY
Jakub Nalepa, KP Labs, Poland

IAC-23.B6.3.6
PREPARATION AND TRAINING OF ASTRONAUTS AND GROUND FORCE AT BLUE ABYSS
John Vickers, Blue Abyss, United Kingdom

IAC-23.B6.3.7
ON-BOARD IN LOOP SIMULATOR DESIGN AND MISSION TESTING FOR GUIDANCE, NAVIGATION AND CONTROL (GNC) SYSTEM FOR LANDING MISSIONS
PRATIBHA SRIVASTAVA, Indian Space Research Organization (ISRO), India

IAC-23.B6.3.8
HIERARCHICAL REINFORCEMENT LEARNING BASED PLANNING METHOD WITH UNCERTAINTY IN LIMITED VISIONS FOR LUNAR ROVERS
Siyao Lu, Beijing Institude of technology, China

IAC-23.B6.3.9 (unconfirmed)
INTERNATIONAL COOPERATION IN EARTH OBSERVATIONS: GAOFEN CENTRE GROUND STATIONS NETWORK
Lucas Liu, China HEAD Aerospace Technology Co., China

IAC-23.B6.3.10
MUNAL: AN OVERVIEW OF NEPAL'S FIRST HIGH-SCHOOL CUBESAT
Anuja Shrestha, Nepal Space Foundation, Nepal

B6.4-B3.4. Flight & Ground Operations of HSF Systems - A Joint Session of the IAF Human Spaceflight and IAF Space Operations Symposia

October 4 2023, 10:15 — BCC A7

Co-Chair(s): Annamaria Piras, Thales Alenia Space Italia, Italy; Dieter Sabath, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;
Rapporteur(s): Thomas A.E. Andersen, Danish Aerospace Company A/S, Denmark; Maria Grulich, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;

IAC-23.B6.4-B3.4.2
UNDERSTANDING ISS ANOMALIES IN THE FRAME OF DEVELOPING RELIABLE AND SUSTAINABLE SPACE STATIONS IN THE FUTURE
Rania Toukebri, Airbus D&S, Germany

B6.5. Large Constellations & Fleet Operations

October 6 2023, 13:45 — BCC A5

Co-Chair(s): Zeina Mounzer, Telespazio VEGA Deutschland GmbH, Germany; Claude AUDOUY, Centre National d'Etudes Spatiales (CNES), France; Simon Plum, European Space Agency (ESA-ESOC), Germany; Thomas Uhlig, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;
Rapporteur(s): Jim Volp, , The Netherlands; Shawn Linam, Qwaltec, Inc., United States; Mario Cardano, Thales Alenia Space France, Italy;

IAC-23.B6.5.1
DARK AND QUIET SKIES: A PREDICTIVE TECHNIQUE TO MITIGATE THE IMPACT OF SATELLITE REFLECTIONS ON ASTRONOMICAL OBSERVATORIES
Mark A. Skinner, The Aerospace Corporation, United States

IAC-23.B6.5.2
RESULTS OF THE OPTICAL OBSERVATION AND CHARACTERIZATION OF APPARENT BRIGHTNESS OF THE DIFFERENT STARLINK SATELLITE GENERATIONS AND VERSIONS BY THEIR ORBITS, OPERATIONS, GEOMETRY AND MORE
Andreas Hornig, AerospaceResearch.net, Germany

IAC-23.B6.5.4
CONSIDERATIONS FOR SATELLITE CONSTELLATION DEPLOYMENT VIA MOMENTUM EXCHANGE TETHERS
Ben Campbell, University of Alabama in Huntsville, United States

IAC-23.B6.5.5
IDENTIFYING KEY NODES OF MEGA LEO SATELLITE NETWORK BASED ON NODE EMBEDDING AND MACHINE LEARNING
Yiwei Zou, Sun Yat-sen University (Zhuhai Campus), China

IAC-23.B6.5.6
THE CONSTELLATION FORMATION OPERATIONS PLANNING SOFTWARE: ENABLING SCALABLE FORMATION MANAGEMENT FOR SPACECRAFT FLEETS
Pouyan Tahmasebipour, Space Flight Laboratory, University of Toronto, Canada

IAC-23.B6.5.7
WHAT MASINT AND OSINT CAN TELL US ABOUT SATELLITE MEGA-CONSTELLATIONS
Andreas Hornig, AerospaceResearch.net, Germany

IAC-23.B6.5.8 (unconfirmed)
POTENTIAL ERROR ELLIPSOID ENVELOPE BASED MULTI-OBJECT OPTIMAL COLLISION AVOIDANCE MANEUVER FOR MEGA-CONSTELLATION
Haochen Tao, School of Aerospace Engineering, Beijing Institute of Technology, China

IAC-23.B6.5.9
TOWARDS AUTOMATED, CLEAR AND EFFICIENT RULE-BASED CONJUNCTION COORDINATION FOR CONSTELLATIONS
Esfandiar Farahvashi, OKAPI:Orbits GmbH, Germany

IAC-23.B6.5.10
ORBITAL ENVIRONMENT SHELL MODELS TO SUPPORT COMPLIANCE WITH UN SUSTAINABLE DEVELOPMENT GOALS
John Mackintosh, University of Manchester, United Kingdom

C1. IAF ASTRODYNAMICS SYMPOSIUM

Coordinator(s): Daniel Scheeres, Colorado Center for Astrodynamics Research, University of Colorado, United States; Vincent Martinot, Thales Alenia Space France, France;

C1.1. Attitude Dynamics (1)

October 3 2023, 15:00 — BCC B4

Co-Chair(s): Giovanni B. Palmerini, Sapienza University of Rome, Italy; Zhanfeng Meng, China Academy of Space Technology (CAST), China;
Rapporteur(s): Robert G. Melton, Pennsylvania State University, United States;

IAC-23.C1.1.1
ABSOLUTE VISUAL SERVOING FOR PRECISE EARTH TARGET POINTING ONBOARD SMALL SATELLITES
Ilham Mammadov, Zentrum für Telematik, Germany

IAC-23.C1.1.2
POINTING STABILITY OF HIZ-GUNDAM SATELLITE AFTER AGILE ATTITUDE MANEUVERS UNDER THE RATE BIAS ERROR OF FIBER OPTIC GYROS
Toshio Kamiya, Meisei University, Japan

IAC-23.C1.1.4
OPTIMAL ATTITUDE PATH PLANNING ALONG TORQUE EQUILIBRIUM POINTS USING AERODYNAMIC DATABASE FOR DEORBITING LARGE DEBRIS BY SMALL SATELLITES
Takahiro Sasaki, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.C1.1.5
MULTI-OBJECTIVE OPTIMIZATION OF ATTITUDE MANEUVER PLANNING FOR FLEXIBLE ASTEROID LANDER USING POPULATION EVOLUTIONARY ALGORITHM
Zhe Zhu, Beijing Institute of Technology, China

IAC-23.C1.1.6
THE EFFECTS OF POINTING ERROR SOURCES ON ENERGY DELIVERY FROM ORBITING SOLAR REFLECTORS
Iain Moore, University of Glasgow, United Kingdom

IAC-23.C1.1.7
A FREE-FLOATING 3-AXIS ATTITUDE CONTROL TEST ENVIRONMENT WITH OPTICAL TRACKING FOR HIGH-PRECISION POINTING VERIFICATION OF CUBESATS
Ilham Mammadov, Zentrum für Telematik, Germany

IAC-23.C1.1.8
LIQUID-FILLED SPACECRAFT FINITE-TIME ATTITUDE MANEUVER CONTROL WITH ANGULAR AND VELOCITY CONSTRAINT
Yanning Guo, Harbin Institute of Technology, China

IAC-23.C1.1.9
ATTITUDE DYNAMICS OF SMALL SATELLITES IN CIRCULAR NEAR-EQUATORIAL LEO/VLEO
Dmitry A. Sizov, Nazarbayev University, Kazakhstan

IAC-23.C1.1.10
PRESCRIBED PERFORMANCE ADAPTIVE CONTROL WITH FAULT-TOLERANCE CAPABILITY FOR A SUN-POINTING SPACECRAFT ON HALO ORBIT
Srianish Vutukuri, Indian Institute of Science, India

C1.2. Attitude Dynamics (2)

October 4 2023, 10:15 — BCC B4

Co-Chair(s): Toshio Kamiya, Meisei University, Japan; Mikhail Ovchinnikov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation;
Rapporteur(s): Bang Hyochoong, Korea Advanced Institute of Science and Technology (KAIST), Korea, Republic of;

IAC-23.C1.2.1
KEYNOTE: "BREAKWELL LECTURE" - SMALL SATELLITES DYNAMICS AND CONTROL: RETROSPECT AND FUTURE
Mikhail Ovchinnikov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-23.C1.2.2
ATTITUDE CONTROL AND TRAJECTORY PLANNING OF A SPACE MANIPULATOR SYSTEM USING KANE'S FORMULATION
David Paolo Madonna, Sapienza University of Rome, Italy

IAC-23.C1.2.3
ATTITUDE CONTROL USING ITERATIVE LEARNING CONTROL CONSIDERING ORBITAL MOTION OF NRHO
Yuta Hayashi, Kyushu University, Japan

IAC-23.C1.2.4
HERMES ADCS: FROM SYSTEM DESIGN TO PRE-FLIGHT VERIFICATION AND TESTING
Andrea Colagrossi, Politecnico di Milano, Italy

IAC-23.C1.2.6
LARGE-ANGLE ATTITUDE MANEUVER OF VARIABLE-SHAPE SPACECRAFT WITH NONLINEAR MODEL PREDICTIVE CONTROL
Haruta Miki, Tokyo Institute of Technology, Japan

IAC-23.C1.2.7
ONLINE ESTIMATION OF UNKNOWN PARAMETERS FOR FLEXIBLE SPACECRAFT SUBJECT TO MEASUREMENTS NOISE
Nicolo Woodward, Embry-Riddle Aeronautical University, United States

IAC-23.C1.2.8
SYNTHESIS OF PROGRAM ANGULAR MOTION REGIMES FOR THE MAGNETIC ATTITUDE CONTROL SYSTEM OF SPACECRAFT
Anna Okhitina, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-23.C1.2.9
KERNEL MANAGEMENT STRATEGY FOR REACTION WHEEL OPTIMAL SPEED CONTROL FOR SPACECRAFTS FOR ENHANCED POINTING ACCURACY AND AGILITY
CHIRANJIB GUHA MAJUMDER, ISRO, India

C1.3. Guidance, Navigation and Control (1)

October 4 2023, 15:00 — BCC B4

Co-Chair(s): Guo Linli, Institute of Manned Space System Engineering,China Academy of Space Technology (CAST), China; Krishna Kumar, Ryerson University, Canada;
Rapporteur(s): Juan Carlos Bastante, OHB System AG-Bremen, Germany;

IAC-23.C1.3.1
A NOVEL GUIDANCE SCHEME FOR BINARY ASTEROIDS-BASED GRAVITY TRACTOR MISSIONS
Alessio Bocci, Politecnico di Milano, Italy

IAC-23.C1.3.2
AUTONOMOUS CONTROL FOR ARBITRARY THRUSTER CONFIGURATIONS AND MASS PROPERTIES IN SPECIAL EUCLIDEAN GROUP SE(3)
Matthew Wittal, NASA, United States

IAC-23.C1.3.3
DEMONSTRATION OF CRATER-BASED NAVIGATION FOR AUTONOMOUS MOON ORBITING AND LANDING APPLICATIONS
Jean-Francois Hamel, NGC Aerospace Ltd., Canada

IAC-23.C1.3.4
VARIATIONAL APPROACH FOR MODELLING AND OPTIMAL CONTROL OF ELECTRODYNAMIC TETHER MOTION
Yana Lishkova, University of Oxford, United Kingdom

IAC-23.C1.3.5
INTELLIGENT COOPERATIVE CONTROL METHOD FOR FLEXIBLE PROBE LANDING ON SMALL CELESTIAL BODIES
Bingjie Lu, Beijing Institute of technology, China

IAC-23.C1.3.6
GUIDING ASTEROIDS TO FORM AN ARTIFICIAL BOUND BINARY PAIR USING CONTINUOUS CONTROL ACCELERATION
Amirah Algethami, University of Glasgow, United Kingdom

IAC-23.C1.3.7
6-DOF AUTONOMOUS AND ROBUST GUIDANCE FOR ASTEROID LANDING
Tomohiro Ishizuka, ISAE-Supaero University of Toulouse, France

IAC-23.C1.3.8
UPPER STAGE MASS PROPERTY ESTIMATION IN THE PRESENCE OF SLOSHING FLUIDS WITH LOW BOND NUMBERS
Matthew Wittal, NASA, United States

IAC-23.C1.3.9
STABILITY OF DEEP NEURAL NETWORKS FOR FEEDBACK-OPTIMAL PINPOINT LANDINGS
Omkar Mulekar, University of Florida, United States

IAC-23.C1.3.10
GUIDANCE AND CONTROL ALGORITHM FOR MARS AEROCAPTURE CONSIDERING UNCERTAINTIES
Ayumi Chikusa, Kyushu University, Japan

C1.4. Guidance, Navigation and Control (2)

October 5 2023, 10:15 — BCC B4

Co-Chair(s): Mai Bando, Kyushu University, Japan; Eberhard Gill, Delft University of Technology, The Netherlands;
Rapporteur(s): Hanspeter Schaub, Colorado Center for Astrodynamics Research, University of Colorado, United States;

IAC-23.C1.4.1
FORMATION KEEPING IN VERY LOW-EARTH ORBIT: THE VULCAIN MISSION CASE STUDY
Enrico Belloni, Politecnico di Milano, Italy

IAC-23.C1.4.2
MITIGATING FUEL SLOSHING DISTURBANCE IN ON-ORBIT SATELLITE REFUELING: AN EXPERIMENTAL STUDY
Mohammadamin Alandihallaj, University of Luxembourg, Luxembourg

IAC-23.C1.4.3
FTCESO-BASED PREDEFINED TIME CONTROL FOR SATELLITE SWARM RECONFIGURATION
Chuang Liu, Northwestern Polytechnical University, China

IAC-23.C1.4.4
DIGRAPHS BASED ALGORITHMS FOR FORMATION FLIGHT CONTROL
Sergey Shestakov, Keldysh Institute of Applied Mathematics of RAS, Russian Federation

IAC-23.C1.4.5
APPLICATION OF ELECTRODYNAMIC TETHERS FOR TETRAHEDRAL SATELLITE FORMATION CONTROL
Kirill Chernov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-23.C1.4.6
IN-ORBIT LARGE SPACE STRUCTURE ASSEMBLY USING REPULSIVE SPACECRAFT-ROBOT WITH MANIPULATORS
Danil Ivanov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-23.C1.4.7
VALIDATION OF CNN-BASED IMAGE PROCESSING ALGORITHM FOR THE HERA MISSION WITH MODEL-IN-THE-LOOP AND HARDWARE-IN-THE-LOOP TESTS
Aurelio Kaluthantrige, University of Strathclyde, United Kingdom

IAC-23.C1.4.8
ACTIVE DISTURBANCE REJECTION CONTROL FOR SPACECRAFT RELATIVE MOTION IN LIBRATION POINT ORBITS SUBJECT TO ACTUATOR SATURATION AND TIME-DELAYS
Wenchao Li, Northwestern Polytechnical University, China

IAC-23.C1.4.9
MISSION ANALYSIS AND GUIDANCE AND CONTROL FOR THE SPEYE INSPECTION CUBESAT
Giacomo Borelli, Politecnico di Milano, Italy

IAC-23.C1.4.10
AERODYNAMIC COORDINATED CONTROL OF ATTITUDE AND RELATIVE POSITION OF A FORMATION OF MICROSATELLITES
Marco Sabatini, Sapienza University of Rome, Italy

C1.5. Guidance, Navigation & Control (3)

October 5 2023, 15:00 — BCC B4

Co-Chair(s): Jean de Lafontaine, NGC Aerospace Ltd., Canada; Yung Fu Tsai, National Cheng Kung University, Taiwan, China;
Rapporteur(s): Miguel Bello Mora, Deimos Space SLU, Spain;

IAC-23.C1.5.2
TRAJECTORY OPTIMIZATION, GUIDANCE AND CONTROL OF LOW-THRUST ORBIT TRANSFERS FROM THE LUNAR GATEWAY TO LOW LUNAR ORBITS
Mauro Pontani, Sapienza University of Rome, Italy

IAC-23.C1.5.3
THE EXTREMA AUTONOMOUS GUIDANCE ALGORITHM FOR LOW-THRUST INTERPLANETARY SPACECRAFT
Andrea Carlo Morelli, Politecnico di Milano, Italy

IAC-23.C1.5.4
ON THE DYNAMICS AND CONTROL OF A SPACECRAFT OBSERVING EXOPLANETS VIA THE SOLAR GRAVITATIONAL LENS
Denis Perepukhov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-23.C1.5.5
KAMNET – APPLYING MACHINE LEARNING TECHNIQUES FOR OPTICAL NAVIGATION IN EARTH OBSERVATION MISSIONS
Manuel Sanjurjo-Rivo, Universidad Carlos III de Madrid, Spain

IAC-23.C1.5.7
UNIVERSAL FUNCTION AND PRIMER VECTOR THEORY FOR FUEL-OPTIMAL LAMBERT PROBLEM
Xiaowei WANG, China Academy of Launch Vehicle Technology (CALT), China

IAC-23.C1.5.8
A NEW FORM OF OSCULATING KEPLERIAN APPROXIMATION OF N-BODY NON-KEPLERIAN MOTION FOR THE DESIGN OF GNC ALGORITHMS
Catello Leonardo Matonti, Politecnico di Torino, Italy

IAC-23.C1.5.9
OPNAV-ONLY STATION KEEPING ON NRHO USING STOCHASTIC PREDICTIVE CONTROL
Yuri Shimane, Georgia Institute of Technology, United States

IAC-23.C1.5.10
PARTICLE SWARM OPTIMIZATION BASED TRACKING WINDOW PLANNING FOR CISLUNAR ORBITERS PERFORMING AUTONOMOUS RADIOMETRIC NAVIGATION
Erdem Turan, Delft University of Technology (TU Delft), The Netherlands, The Netherlands

C1.6. Mission Design, Operations & Optimization (1)

October 6 2023, 10:15 — BCC B4

Co-Chair(s): Yury Razoumny, RUDN University, Russian Federation; Mauro Pontani, Sapienza University of Rome, Italy;
Rapporteur(s): Liang Tang, Beijing Institute of Control Engineering, CAST, China;

IAC-23.C1.6.1
DESIGN OF OPTIMAL SPATIAL LOW-ENERGY TRAJECTORIES TO NEAR-EARTH OBJECTS
Elena Fantino, Khalifa University of Science and Technology (KUST), United Arab Emirates

IAC-23.C1.6.2
COMBINED TRAJECTORY DESIGN AND NAVIGATION ANALYSIS FOR HERA'S VERY-CLOSE FLYBY OF DIMORPHOS.
Iosto Fodde, University of Strathclyde, The Netherlands

IAC-23.C1.6.3
DESTINY+: TRAJECTORY DESIGN AND OPERATIONAL PLANNING FOR DEEP SPACE EXPLORATION
Takayuki Yamamoto, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.C1.6.4
ENCELADUS MOON IN SITU SCIENCE: PRELIMINARY MISSION ANALYSIS AND GNC DESIGN FOR THE EPOPEA MISSION
Matteo Lusvarghi, Politecnico di Milano, Italy

IAC-23.C1.6.6
MISSION STRATEGY TO AWAIT COMETS BY LEVERAGING MANIFOLDS AND LOW THRUST
Soi Yamaguchi, Kyushu University, Japan

IAC-23.C1.6.7
EUROPA CLIPPER MISSION ANALYSIS: INTERPLANETARY TRAJECTORY DESIGN
Etienne Pellegrini, NASA Jet Propulsion Laboratory, United States

IAC-23.C1.6.8
EVALUATION OF OPTIMAL LOW-THRUST INTERPLANETARY TRAJECTORIES WITH COLLINEAR LIBRATION POINTS TRANSITIONS
Sung Wook Yoon, Moscow Aviation Institute (National Research Institute, MAI), Russian Federation

IAC-23.C1.6.9
AN EXPLORATION OF A PROSPECTIVE FLIGHT SCHEME TO VENUS ASSOCIATED WITH AN ASTEROID FLYBY
Vladislav Zubko, Space Research Institute (IKI), Russian Academy of Sciences (RAS), Russian Federation

IAC-23.C1.6.10
OPTIMAL TRANSFER TRAJECTORIES BETWEEN RELATIVE QUASI-SATELLITE ORBITS
Nishanth Pushparaj, University of Nottingham, United Kingdom

C1.7. Mission Design, Operations & Optimization (2)

October 6 2023, 13:45 — BCC B4

Co-Chair(s): Erick Lansard, Nanyang Technological University, Singapore, Republic of; Richard Epenoy, Centre National d'Etudes Spatiales (CNES), France;

IAC-23.C1.7.1
OPTIMAL LOW-THRUST EARTH-MOON ORBIT TRANSFERS VIA MULTIPLE-ARC FORMULATION AND IMPLICIT COSTATE TRANSFORMATION
Mauro Pontani, Sapienza University of Rome, Italy

IAC-23.C1.7.2
OPTIMAL TRAJECTORY DESIGN BY ADAM UNDER STOCHASTIC DISTURBING ACCELERATION
Shodai Hirayama, Kyushu University, Japan

IAC-23.C1.7.3
MULTI-OBJECTIVE OPTIMIZATION OF LUNAR COMMUNICATION/NAVIGATION CONSTELLATIONS BASED ON LPOS AND DROS
Yuchen He, Beihang University, China

IAC-23.C1.7.4
MATRYOSHKA ORBITAL NETWORKS
Joshua Gribben, University of Strathclyde, United Kingdom

IAC-23.C1.7.5
MANY-TO-MANY GEO ON-ORBIT REFUELING MISSION OPTIMIZATION UNDER TIME-VARYING FUEL DEMANDS VIA MODIFIED DIFFERENTIAL EVOLUTION
Chuanjiang Li, Harbin Institute of Technology, China

IAC-23.C1.7.6
OPTIMIZING LAUNCH WINDOW OPPORTUNITIES FOR ESA'S COMET INTERCEPTOR MISSION USING PRIME VECTOR THEORY
Miguel Rebelo, ISAE-Supaero University of Toulouse, France

IAC-23.C1.7.7
EXTENDED PERILUNE RENDEZVOUS METHOD FOR LOW DELTA-V TRANSITION TO NRHO
Junji Kikuchi, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.C1.7.8
EXTREMELY LOW EARTH ORBIT IMAGING AND TECHNOLOGY EXPLORER (ELITE): PUSHING EARTH OBSERVATION BOUNDARIES
Erick Lansard, Nanyang Technological University, Singapore, Republic of

IAC-23.C1.7.9
APPROXIMATE CLOSED-FORM SOLUTION OF THE PERIODICALLY PERTURBED TWO-BODY PROBLEM WITH APPLICATION TO LOW-THRUST OPTIMIZATION
Kirill Suslov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-23.C1.7.10
OPTIMIZATION OF NON-DIFFERENTIABLE TRAVELLING SALESMAN PROBLEM FOR SPACE TRAJECTORY DESIGN WITH NON-BRANCHING OPERATION
Liqiang Hou, Shanghai Jiaotong University, China

C1.8. Orbital Dynamics (1)

October 2 2023, 15:15 — BCC B4

Co-Chair(s): Yuichi Tsuda, Japan Aerospace Exploration Agency (JAXA), Japan; Elena Fantino, Khalifa University of Science and Technology (KUST), United Arab Emirates;
Rapporteur(s): Kathleen Howell, Purdue University, United States;

IAC-23.C1.8.1
LUNAR FORMATION FLYING INVARIANT UNDER ZONAL HARMONIC PERTURBATIONS
Stefano Carletta, Sapienza University of Rome, Italy

IAC-23.C1.8.2
ANALYTICAL APPROXIMATIONS OF SPATIAL DISTANT RETROGRADE ORBITS
Nuraddin Adigozalov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-23.C1.8.3
VECTORIAL FORMULATION FOR THE PROPAGATION OF AVERAGE DYNAMICS UNDER GRAVITATIONAL EFFECTS
Juan Félix San-Juan, Universidad de La Rioja, Spain

IAC-23.C1.8.4
JET TRANSPORT-BASED ANALYSIS OF SPACECRAFT ABSOLUTE REACHABLE DOMAIN UNDER A SINGLE IMPULSE
Junhua Zhang, National Key Laboratory of Aerospace Flight Dynamic, Northwestern Polytechnical University, China

IAC-23.C1.8.5
EXACT SEPARATION OF LONG- AND SHORT-PERIOD EFFECTS IN THE COMPUTATION OF MEAN ELEMENTS OF ARTIFICIAL SATELLITE THEORY
Martin Lara, Universidad de La Rioja, Spain

IAC-23.C1.8.6
EXPLORING SOLUTIONS FOR MULTI-IMPULSE AIDED LOW-ENERGY MOON-TO-MOON TRANSFER
Limin Qin, Nanjing University of Aeronautics and Astronautics, China

IAC-23.C1.8.7
PRECISE ORBIT PREDICTION OF LEO SATELLITE VIA PHYSICS INFORMED MACHINE LEARNING
Toshio Kamiya, Meisei University, Japan

IAC-23.C1.8.8
LONG-TERM ORBITAL EVOLUTION SURROUNDING A BINARY ASTEROID SYSTEM
Pengfei Lu, Beihang University, China

IAC-23.C1.8.9
ANALYSIS OF GRAVITY PERTURBATIONS OVER LOW-THRUST TRAJECTORIES FOR DESTINY+ MISSION USING EQUINOCTIAL ELEMENTS
Josué Cardoso dos Santos, Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.C1.8.10
TETHER SYSTEMS FOR PHOBOS EXPLORATION
Vladimir S. Aslanov, Samara National Research University (Samara University), Russian Federation

C1.9. Orbital Dynamics (2)

October 3 2023, 10:15 — BCC B4

Co-Chair(s): Othon Winter, UNESP - São Paulo Sate University, Brazil; Josep J. Masdemont, Universitat Politecnica de Catalunya (UPC), Spain;
Rapporteur(s): David C. Folta, National Aeronautics and Space Administration (NASA), Goddard Space Flight Center, United States;

IAC-23.C1.9.1
COMPUTATIONAL METHODOLOGIES FOR QUASI-PERIODIC ORBITS AND INVARIANT MANIFOLD CONNECTIONS IN NON-AUTONOMOUS PROBLEMS
Ruilong Li, National Key Laboratory of Aerospace Flight Dynamics,Northwestern Polytechnical University,Xi'an, China

IAC-23.C1.9.2
ANALYSIS OF TRANSFER TRAJECTORIES IN CISLUNAR SPACE USING SEQUENCES OF LOBE DYNAMICS
Naoki Hiraiwa, Kyushu University, Japan

IAC-23.C1.9.3
EXPLORATION OF NEAR RECTILINEAR HALO ORBITS AND THEIR TRANSFER TRAJECTORIES IN THE JUPITER-EUROPA SYSTEM
Pengfei Lu, Beihang University, China

IAC-23.C1.9.4
A NEW FAMILY OF PHOTOGRAVITATIONAL SUN-EARTH L1 HALO ORBITS TO ENABLE PLANETARY SUNSHADE
Catello Leonardo Matonti, Politecnico di Torino, Italy

IAC-23.C1.9.5
INFORMED DISTRIBUTED SPACE ASSETS DESIGN ON MULTI-BODY QUASI-PERIODIC TORI BY MEANS OF ENGINEERING PROPERTIES MAPPING TECHNIQUES
Daniele Barberi Spirito, Politecnico di Milano, Italy

IAC-23.C1.9.6
AN ESTABLISHMENT AND TRANSFER STRATEGY FOR FORMATION CONFIGURATIONS BASED ON OMEGA-U TORUS TOPOLOGICAL EQUIVALENCE
Jixin Ding, School of Astronautics, Beihang University, China

IAC-23.C1.9.7
LOW-ENERGY LUNAR TRANSFER DESIGN USING HIGH- AND LOW-THRUST ON BALLISTIC CAPTURE TRAJECTORIES
Alexey Ivanyukhin, Research Institute of Applied Mechanics and Electrodynamics (RIAME), MAI, Russian Federation

IAC-23.C1.9.8
SEMI-ANALYTICAL ESTIMATION OF THE PROBABILITY OF CAPTURE INTO GROUND-TRACK RESONANCES OF DAWN AROUND VESTA.
Wail Boumchita, University of Strathclyde, United Kingdom

IAC-23.C1.9.9
CALLISTO-GANYMEDE-EUROPA TRIPLE-CYCLER TRAJECTORIES USING THE NEAR-RESONANCES
Limin Qin, Nanjing University of Aeronautics and Astronautics, China

C2. IAF MATERIALS AND STRUCTURES SYMPOSIUM

Coordinator(s): Jochen Albus, ArianeGroup, Germany; Alwin Eisenmann, IABG Industrieanlagen - Betriebsgesellschaft mbH, Germany;

C2.1. Space Structures I - Development and Verification (Space Vehicles and Components)

October 2 2023, 15:15 — BCC A1

Co-Chair(s): Alwin Eisenmann, IABG Industrieanlagen - Betriebsgesellschaft mbH, Germany; Andreas Rittweger, DLR (German Aerospace Center), Germany;
Rapporteur(s): Jochen Albus, ArianeGroup, Germany; Markus Geiss, OHB System AG, Germany;

IAC-23.C2.1.1
SYNTHESIS OF DICARBOXYLATE DERIVATIVES WITH ANTIMICROBIAL PROPERTIES
Zahra Fataliyeva, Azerbaijan State Oil and Industry University (ASOIU), Azerbaijan

IAC-23.C2.1.2
WINDOWS FOR SPACE APPLICATIONS
Annamaria Piras, Thales Alenia Space Italia, Italy

IAC-23.C2.1.3
MORPHOLOGY OF POLYHEDRAL SPACE HABITAT MODULES - IDENTIFYING THE IDEAL FORM USING MULTI-CRITERIA ANALYSIS
Elliott Ruzicka, United States

IAC-23.C2.1.5
PASSIVE THERMAL EXPANSION COMPENSATION MECHANISM DESIGN USING FEM FOR OFF-AXIS OPTICAL PAYLOAD IN LOW EARTH ORBIT SMALL SATELLITE
Pearachad Chartsiriwattana, National Astronomical Research Institute of Thailand (NARIT), Thailand

IAC-23.C2.1.6
EFFECT OF GEOMETRIC PARAMETERS OF CONSTITUENT MEMBERS ON THE STRUCTURAL BEHAVIOUR OF THE LATTICE TRUSS BEAM FOR SPACE APPLICATIONS
Litesh Sulbhewar, University of Glasgow, United Kingdom

IAC-23.C2.1.8
INVESTIGATION OF INTEGRATION OF ANNULAR FIN CONFIGURATION AND GEOMETRY FOR IMPROVED THERMAL MANAGEMENT OF ROCKET NOZZLES: DESIGN, ANALYSIS, AND OPTIMIZATION
Sriram Kumar, Sri Sairam Engineering College, India

IAC-23.C2.1.9
A PNEUMATIC SEPARATION SYSTEM FOR ROCKET SEPARATION
Aizhen Ming, CAS Space, China

IAC-23.C2.1.10
DESIGN OPTIMIZATION OF CUBIC IN SHAPE PRESSURANT TANK FOR CUBESAT'S PROPULSION SYSTEM
Georgy Shcheglov, Bauman Moscow State Technical University, Russian Federation

C2.2. Space Structures II - Development and Verification (Deployable and Dimensionally Stable Structures)

October 3 2023, 10:15 — BCC A1

Co-Chair(s): Paolo Gasbarri, University of Rome "La Sapienza", Italy; Oliver Kunz, Beyond Gravity, Switzerland;
Rapporteur(s): Aicke Patzelt, MT Aerospace AG, Germany; Thomas Sinn, DcubeD (Deployables Cubed GmbH), Germany;

IAC-23.C2.2.1
THERMAL STRESSES AND BUCKLING OF VARIABLE STIFFNESS COMPOSITE LAMINATES
Rebecca Masia, Politecnico di Torino, Italy

IAC-23.C2.2.2
A HIGHER-ORDER BEAM FINITE ELEMENT FOR THE FOLDING ANALYSIS OF COMPOSITE-MADE BOOMS WITH SILICONE MATRIX AND CARBON FIBERS
Alfonso Pagani, Associazione Italiana di Aeronautica e Astronautica (AIDAA), Italy

IAC-23.C2.2.3
ANALYSIS OF OUT-OF-PLANE THERMAL DEFORMATION OF THE ULTRALIGHT PHASED ARRAY ANTENNA
Ryo Higuchi, University of Tokyo, Japan

IAC-23.C2.2.4
UNFOLDING METHODS OF A TWO ORDERS OF MAGNITUDE MECHANICAL VOLUME REDUCED SPHEROID TUMBLEWEED MOBILE IMPACTOR
Nils Neumeister, Team Tumbleweed, Austria

IAC-23.C2.2.5
A PROPOSAL FOR A LIGHTWEIGHT DEPLOYABLE LARGE MEMBRANE DIPOLE ARRAY ANTENNA
Ryohei Orii, The Graduate Universty for Advanced Studies[SOKENDAI], Japan

IAC-23.C2.2.6
NON-INERTIAL STRUCTURAL EFFECTS IN FLEXIBLE SPACECRAFT WITH SPINNING APPENDAGE
David Paolo Madonna, Sapienza University of Rome, Italy

IAC-23.C2.2.7
TENSEGRITICAL MODEL ROCKET FUSELAGE BASED ON PRISMATIC UNIT CELLS STRUCTURES FOR IMPACT ABSORBING AND ENERGY DISTRIBUTING PURPOSES.
Bryan Méndez Medina, Universidad de Costa Rica, Costa Rica

IAC-23.C2.2.8
PRELIMINARY DESIGN OF A CUBESAT DEMONSTRATOR FOR AN ORIGAMI-INSPIRED DEPLOYABLE STRUCTURE
Joshika Sachithanandan, Delft University of Technology (TU Delft), The Netherlands, The Netherlands

IAC-23.C2.2.9
RELAXATION EFFECTS DUE TO THE STOWAGE PHASE ON THE DEPLOYMENT OF ULTRA-THIN COMPOSITE BOOMS
Daniele Tortorici, Sapienza University of Rome, Italy

IAC-23.C2.2.10
ANALYSIS OF THE ANGULAR MOTION DYNAMICS OF A PROSPECTIVE DESCENT VEHICLE EQUIPPED WITH A DEPLOYABLE BRAKING
Andrey Kukharenko, Bauman Moscow State Technical University, Russian Federation

IAC-23.C2.2.11
DEGRADATION PROCESSES OF AL/MGF2 UV TELESCOPE MIRRORS UNDER HIGH ENERGY PHOTONS
Victor Telekh, Bauman Moscow State Technical University, Russian Federation

IAC-23.C2.2.12
ADDITIVE MANUFACTURING WITH MOLTEN LUNAR REGOLITH UNDER VACUUM CONDITIONS
Simon Stapperfend, TU Berlin, Germany

C2.3. Space Structures - Dynamics and Microdynamics

October 3 2023, 15:00 — BCC A1

Co-Chair(s): Harijono Djojodihardjo, Bandung Institut of Tecnology, Indonesia; Élcio Jeronimo de Oliveira, Associazione Italiana di Aeronautica e Astronautica (AIDAA), Brazil;
Rapporteur(s): Ijar Da Fonseca, ITA-DCTA, Brazil; Paolo Gasbarri, University of Rome "La Sapienza", Italy;

IAC-23.C2.3.1
KEYNOTE: 11TH PAOLO SANTINI MEMORIAL LECTURE - STRUCTURAL INTEGRITY OF SPACE VEHICLES AND STRUCTURES SUBJECT TO MOTION, THERMO-STRUCTURAL DYNAMICS AND ENVIRONMENTAL EFFECTS
Harijono Djojodihardjo, Bandung Institut of Tecnology, Indonesia

IAC-23.C2.3.2
NONLINEARITIES AND HIGH ORDER EFFECTS ON MEMBRANES VIBRATION
Marianna Valente, Politecnico di Torino, Italy

IAC-23.C2.3.3
DEVELOPMENT OF REACTION WHEEL BALANCING PLATFORM FOR NANOSATELLITE APPLICATION
GUEDDACHE Brahim, Agence Spatiale Algérienne (ASAL), Algeria

IAC-23.C2.3.4
SCALING, MANUFACTURING AND OPERATIONS OF A FREE-FLOATING PLATFORM FOR THE ON-GROUND TESTING OF ROBUST COLLOCATED CONTROL FOR A LARGE FLEXIBLE SATELLITE
Marco Sabatini, Sapienza University of Rome, Italy

IAC-23.C2.3.6
STATE SPACE MODELING AND ESTIMATION OF FLEXIBLE STRUCTURE USING THE THEORY OF FUNCTIONAL CONNECTIONS
Carlo Lombardi, Embry-Riddle Aeronautical University, United States

IAC-23.C2.3.7
DYNAMIC SIMULATION OF WRAP-RIB ANTENNA BY RAILEIGH-RITZ METHOD
Tetsuo Yasaka, Institute for Q-shu Pioneer of Space, Inc. (iQPS), Japan

IAC-23.C2.3.8
A VTVL PROTOTYPE FOR FLIGHT CONTROL ALGORITHM VERIFICATION AND STEM EDUCATION
Rui Zhang, CAS Space, China

IAC-23.C2.3.9
AUGMENTED FAULT-TOLERANT DYNAMIC SLIDING MODE CONTROL OF FLEXIBLE-JOINT SPACE MANIPULATORS
Xiangling Chen, Fuzhou University, China

IAC-23.C2.3.10
TIME-DELAY ESTIMATION BASED ADAPTIVE IMPEDANCE CONTROL OF A FREE-FLYING SPACE MANIPULATOR'S WIPING A SURFACE
Tao Lin, Fuzhou University, China

IAC-23.C2.3.11
STUDY ON THE TRANSONIC DISTRIBUTED AERODYNAMIC CHARACTERISTICS OF LARGE LENGTH SLENDER RATIO AIRCRAFT
Jing Ma, CAS Space, China

C2.4. Advanced Materials and Structures for High Temperature Applications

October 4 2023, 10:15 — BCC A1

Co-Chair(s): David E. Glass, National Aeronautics and Space Administration (NASA), United States; Thierry Pichon, ArianeGroup, France;
Rapporteur(s): Zijun Hu, China Academy of Launch Vehicle Technology (CALT), China;

IAC-23.C2.4.1
DESIGN OF A NOVEL INTEGRATED STRUCTURE CONSIDERING HEAT-TRANSPORT AND LOAD-BEARING CAPACITIES FOR HYPERSONIC VEHICLES
Jian-Jun Gou, Northwestern Polytechnical University, China

IAC-23.C2.4.2
HEAT-RESISTANT MOSI2 – NBSI2 AND CR-NI COATINGS FOR ROCKET ENGINE COMBUSTION CHAMBERS AND RESPECTIVE VACUUM-ARC DEPOSITION TECHNOLOGY
Volodymyr Nadtoka, Yuzhnoye State Design Office, Ukraine

IAC-23.C2.4.3
THERMAL STABILITY OF POLYMER DERIVED ULTRA-HIGH TEMPERATURE CERAMIC MATRIX COMPOSITES
Luca Zoli, CNR - ISSMC, Italy

IAC-23.C2.4.4
ANISOTROPIC COMPOSITE HEAT-SHIELDING MATERIALS BASED ON GLASSY CARBON AND PYROLYTIC GRAPHITE: ANALYZING EFFECTIVENESS IN CASE OF A RE-ENTRY MODULE OF A LUNAR PROBE
Victor Leonov, Bauman Moscow State Technical University, Russian Federation

IAC-23.C2.4.5
PROCESSING AND TESTING OF UHTCMCS FOR AEROSPACE APPLICATIONS
Diletta Sciti, CNR - ISSMC, Italy

IAC-23.C2.4.6
THE IMPORTANCE OF USING THERMAL BARRIER COATINGS IN AERO GAS TURBINE ENGINES. CERAMIC MATERIALS FOR THERMAL BARRIER COATINGS: A REVIEW AND CURRENT STATUS
Ibrahim Muradzade, National Aviation Academy - Azerbaijan, Azerbaijan

IAC-23.C2.4.7
UNLEASHING THE POTENTIAL OF CERAMIC MATRIX COMPOSITES FOR HYPERSONIC FLIGHT
Joyjit Barua, Concordia University, Canada

IAC-23.C2.4.8
ZRO2 REINFORCED ABLATIVE MATERIAL SUITABLE FOR THE THERMAL PROTECTION SYSTEM OF ULTRA-HIGH TEMPERATURE IN SOLID ROCKET MOTOR COMBUSTION CHAMBER
MengFei Guo, China

IAC-23.C2.4.9
CHALLENGES AND SOLUTIONS FOR HIGH-TEMPERATURE APPLICATIONS IN SPACE: MATERIALS AND STRUCTURES FOR SPACECRAFT AND SATELLITES"
Mohammed Umar, R.V.College of Engineering, India

IAC-23.C2.4.11
DESIGN OF THERMAL PROTECTION BASED ON CARBON AEROGEL COMPOSITE STRUCTURE OPTIMIZATION
Margarita Salosina, Moscow Aviation Institute (National Research University), Russian Federation

C2.5. Advancements in Materials Applications and Rapid Prototyping

October 4 2023, 15:00 — BCC A1

Co-Chair(s): Giuliano Marino, CIRA Italian Aerospace Research Centre, Italy; Behnam Ashrafi, National Research Council, Canada;
Rapporteur(s): James Tucker, [unlisted], United States; Raymond Clinton, NASA, United States;

IAC-23.C2.5.2
ADDITIVE MANUFACTURING OF TWO-DIMENSIONAL INKS FOR IN-SPACE MANUFACTURING OF ADVANCED SENSORS AND ENERGY STORAGE
David Estrada, Boise State University (BSU), United States

IAC-23.C2.5.3
FEASIBILITY OF IN-ORBIT 3D PRINTING OF CONTINUOUS FIBRE REINFORCED COMPOSITES
Declan Jonckers, TU Braunschweig, Institute of Space Systems, Germany

IAC-23.C2.5.4
DEVELOPMENT OF A REGENERATIVELY COOLED NOZZLE EXTENSION BY ADDITIVE MANUFACTURING FOR THE THRUST CHAMBER OF A CRYOGENIC LIQUID ROCKET ENGINE
Gianmarco Brunetti, AVIO S.p.A., Italy

IAC-23.C2.5.5
3D PRINTING OF SHAPE MEMORY ALLOYS FOR COMPLEX ARCHITECTURES OF SMART STRUCTURES
Tiziana Biasutti, Politecnico di Milano, Italy

IAC-23.C2.5.6
ADDITIVE MANUFACTURING OF COPPER COMPONENTS FOR THE SPACE SECTOR: TECHNOLOGY COMPARISON, OPPORTUNITIES AND CHALLENGES
Marco Grasso, Politecnico di Milano, Italy

IAC-23.C2.5.7
WIRE-ARC ADDITIVE MANUFACTURING (WAAM) FOR SPACE APPLICATION
Sumant Hemant Jadhav, Cranfield University, Cranfield UK, United Kingdom

IAC-23.C2.5.9
DESIGN AND STANDARDISATION OF ADDITIVE MANUFACTURING FOR SPACECRAFT STRUCTURES
Didunoluwa Obilanade, Luleå University of Technology, Sweden

IAC-23.C2.5.10
EFFECTS OF MACHINE PARAMETERS ON SPACE COMPONENTS MANUFACTURED THROUGH SLM
Davide Zuin, Politecnico di Milano, Italy

IAC-23.C2.5.11
PERFORMANCE IMPROVEMENT OF 3D PRINTED FUNCTIONAL PARTS THROUGH THE USE OF UNCONVENTIONAL CONTINUOUS FIBER REINFORCEMENTS
Enrico Zappino, Politecnico di Torino, Italy

C2.6. Space Environmental Effects and Spacecraft Protection

October 5 2023, 10:15 — BCC A1

Co-Chair(s): Antonio Del Vecchio, CIRA Italian Aerospace Research Centre, Italy; Anatolii Lohvynenko, Yuzhnoye State Design Office, Ukraine;
Rapporteur(s): Kyeum-rae Cho, Pusan National University, Korea, Republic of;

IAC-23.C2.6.1
OPTIMIZATION OF SATELLITE SPACE RADIATION SHIELDING
Oleg Dotsenko, Yuzhnoye State Design Office, Ukraine

IAC-23.C2.6.2
VOLTAGE REGULATOR RADIATION QUALIFICATION CASE STUDY
Nayef Alshamlan, King Abdulaziz City for Science & Technology (KACST), Saudi Arabia

IAC-23.C2.6.3
RADIATION SHIELDING TECHNOLOGIES FOR DEEP SPACE EXPLORATION DEVELOPMENT AND ASSESSMENT OF ADVANCED COMPOSITE MATERIALS AND THEIR EFFECTIVENESS IN REDUCING SPACE RADIATION EXPOSURE
Sudarsan Nerella, University of Petroleum and Energy Studies, India

IAC-23.C2.6.5
APPLICATION OF AMORPHOUS METAL THERMAL SPRAY COATING FOR NON-LUBRICANT WEAR-RESISTANT MOBILITY COMPONENTS FOR THE LUNAR ENVIRONMENT
KangSan Kim, Space Generation Advisory Council (SGAC), Korea, Republic of

IAC-23.C2.6.6
IN-SPACE MANUFACTURING BY PHOTOPOLYMER EXTRUSION: INVESTIGATION OF DIFFERENT PHOTOPOLYMERS UNDER HIGH VACUUM CONDITIONS
Michael Kringer, Munich University of Applied Sciences, Germany

IAC-23.C2.6.7
CROSS-LINKED POLY(VINYL ALCOHOL)/BORIC ACID GELS FOR RADIATION SHIELDING APPLICATIONS
Lucia Lambertini, Sapienza University of Rome, Italy

IAC-23.C2.6.8
EFFECTS OF UV-C EXPOSURE ON COMPOSITES MATERIALS MADE OF RECYCLED CARBON FIBERS
Daniele Tortorici, Sapienza University of Rome, Italy

IAC-23.C2.6.9
SPACE ENVIRONMENTAL EFFECTS AND SPACECRAFT PROTECTION: RESEARCH TRENDS, CHALLENGES AND OPPORTUNITIES
Ilkin Aliyev, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.C2.6.10
MEASURING WEAR AND ABRASIVE RESISTANCE OF AIR PLASMA SPRAYED ALUMINUM OXIDE COATINGS FOR LUNAR EXPLORATION
Perla Latorre, Embry-Riddle Aeronautical University, United States

IAC-23.C2.6.11
AGEING PROCESS ANALYSIS OF SOLAR PANELS IN GRAVEYARD GEO ORBIT FOR REUSABILITY POTENTIAL
Robin Drevet, Department of Space Engineering, Lulea University of Technology, Sweden

IAC-23.C2.6.12
STUDYING THE EFFECTS OF SPACE ENVIRONMENTAL FACTORS ON THE FATIGUE BEHAVIOR OF A MATERIAL ON SPACECRAFT'S BODY
Shubham Das, R V College of Engineering, Bengaluru, India

C2.7. Space Vehicles – Mechanical/Robotic/ Thermal/Fluidic Systems

October 5 2023, 15:00 — BCC A1

Co-Chair(s): Brij Agrawal, Naval Postgraduate School, United States; Oleg Alifanov, MAI, Russian Federation;
Rapporteur(s): Guoliang Mao, Beijing Institute of Aerodynamics, China; Federica Angeletti, University of Rome "La Sapienza", Italy;

IAC-23.C2.7.1
STUDY OF GAS FLOW BY INVERSE PROBLEMS TECHNIQUE
Alena V. Morzhukhina, Moscow Aviation Institute (National Research University, MAI), Russian Federation

IAC-23.C2.7.3
DESIGN OF AN ALGORITHM FOR ESTIMATION AND COMPENSATION OF STATIC AND DYNAMIC UNBALANCES OF CIMR INSTRUMENT ROTATING BODY VIA GYROSCOPES TELEMETRY DATA
Fabrizio Gennari, Thales Alenia Space Italia (TAS-I), Italy

IAC-23.C2.7.4
EXTENDING SATELLITE UPTIME THROUGH ROBOTIC MAINTENANCE
Arzu Mirzabayova, Azerbaijan State Oil and Industry University (ASOIU), Azerbaijan

IAC-23.C2.7.5
MINIMAL-HEATING THERMAL MANAGEMENT DESIGN FOR LOW-MASS, POWER-CONSTRAINED TUMBLEWEED MOBILE IMPACTORS ON MARS
Mihai Coman, Team Tumbleweed, The Netherlands

IAC-23.C2.7.6
FEASIBILITY OF MULTI-AXIAL GECKO GRIPPING FOR ACTIVE DEBRIS REMOVAL
Kristina Andreyeva, Viterbi School of Engineering, USC, United States

IAC-23.C2.7.7
THRUST VECTOR CONTROL FOR CONTROLLED DEORBITATION – DEVELOPMENT AND TESTING
Ewa Majewska, Łukasiewicz Research Network – Institute of Aviation (ILOT), Poland

IAC-23.C2.7.8
TEMPERATURE STABILIZATION DEVICE'S DESIGN AND IMPLEMENTATION METHOD FOR NANOSATELLITE SYSTEM
Kikuko Miyata, Meijo University, Japan

IAC-23.C2.7.9
THERMAL VACUUM TESTS CAMPAIGN FOR THE AMAZONIA 1 SATELLITE
Geilson Loureiro, National Institute for Space Research - INPE, Brazil

IAC-23.C2.7.10
MACHINE LEARNING BASED THERMAL FAILURE DETECTION IN THERMAL VACUUM TESTING
Yaqoob Alqassab, National Space Science Agency (NSSA), Bahrain

IAC-23.C2.7.11
DESIGN OF AN INTEGRATED VEHICLE FLUID SYSTEM BASED ON ENERGY-FLUID MATCHING
Liqiang Ai, China Academy of Launch Vehicle Technology (CALT), China

C2.8. Specialized Technologies, Including Nanotechnology

October 6 2023, 10:15 — BCC A1

Co-Chair(s): Mario Marchetti, Associazione Italiana di Aeronautica e Astronautica (AIDAA), Italy; Pierre Rochus, CSL (Centre Spatial de Liège), Belgium;
Rapporteur(s): Bangcheng Ai, China Aerospace Science and Industry Corporation, China;

IAC-23.C2.8.1
DEVELOPMENT OF A NEURAL NETWORK FOR SOLVING DESIGN AND STRUCTURAL PROBLEMS
Atzin Fernanda Constantino Gomez, Samara National Research University (Samara University), Russian Federation

IAC-23.C2.8.2
ELECTROMAGNETIC CHARACTERIZATION OF LUNAR LAVA TUBES SIMULANTS FOR A FUTURE MOON BASE
Andrea Delfini, Sapienza University of Rome, Italy

IAC-23.C2.8.4
EMBEDDING ELECTRONICS WITH TEXTILE BASED SOFT-GOODS USING FRET TECHNOLOGY
Vittorio Netti, Sasakawa International Center for Space Architecture, Italy

IAC-23.C2.8.5
OBTAINING IRON NANOPARTICLES FROM "AZERCHAY" GREEN TEA LEAVES
Milana Suleymanova, Azerbaijan State Oil and Industry University (ASOIU), Azerbaijan

IAC-23.C2.8.6
GRAPHENE AND GRAPHENE-LIKE MATERIALS: INNOVATION AND FORESIGHT IN SPACE TRANSPORTATION TECHNOLOGIES
Marco Di Clemente, Italian Space Agency (ASI), Italy

IAC-23.C2.8.7
ORGANIC-INORGANIC HYBRID (OIH) COMPOUNDS FOR SMALL SPACECRAFT MISSIONS
Urszula Wiśniewska, Wroclaw University of Science and Technology, Poland

IAC-23.C2.8.8
DEVELOPMENT OF AN INNOVATIVE TWO-PHASE FLOW COOLING SYSTEM ENHANCED BY A GRAPHENE EVAPORATIVE LAYER
Andrea Delfini, Sapienza University of Rome, Italy

IAC-23.C2.8.9
PARAMETRIC IDENTIFICATION OF HEAT TRANSFER PROCESSES IN HEAT PIPES
Alena V. Morzhukhina, Moscow Aviation Institute (National Research University, MAI), Russian Federation

IAC-23.C2.8.11 (unconfirmed)
NUMERICAL INVESTIGATION OF DETONATION SPRAY PROCESS OF SUSPENSIONS CONTAINING NANO-PARTICLES
Ivan Yakovenko, Joint Institute for High Temperatures of the Russian Academy of Sciences, Russian Federation

IAC-23.C2.8.12
USE OF AMORPHOUS ALLOY COATING ON ANGULAR SURFACES TO PREVENT LUNAR DUST ACCUMULATION
KangSan Kim, Space Generation Advisory Council (SGAC), Korea, Republic of

IAC-23.C2.8.13 (unconfirmed)
DESIGN AND MANUFACTURING OF A MODULAR, LIGHTWEIGHT AND SCALABLE REACTION WHEEL SYSTEM FOR SOUNDING ROCKET ROLL CONTROL AND STABILIZATION
Carlos Serradilla Gil, LEEM-UPM, Spain

C2.9. Smart Materials and Adaptive Structures

October 6 2023, 13:45 — BCC A1

Co-Chair(s): Pavel Trivailo, RMIT University (Royal Melbourne Institute of Technology), Australia; Hiroshi Furuya, , Japan;
Rapporteur(s): Paolo Gaudenzi, Sapienza University of Rome, Italy; Élcio Jeronimo de Oliveira, Associazione Italiana di Aeronautica e Astronautica (AIDAA), Brazil;

IAC-23.C2.9.1
PREDICTIVE VIBRATION CONTROL USING TREE DECISION ALGORITHM WITH LOW ENERGY REQUIREMENTS
Kanjuro MAKIHARA, Tohoku University, Japan

IAC-23.C2.9.2
CARBON COMPOSITE STRUCTURES WITH EMBEDDED FIBER OPTIC SENSORS: A SMART PROPELLANT TANK FOR FUTURE SPACECRAFT AND LAUNCHERS
Ahmed E. S. NOSSEIR, University of Trento, Italy

IAC-23.C2.9.3
ANALYSIS AND APPLICATION OF DIEL-ALDER AND SILICONE BASED SELF-HEALING MATERIALS (SHM) IN AEROSPACE SECTOR.
Jeevitha J L, R V College of Engineering, Bengaluru, India

IAC-23.C2.9.4
INNOVATIVE DESIGN AND CONSTRUCTION METHODOLOGIES FOR IN-SITU MANUFACTURING OF LARGE SENSORIZED STRUCTURES IN FUTURE HUMAN HABITAT ON THE MOON
Carlo Giovanni Ferro, Politecnico di Torino, Italy

IAC-23.C2.9.6
USE OF SMART MATERIALS FOR STRUCTURAL HEALTH MONITORING IN AEROSPACE STRUCTURES
Hasel Ramírez Cortés, Instituto Politécnico Nacional, Mexico

IAC-23.C2.9.7
ADAPTATIVE FIN STRUCTURES BASED ON TENSEGRITY ACCORDING TO THE DIFFERENT FLIGHT STAGES OF A MODEL ROCKET
Abigail González-Alcázar, Universidad de Costa Rica, Costa Rica

IAC-23.C2.9.9
APPLIED ELECTRIC FIELD ON SMART OPTICAL MATERIAL (SOM), ALUMINUM DOPED-ZINC OXIDE (AZO), SIMULATED BY J.A. WOOLLAM'S (JAW) WVASE SOFTWARE FOR SPACE APPLICATIONS - PART I
John Patrick Harris, Norfolk State University, United States

IAC-23.C2.9.10
INVESTIGATION OF SHAPE MEMORY ALLOY REINFORCED ALUMINIUM METAL MATRIX COMPOSITE
Shashwat Yadav, Ajay Kumar Garg Engineering College, India

C3. IAF SPACE POWER SYMPOSIUM

Coordinator(s): John C. Mankins, ARTEMIS Innovation Management Solutions, LLC, United States; Koji Tanaka, Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan;

C3.1. Solar Power Satellite

October 3 2023, 10:15 — BCC B1

Co-Chair(s): John C. Mankins, ARTEMIS Innovation Management Solutions, LLC, United States; Ming Li, China Academy of Space Technology (CAST), China;
Rapporteur(s): Leopold Summerer, European Space Agency (ESA), The Netherlands; Koji Tanaka, Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan;

IAC-23.C3.1.3
INTRODUCTION OF THE UP-TO-DATE CURRENT DEVELOPMENT ACTIVITIES AND THE POWER BEAM CONTROL EXPERIMENT PROJECT FROM THE LEO FOR THE REALIZATION OF THE OPERATIONAL SSPS
Koichi Ijichi, Japan Space Systems, Japan

IAC-23.C3.1.4
TAILORING SPACE SOLAR POWER FOR DIVERSE LOCATIONS: AN SPS-ALPHA USE CASE STUDY
John C. Mankins, ARTEMIS Innovation Management Solutions, LLC, United States

IAC-23.C3.1.5
PROPOSAL OF A LOW EARTH ORBIT (LEO) SPACE SOLAR POWER SATELLITE SYSTEM
Joon Min Choi, Korea Aerospace Research Institute (KARI), Korea, Republic of

IAC-23.C3.1.6
MMR-SPS, AN UPDATED CONCEPT DESIGN ON MR-SPS
Xinbin Hou, CAST, China

IAC-23.C3.1.7
SPACE-BASED SOLAR POWER: AN AMBITIOUS SPACE PROJECT FOR HUMANITY
Amru Alamoudi, NEOM Space, Saudi Arabia

IAC-23.C3.1.8
MORPHEUS: A SANDWICH TYPE SOLAR POWER SATELLITE CONCEPT BASED ON THE ECO-DESIGN APPROACH
Haroon B. Oqab, Space Canada Corporation, Canada

IAC-23.C3.1.9
SEEKING SUSTAINABILITY FOR TERRESTRIAL AND SPACE POWER NEEDS: A NOVEL, MODULAR AND SCALABLE APPROACH TO SPACE-BASED SOLAR POWER
Sahana Shastry, University of Bremen, Germany

IAC-23.C3.1.10
TESTING OF A SOLAR ENERGY SATELLITE CONCEPT ON NANOSATELLITE PLATFORM
Nurlan Rahimli, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.C3.1.11
STATE OF THE INDUSTRY REPORT ON INVESTMENT AND DEVELOPMENT OF SPACE SOLAR POWER
Kevin Barry, LightBridge Strategic Consulting, United States

IAC-23.C3.1.12
SPACE SOLAR POWER - 2023 SURVEY OF PUBLIC AND PRIVATE INITIATIVES
Erik Kulu, Estonia

C3.2. Wireless Power Transmission Technologies and Application

October 5 2023, 10:15 — BCC B5

Co-Chair(s): Nobuyuki Kaya, Kobe University, Japan; Ming Li, China Academy of Space Technology (CAST), China;
Rapporteur(s): Massimiliano Vasile, University of Strathclyde, United Kingdom; Haroon B. Oqab, Space Canada Corporation, Canada;

IAC-23.C3.2.1
RESULTS FROM THE FIRST TEST OF A CONVERSION MODULE FOR SPACE SOLAR IN ORBIT
Elias Wilcoski, Naval Research Laboratory, United States

IAC-23.C3.2.2
MISSION DESIGN FOR ON-ORBIT PRECISE MICROWAVE BEAM CONTROL EXPERIMENTS OF WIRELESS POWER TRANSMISSION TECHNOLOGY
Koji Tanaka, Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan

IAC-23.C3.2.3
MICROWAVE POWER TRANSMISSION SUBSYSTEMS DESIGN EVOLUTION FROM DEMONSTRATION TO OPERATION SYSTEMS FOR SSPS
Shi-Wei Dong, China Academy of Space Technology (Xi'an), China

IAC-23.C3.2.4
AUTOMATIC REMOTE ARRAY CALIBRATION SYSTEM FOR MICROWAVE WIRELESS POWER TRANSMITTER
Sang-Hwa Yi, Korea Electrotechnology Research Institute (KERI), Korea, Republic of

IAC-23.C3.2.5
ADVANCED SPACE-TO-SPACE WIRELESS POWER TRANSMISSION SYSTEM VIA LASER
Giovanni Pio Parracino, Politecnico di Milano, Italy

IAC-23.C3.2.6
FROM SPACE TO EARTH: WIRELESS POWER TRANSMISSION TECHNOLOGIES FOR EARTH-BASED APPLICATIONS
Sakit Yarmammadli, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.C3.2.7
RECEIV'AIR - BYPASSING OF ATMOSPHERIC ATTENUATION FOR SPACE BASED SOLAR POWER WITH AN AIRBORNE RECEIVER
Alexandre Garus, Thales Alenia Space, Italy

IAC-23.C3.2.8
WIRELESS POWER TRANSMISSION SYSTEM BASED ON SPACE TECHNOLOGIES
Zarifa Guliyeva, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.C3.2.9
INVESTIGATION OF SPACE-BASED SOLAR POWER BEAMING KINEMATIC EFFICIENCY FOR MOLNIYA ORBITS
Basel Omran, Clarkson University, United States

IAC-23.C3.2.10
INTERNATIONAL SPACE SOLAR POWER STUDENT COMPETITION PAPER NO. 1 MR. GEORGE B. DIETRICH 1-SPACE CANADA, ONTARIO, CANADA
Megan Campbell, United Kingdom

IAC-23.C3.2.11
INTERNATIONAL SPACE SOLAR POWER STUDENT COMPETITION PAPER NO. 2 MR. GEORGE B. DIETRICH SPACE CANADA, ONTARIO, CANADA
Connor MacRobbie, University of Waterloo, Canada

IAC-23.C3.2.12
INTERNATIONAL SPACE SOLAR POWER STUDENT COMPETITION PAPER NO. 3 MR. GEORGE B. DIETRICH SPACE CANADA, ONTARIO, CANADA
Abdulbari Agboola, The University of Texas at Austin, United States

IAC-23.C3.2.13
INTERNATIONAL SPACE SOLAR POWER STUDENT COMPETITION PAPER NO. 4
Takahiro Ohnishi, Tokyo University of Science, Japan

C3.3. Advanced Space Power Technologies

October 6 2023, 10:15 — BCC B1

Co-Chair(s): Matthew Perren, Airbus Defence & Space, United Kingdom; Gary Barnhard, XISP-Inc, United States; Lisa May, Lockheed Martin (Space Systems Company), United States;
Rapporteur(s): Lee Mason, National Aeronautics and Space Administration (NASA), Glenn Research Center, United States; Koji Tanaka, Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan;

IAC-23.C3.3.1
RESEARCH ON APPLICATION OF EXTRA-HIGH POWER ELECTRIC THRUSTER TOWARDS SPACE SOLAR POWER STATION
Na Yao, Qian Xuesen Laboratory of Space Technology, China Academy of Space Technology (CAST), China

IAC-23.C3.3.2
THE PRINCIPLES OF DESIGNING AND DEVELOPING AN EPS (ELECTRONIC POWER SYSTEM) FOR A 1U CUBESAT
Ali Bunyatzada, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.C3.3.3
DESIGN AND SIMULATION OF A BIDIRECTIONAL CONVERTER WITH POWER BALANCE CONTROL TECHNIQUE FOR A SPACE-BASED ELECTRICAL POWER SYSTEM.
Methawin Jantra, National Astronomical Research Institute of Thailand (NARIT), Thailand

IAC-23.C3.3.4
DESIGN AND ANALYSIS OF A DC/DC BUCK CONVERTER WITH LOAD SWITCH FOR EDUCATIONAL NANOSATELLITE POWER SUB-SYSTEMS.
HOUARI BENTOUTOU, Agence Spatiale Algérienne (ASAL), Algeria

IAC-23.C3.3.5 (unconfirmed)
A NOVEL DUAL-BUS SATELLITE ELECTRICAL POWER SYSTEM
Wei Lu, Tianjin Institute of Power Sources, China

IAC-23.C3.3.6
AN OVERVIEW OF THE SOLAR CELL SPACE CALIBRATION TECHNIQUE AND STANDARD
Jiang Yaoxian, China Academy of Space Technology (CAST), China

IAC-23.C3.3.7 (unconfirmed)
COMBINED POWER SYSTEMS IN AEROSPACE VEHICLE: DC BUS VOLTAGE STABILISATION AND INFLUENCE OF LOADING ON SERVO SYSTEM.
Mansi Gupta, University of Petroleum and Energy Studies, India

IAC-23.C3.3.8 (unconfirmed)
GRAPHENE BASED BATTERIES FOR ROBOTS
S J Amy Dewsyl, Karunya Institute of Technology and Sciences, India

IAC-23.C3.3.9
DEVELOPMENT PROCESS OF LITHIUM-ION BATTERY TEST PLATFORM DESIGNED FOR AEROSPACE APPLICATION
LAKHDAR LIMAM, Agence Spatiale Algérienne (ASAL), Algeria

IAC-23.C3.3.11
ON-ORBIT DEMONSTRATION FOR NEXT GENERATION SPACE SOLAR CELL ON HTV-X
Teppei Okumura, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.C3.3.12
MEMS-BASED SOLAR PANEL DEPLOYMENT FOR A SPACECRAFT
Shryas Bhurat, R V College of Engineering, Bengaluru, India

C3.4. Space Power System for Ambitious Missions

October 6 2023, 13:45 — BCC B1

Co-Chair(s): Massimiliano Vasile, University of Strathclyde, United Kingdom; Shoichiro Mihara, Japan Space Systems, Japan; Lisa May, Lockheed Martin (Space Systems Company), United States;
Rapporteur(s): Xinbin Hou, CAST, China; Koji Tanaka, Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan;

IAC-23.C3.4.1 (unconfirmed)
A MULTIPHYSICS MODEL TO SIMULATE LASER POWER TRANSMISSION, EXPERIMENTS DRIVEN AND TRAINED
Tommaso Aresi, Politecnico di Milano, Italy

IAC-23.C3.4.2
ORBIT OCCUPANCY OF A SOLAR POWER SATELLITE IN GEOSYNCHRONOUS ORBIT
Nathan Pullicino, University of Strathclyde / Mechanical and Aerospace Engineering, United Kingdom

IAC-23.C3.4.3
AN EVALUATION OF SOLAR ENERGY SYSTEMS FOR DEEP SPACE APPLICATIONS.
Ivy Mayor, Sweden

IAC-23.C3.4.4
PHASED ON-ORBIT ASSEMBLY SCHEME OF DEMONSTRATION MR-SPS
ZhengAi Cheng, Qian Xuesen Laboratory of Space Technology, China Academy of Space Technology (CAST), China

IAC-23.C3.4.5
ASSEMBLY OF SPACE BASED SOLAR POWER SATELLITE AND MAINTENANCE USING SPACE ROBOTICS
Prathmesh Barapatre, National Space Society (USA) -Mumbai chapter, India

IAC-23.C3.4.6
COST EFFECTIVE FOLDABLE ORIGAMI STYLE SOLAR PANELS FOR SPACE BASED SOLAR POWER SYSTEMS.
Pranav Jha, India

IAC-23.C3.4.7
ASSEMBLY AND DISASSEMBLY DYNAMICS OF A MODULAR SOLAR POWER SATELLITE
Maria Anna Laino, University of Strathclyde, United Kingdom

IAC-23.C3.4.8
SKYBEAM: IN-ORBIT ASSEMBLY FOR SPACE-BASED SOLAR POWER WITH EUROPEAN ROBOTIC TECHNOLOGIES
Diego A. Urbina, Space Applications Services, Belgium

IAC-23.C3.4.10
MULTIFLUID GEOTHERMAL ENERGY GENERATION ON MARS IN THE SEDIMENTARY REGIONS UTILIZING INDIGENOUS RESOURCES OF THE PLANET
Akshay Rajshekhar Hiremath, Space Generation Advisory Council (SGAC), United States

IAC-23.C3.4.11
SOLAR POWER ENERGY GENERATION IN SPACE FOR MOON AND MARS
VISHAL SHARMA, India

IAC-23.C3.4.12
DEVELOPMENT OF A SMALL-SCALE ENERGY GENERATION SYSTEM ON MARS USING FORMIC ACID
Sukhjit Singh, Space Generation Advisory Council (SGAC), India

C3.5-C4.10. Joint Session on Nuclear Power and Propulsion Systems, and Propellantless Propulsion

October 6 2023, 13:45 — BCC A8

Co-Chair(s): Leopold Summerer, European Space Agency (ESA), The Netherlands; Christian Bach, Technical University Dresden, Germany; Lisa May, Lockheed Martin (Space Systems Company), United States;
Rapporteur(s): Markus Jaeger, The Exploration Company GmbH, Germany; Saroj Kumar, University of Alabama in Huntsville, United States;

IAC-23.C3.5-C4.10.4
APPLICATION OF NUCLEAR POWER AND PROPULSION SYSTEMS OF HIGH POWER LEVEL FOR SPACE TRANSPORTATION
Alexander Solodukhin, Keldysh Research Center, Russian Federation

C4. IAF SPACE PROPULSION SYMPOSIUM

Coordinator(s): Angelo Cervone, Delft University of Technology (TU Delft), The Netherlands; Elena Toson, Space Generation Advisory Council (SGAC), Italy; Riheng Zheng, Beihang University, China; Christophe Bonhomme, Centre National d'Etudes Spatiales (CNES), France;

C4.1. Liquid Propulsion (1)

October 2 2023, 15:15 — BCC A8

Co-Chair(s): Christophe Bonhomme, Centre National d'Etudes Spatiales (CNES), France; Markus Jaeger, The Exploration Company GmbH, Germany;
Rapporteur(s): Annafederica Urbano, ISAE - Institut Supérieur de l'Aéronautique et de l'Espace, France; Hidenori Hara, Mitsubishi Heavy Industries, Ltd., Japan;

IAC-23.C4.1.1
KEYNOTE: OVERVIEW ON DEVELOPMENT OF LIQUID ROCKET ENGINES FOR HEAVY LAUNCH VEHICLES IN CHINA
Yushan Gao, Xian Aerospace Propulsion Institute, China

IAC-23.C4.1.2
ADDITIVE MANUFACTURED FUEL INJECTOR AS A WAY FORWARD TO IMPROVE GREEN PROPELLANT LIQUID APOGEE ENGINE
Adrian Parzybut, Łukasiewicz Research Network – Institute of Aviation (ILOT), Poland

IAC-23.C4.1.4
DEVELOPMENT OF SMALL ROCKET ENGINE FOR ROCKET VENTURES
Ryoma Yamashiro, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.C4.1.5
DEVELOPMENT OF THE LIQUID OXYGEN AND METHANE M10 ROCKET ENGINE FOR THE VEGA-E UPPER STAGE
Simone Porzi, AVIO S.p.A., Italy

IAC-23.C4.1.6
T(H)RUST: APPLIED RESEARCH ACTIVITIES ON LIQUID ROCKET PROPULSION AT SAPIENZA UNIVERSITY OF ROME
Francesco Nasuti, Sapienza University of Rome, Italy

IAC-23.C4.1.7
INVESTIGATION ON PERFORMANCE IMPROVEMENT OF THE NEW HYDROGEN PEROXIDE THRUSTER WITH EXTERNALLY HEATED AEROSPIKE NOZZLE
Kotaro Munenaga, Kanazawa Institute of Technology, Japan

IAC-23.C4.1.8
DEVELOPMENT OF PROPULSION SYSTEM FOR CHINA CHANG'E 5 LUNAR PROBE
Xin Hong, Shanghai Institute of Space Propulsion, China

IAC-23.C4.1.9
OVERVIEW OF EQUIPMENT AND SUBASSEMBLIES FOR THE ESM PROPULSION SYSTEM FOR ARTEMIS MOON EXPLORATION PROGRAM
Timo Krone, ArianeGroup, Germany

IAC-23.C4.1.10
QUALIFICATION TEST RESULTS OF LE-9 ENGINE FOR H3 LAUNCH VEHICLE
Hideto Kawashima, JAXA, Japan

IAC-23.C4.1.11
RESEARCH ON FAULT DIAGNOSIS TECHNOLOGY OF DEEP SPACE PROBE PROPULSION SYSTEM HEALTH DETECTION PROTOTYPE
Feng Zhang, China Academy of Launch Vehicle Technology(CALT), China

C4.2. Liquid Propulsion (2)

October 4 2023, 10:15 — BCC A8

Co-Chair(s): Angelo Cervone, Delft University of Technology (TU Delft), The Netherlands; Annafederica Urbano, ISAE - Institut Supérieur de l'Aéronautique et de l'Espace, France;
Rapporteur(s): Christian Bach, Dresden University of Technology (DUT) / Technische Universität Dresden, Germany; Hidenori Hara, Mitsubishi Heavy Industries, Ltd., Japan;

IAC-23.C4.2.1
QUALIFICATION OF A PROPULSION SYSTEM FOR ACTIVE DEORBIT
Ulrich Gotzig, ArianeGroup, Germany

IAC-23.C4.2.2
PERFORMANCE EVALUATION OF HYPERGOLIC IONIC LIQUID-BASED FUEL (ILETHCU01) WITH 95% HYDROGEN PEROXIDE OXIDIZER IN 50 N THRUSTER.
Vikas Bhosale, Space Solutions Co. LTD, Korea, Republic of

IAC-23.C4.2.3
EXPERIMENTAL INVESTIGATION OF FUEL TRANSVERSE INJECTION DURING THROTTLING IN A BIPROPELLANT THRUSTER.
Vincent Ugolini, Korea Advanced Institute of Science and Technology (KAIST), Korea, Republic of

IAC-23.C4.2.4 (unconfirmed)
EMPLOYING CARBON-SPLIT PORE TUBES AS ADSORBENTS TO CONTROL THE LEAKAGE OF METHANE IN TRANSPORT VALVES
Anagha Udupa, R V College of Engineering, Bengaluru, India

IAC-23.C4.2.5
SOFT FLOW METER FOR MISSION-ONBOARD TO MEASRUE FLOW PARAMETER FOR LIQUID ROCKET ENGINES
Elayaperumal Ezhilrajan, Indian Space Research Organization (ISRO), India

IAC-23.C4.2.6
DESIGN AND ANALYSIS OF A NOVEL SWIRL-PINTLE COMBINED FUEL INJECTOR FOR IMPROVED PERFORMANCE OF LIQUID ROCKET ENGINES
Sriram Kumar, Sri Sairam Engineering College, India

IAC-23.C4.2.7
FEASIBILITY OF UV INDUCED DECOMPOSITION OF HIGH TEST PEROXIDE IN SPACECRAFT PROPULSION.
Damian Grabowski, Łukasiewicz Research Network – Institute of Aviation (ILOT), Poland

IAC-23.C4.2.8
PERFORMANCE TESTING OF 1N HYDROGEN PEROXIDE THRUSTER AT FOTEC PROPULSION TEST FACILITIES
Varun Reddy Nandyala, FOTEC Forschungs- und Technologietransfer GmbH, Austria

IAC-23.C4.2.10
CONVECTIVE AND RADIATIVE WALL HEAT TRANSFER EVALUATION IN FILM-COOLED LIQUID ROCKET THRUST CHAMBERS
Mario Tindaro Migliorino, Sapienza University of Rome, Italy

C4.3. Solid and Hybrid Propulsion (1)

October 3 2023, 10:15 — BCC A8

Co-Chair(s): Marco Di Clemente, Italian Space Agency (ASI), Italy; Ozan Kara, Technology Innovation Institute (TII), United Arab Emirates;
Rapporteur(s): Adam Okninski, Łukasiewicz Research Network – Institute of Aviation (ILOT), Poland; Jean-Claude Traineau, Office National d'Etudes et de Recherches Aérospatiales (ONERA), France;

IAC-23.C4.3.1
PASSIVATION OF ALUMINIUM PARTICLE AND ITS EFFECTS IN SOLID PROPELLANTS: A REAXFF STUDY
Rene Gonçalves, Aeronautic Institute of Technology (ITA), Brazil

IAC-23.C4.3.2
A CONCEPTUAL DESIGN OF PERMEABLE NOZZLE FOR ALTITUDE COMPENSATION AND THRUST VECTORING
Ye Wang, CAS Space, China

IAC-23.C4.3.3
DESIGN, MANUFACTURING AND TESTING OF 50 MM SOLID ROCKET MOTOR USING NON-HTPB COMPOSITE PROPELLANT FOR POTENTIAL IN-ORBIT APPLICATIONS.
Florin Mingireanu, Romanian Space Agency (ROSA), Romania

IAC-23.C4.3.4
EFFECT OF ALUMINUM CONTENT ON NOZZLE EROSION IN A HYBRID ROCKET MOTOR
Xianzhu Jiang, School of Astronautics, Beihang University, China

IAC-23.C4.3.5
HYBRID AUTOPHAGE PROPULSION FOR SPACE LAUNCH VEHICLES: A PROMISING CONCEPT
Martin Gros, France

IAC-23.C4.3.6
RESEARCH ON ANALYTICAL INVERSE KINEMATICS ALGORITHM FOR SERVO MECHANISM OF SWINGING NOZZLE
Guanchao Han, CAS Space, China

IAC-23.C4.3.7
IN-SITU PROPELLANT DESIGN FOR MOON AND MARS EXPLORATION USING HYBRID ROCKETS
Hessa Almarzooqi, Technology Innovation Institute (TII), United Arab Emirates

IAC-23.C4.3.8
SURROGATE NEURAL NETWORK MODEL FOR INTEGRATED ASCENT TRAJECTORY OPTIMIZATION OF THROTTLEABLE HYBRID ROCKETS
Mario Tindaro Migliorino, Sapienza University of Rome, Italy

IAC-23.C4.3.9
DESIGN AND TESTING OF THE COMBUSTION CHAMBER OF A H2O2/ABS STUDENT-DEVELOPED HYBRID ROCKET ENGINE
Daniel Cantos Gálvez, ISAE - Institut Supérieur de l'Aéronautique et de l'Espace, France

IAC-23.C4.3.10
COURSE AND CHALLENGES OF FLIGHT QUALIFICATION TEST CAMPAIGN OF THE STUDENTS' HYBRID ROCKET ENGINE.
Marek Dzik, Warsaw University of Technology (WUT), Poland

C4.4. Solid and Hybrid Propulsion (2)

October 4 2023, 10:15 — BCC B6

Co-Chair(s): Didier Boury, ArianeGroup SAS, France; Adam Okninski, Łukasiewicz Research Network – Institute of Aviation (ILOT), Poland;

Rapporteur(s): Christophe Bonhomme, Centre National d'Etudes Spatiales (CNES), France; Arif Karabeyoglu, Koc University, Türkiye;

IAC-23.C4.4.1
THERMOPLASTIC SOLID PROPELLANT ANALYSIS
Ana Carolina Buzelim dos Santos, Brazil

IAC-23.C4.4.2
STUDY OF THE INFLUENCE OF THE ELECTRIC FIELD ON THE INCIDENTAL IGNITION OF ALUMINIZED COMPOUND SOLID PROPELLENT VIA ELECTROSTATIC DISCHARGE
Rene Gonçalves, Aeronautic Institute of Technology (ITA), Brazil

IAC-23.C4.4.4
MEASUREMENT OF SOLID FUEL PORT PRESSURE BY USING EXPOSED HDPE HYDROGEN PEROXIDE CATALYTIC DECOMPOSITION HYBRID THRUSTER
Seungho Lee, Korea Advanced Institute of Science and Technology (KAIST), Korea, Republic of

IAC-23.C4.4.5
INVESTIGATION OF THE INFLUENCE OF GAS PHASE MOLECULAR MASS VARIATIONS ON HYBRID ROCKET REGRESSION RATE
Francesco Barato, University of Padova - DII/CISAS, Italy

IAC-23.C4.4.6
COMBUSTION CHARACTERISTICS OF AXIAL-INJECTION END-BURNING HYBRID ROCKETS USING LIQUID OXYGEN
KAII RI, Hokkaido University, Japan

IAC-23.C4.4.7
EXPERIMENTAL AND NUMERICAL ASSESSMENT OF REGRESSION RATE AND PROPULSIVE PERFORMANCE OF 10N-CLASS HYBRID ROCKETS FOR NANOSATELLITE MANEUVERING
Stefano Mungiguerra, Università degli Studi di Napoli "Federico II", Italy

IAC-23.C4.4.8
ABLATION RESISTANCE ASSESSMENT OF GRAPHITE AND CARBON-CARBON COMPOSITES UNDER HYBRID PROPELLANT ROCKET FREE-JET EXPOSURE
Serhan Enes Kalmis, Deltav Space Technologies,Inc., Türkiye

IAC-23.C4.4.9
NOVEL DESIGN OF GAS GENERATOR SYSTEM USING HYBRID ROCKET MOTOR
Mehmet Reşat UFUK, Deltav Space Technologies,Inc., Türkiye

IAC-23.C4.4.10
DEMONSTRATION OF CENTRIFUGAL CASTED PARAFFIN WAX-BASED HYPERGOLIC SOLID FUEL FOR HYDROGEN PEROXIDE
Junyeong Jeong, Korea Advanced Institute of Science and Technology (KAIST), Korea, Republic of

IAC-23.C4.4.11
DEVELOPMENT OF HYBRID THRUSTER IGNITION SYSTEM WITH LOW-TOXICITY FUEL AND CATALYTIC REACTION
Yuji Saito, Tohoku University, Japan

C4.5. Electric Propulsion (1)

October 3 2023, 15:00 — BCC A8

Co-Chair(s): Garri A. Popov, Research Institute of Applied Mechanics and Electrodynamics (RIAME), MAI, Russian Federation; Vito Salvatore, CIRA Italian Aerospace Research Center, Capua, Italy;
Rapporteur(s): Marco Di Clemente, Italian Space Agency (ASI), Italy;

IAC-23.C4.5.1
NUMERICAL SIMULATIONS OF THE HELICAL PLASMA THRUSTER EXPERIMENT UNDER DIFFERENT MAGNETIC CONFIGURATIONS
Renan Almeida, Universidade de Brasília, Brazil

IAC-23.C4.5.2
ENHANCING IONIC THRUST GENERATION VIA NUCLEAR POWER
Pratik B Matt, R V College of Engineering, Bengaluru, India

IAC-23.C4.5.3
INVESTIGATION ON THE IONIZATION PROBABILITY OF COATED INTAKES USED FOR A NOVEL PASSIVELY IONIZING AIR-BREATHING ELECTRIC PROPULSION CONCEPT FOR VERY LOW EARTH ORBITS
Florian Prochnow, TU Dresden, Germany

IAC-23.C4.5.4
RESULTS OF THE SUCCESSFUL 48000 H ENDURANCE TEST OF A FEEP MULTI-EMITTER
Laura Bettiol, FOTEC Forschungs- und Technologietransfer GmbH, Austria

IAC-23.C4.5.5
PULSED PLASMA THRUSTER FOR DEEP SPACE EXPLORATION
Jayakumar Venkatesan, Valles Marineris International Private Limited, India

IAC-23.C4.5.6
COUPLING TEST OF PROPULSION SUB-SYSTEM: TMA 5000, PPU ELEKTRO, AND XFC PPS®5000
Alexandre Briges, SAFRAN, France

IAC-23.C4.5.7
PPSX00 HALL THRUSTER: ON THE FINAL PATH TOWARDS THE QUALIFICATION OF A SUBKILOWATT-CLASS THRUSTER
Claude-Martin Brito, SAFRAN, France

IAC-23.C4.5.8
STARTING MODES OF MULTIDIRECTIONAL PLASMA THRUSTER OPERATED IN NOBLE GASES
Andrei Shumeiko, Bauman Moscow State Technical University, Russian Federation

IAC-23.C4.5.9
COUPLED PARTICLE-IN-CELL AND DIRECT-SIMULATION MONTE-CARLO MODELLING OF GRID EROSION BY ION BOMBARDMENT IN RADIO-FREQUENCY ION THRUSTER GRIDS
Maximilian Maigler, Universität der Bundeswehr München, Germany

IAC-23.C4.5.10
MODELLING AND DESIGN OF EARTH AND MARS ATMOSPHERE-BREATHING ELECTRIC PROPULSION SYSTEMS (ABEP) USING A CATHODE-LESS RF THRUSTER
Mirko Magarotto, University of Padova, Italy

IAC-23.C4.5.11
PARAMETRIC INVESTIGATION OF A WATER-VAPOR HALL THRUSTER FOR 100W OPERATION
Masayuki Matsuura, University of Tokyo, Japan

IAC-23.C4.5.12
LANTHANUM HEXABORIDE HOLLOW CATHODE FOR A MAGNETIC OCTUPOLE THRUSTER
Jordan Hsieh, National Cheng Kung University, Taiwan, China

C4.6. Electric Propulsion (2)

October 4 2023, 15:00 — BCC A8

Co-Chair(s): Jamila Mansouri, European Space Agency (ESA), The Netherlands; Nicoletta Wagner, European Space Agency (ESA), France;
Rapporteur(s): Angelo Cervone, Delft University of Technology (TU Delft), The Netherlands;

IAC-23.C4.6.1
NUMERICAL SIMULATION OF IONIC LIQUID ION SOURCES FOR ELECTROSPRAY PROPULSION DURING STEADY ION EVAPORATION
Ximo Gallud Cidoncha, Massachusetts Institute of Technology (MIT), United States

IAC-23.C4.6.2
DESIGN AND SIMULATION OF AN IONIC PROPULSION ENGINE WITH PROPOSED AU-GRAPHENE COMPOSITE MATERIAL.
Rosaura Patricia Delgado Ortiz, University of Guadalajara, Mexico

IAC-23.C4.6.3
ASSESSMENT OF THE MPPT PROPELLANTS EVAPORATION CAPACITY CAUSED BY UV RADIATION.
Victor Telekh, Bauman Moscow State Technical University, Russian Federation

IAC-23.C4.6.4
DEVELOPMENT OF POWER PROCESSING UNIT FOR ELECTRICALLY PROPELLED SATELLITES
Manju S. Nair, LPSC, ISRO, India

IAC-23.C4.6.5
NOVEL COUPLING METHODS FOR FLUID AND KINETIC SOLVERS IN THE NUMERICAL MODELING OF HELICON PLASMA THRUSTERS
Willem van Lynden, Delft University of Technology (TU Delft), The Netherlands

IAC-23.C4.6.6
THRUST LEVEL CHARACTERISTICS AT DIFFERENT XENON FLOW RATES
Baris Cal, TUBITAK Uzay, Space Technologies Research Institute, Türkiye

IAC-23.C4.6.7
AMPSS-2000: ADVANCED MICRO-PROPULSION SYSTEM FOR SMALL SATELLITES BASED ON 2-MN HALL-EFFECT THRUSTER
Merve Balaban, Berlin Space Consortium GmbH, Germany

IAC-23.C4.6.9
UNEXPECTED ELECTRICAL BREAKDOWN CHARACTERISTICS AND PROTECTION OF PPU IN SPACE ELECTRIC PROPULSION SYSTEM.
Siqiao Ge, China Academy of Space Technology (CAST), China

IAC-23.C4.6.10
HIGHLY EFFICIENT, MINIATURIZED POWER PROCESSING AND CONTROL UNIT (PPCU) FOR HALL EFFECT THRUSTERS (HET)
Karthik Kumar Venkateshaiah, Bellatrix Aerospace Private Limited., India

IAC-23.C4.6.12
FAR-FIELD PLUME CHARACTERIZATION OF IN-SITU 200W HALL EFFECT THRUSTER
Vidhi Goyal, Bellatrix Aerospace Private Limited., India

C4.7. Hypersonic Air-breathing and Combined Cycle Propulsion, and Hypersonic Vehicle

October 5 2023, 10:15 — BCC A8

Co-Chair(s): Arif Karabeyoglu, Koc University, Türkiye; Jean-Claude Traineau, Office National d'Etudes et de Recherches Aérospatiales (ONERA), France;
Rapporteur(s): Didier Boury, ArianeGroup SAS, France; Riheng Zheng, Beihang University, China;

IAC-23.C4.7.2
INVESTIGATION OF SHOCKS, BOUNDARY LAYER AND FUEL INJECTION INTERACTION IN THE HIFIRE-2 SCRAMJET
Sasi Kiran Palateerdham, University of Rome "La Sapienza", Italy

IAC-23.C4.7.3
INVESTIGATION ON COMBUSTION PERFORMANCE OF MACH 5 HYPERSONIC RAMJET WITH SUBSONIC COMBUSTION
Mengze Qin, Beihang University (BUAA), China

IAC-23.C4.7.4
DESIGN AND STREAM THRUST ANALYSIS OF A MACH 8 SCRAMJET ENGINE WITH AN AFTERBURNER BURNING METAL FUEL
Wang Xu, Beihang University (BUAA), China

IAC-23.C4.7.5
MULTI-OBJECTIVE DESIGN OPTIMIZATION OF SHOCK-INDUCED MIXING ENHANCEMENT VIA EVOLUTIONARY ALGORITHMS ASSISTED BY DATA-DRIVEN APPROACHES
Chihiro Fujio, Kyushu University, Japan

IAC-23.C4.7.6
NUMERICAL ANALYSIS OF AEROSPIKE NOZZLES FOR AIR-BREATHING COMBINED CYCLE PROPULSION ENGINES
Pratik B Matt, R V College of Engineering, Bengaluru, India

IAC-23.C4.7.7
EFFECT OF PLASMA SYNTHETIC JET ACTUATOR ON MIXING ENHANCEMENT IN A SOLID-PROPELLANT DUCTED ROCKET
Yiqiao Zhang, Beijing Institute of Technology, China

IAC-23.C4.7.8
A STUDY ABOUT THE SIMPLE NUMERICAL SIMULATION METHODS TO ANALYZE THE FLAME HOLDER FLOW FIELD OF THE HYPERSONIC JET ENGINES
Kotaro Iguchi, Kanazawa Institute of Technology, Japan

IAC-23.C4.7.9
EXPERIMENTAL STUDY ON FUEL SUPPLY CHARACTERISTICS OF MAGNESIUM POWDER RAMJET ENGINE
Wang Xu, Beihang University (BUAA), China

IAC-23.C4.7.10
EXPERIMENTS WITH HYDROGEN/AMMONIA MIXTURES FOR AIRBREATHING HYPERSONIC PROPULSION
Subith Vasu, University of Central Florida (UCF), United States

C4.8-B4.5A. Joint Session between IAA and IAF for Small Satellite Propulsion Systems

October 5 2023, 15:00 — BCC A8

Co-Chair(s): Arnau Pons Lorente, Space Generation Advisory Council (SGAC), United States; Jeff Emdee, The Aerospace Corporation, United States;
Rapporteur(s): Elena Toson, T4i, Italy; Vito Salvatore, CIRA Italian Aerospace Research Center, Capua, Italy;

IAC-23.C4.8-B4.5A.1
ON-ORBIT PERFORMANCE OF AQUARIUS: WORLD'S FIRST SUCCESSFUL WATER PROPULSION SYSTEM IN DEEP SPACE
Isamu Moriai, The University of TOKYO, Graduate school, Japan

IAC-23.C4.8-B4.5A.2
DEVELOPMENT OF A NOVEL AMBIPOLAR PLASMA THRUSTER FOR NANOSATELLITES AND AIR BREATHING APPLICATIONS
Christoph Peter, Dresden University of Technology (DUT) / Technische Universität Dresden, Germany

IAC-23.C4.8-B4.5A.3
IANUS: AN OVERVIEW ON THE TESTING CAMPAIGN OF THE MILANI PROPULSION SYSTEM
Elena Toson, T4i, Italy

IAC-23.C4.8-B4.5A.4
DEVELOPMENT OF A 50 W POROUS EMITTER ELECTROSPRAY THRUSTER TOWARDS FLIGHT
Arsad Quraishi, University of Southampton, United Kingdom

IAC-23.C4.8-B4.5A.6
DEMONSTRATION OF THE FULLY WIRELESS THRUST MEASUREMENT SYSTEM FOR MICROPROPULSION
Ten Arai, The University of TOKYO, Graduate school, Japan

IAC-23.C4.8-B4.5A.8
POLYMERS THRUST CHARACTERISTICS IN ABLATIVE PULSED PLASMA MICROTHRUSTER
Daria Fedorova, Bauman Moscow State Technical University, Russian Federation

IAC-23.C4.8-B4.5A.9
EXPERIMENTAL CHARACTERIZATION OF AN IMPULSIVE HYDROGEN PEROXIDE-BASED ROCKET FOR FINE ORBIT CONTROL
Sergio Cassese, University of Naples "Federico II", Italy

IAC-23.C4.8-B4.5A.11
DESIGN AND DEVELOPMENT OF A BUTANE WARM GAS PROPULSION SYSTEM FOR 6U CUBESAT;
Djamal Darfilal, Agence Spatiale Algérienne (ASAL), Algeria

IAC-23.C4.8-B4.5A.12
3D PRINTED MINIATURIZED MICRO THRUSTERS FOR CUBESAT APPLICATIONS
Sasi Kiran Palateerdham, University of Rome "La Sapienza", Italy

IAC-23.C4.8-B4.5A.14
THERMALLY DECOMPOSED HYDROGEN PEROXIDE FOR SMALL SCALE MONOPROPELLANT PROPULSION APPLICATION
Adil Mahroof, United Arab Emirates University (UAEU), United Arab Emirates

C4.9. Disruptive Propulsion Concepts for Enabling New Missions

October 6 2023, 10:15 — BCC A8

Co-Chair(s): Elena Toson, T4i, Italy; Nicoletta Wagner, European Space Agency (ESA), France;
Rapporteur(s): Angelo Cervone, Delft University of Technology (TU Delft), The Netherlands; Arnau Pons Lorente, Space Generation Advisory Council (SGAC), Spain;

IAC-23.C4.9.1
KEYNOTE: SPACE FLIGHT EXPERIMENTS OF DETONATION ENGINE SYSTEM BY USING SOUNDING ROCKET S-520
Jiro Kasahara, Nagoya University, Japan

IAC-23.C4.9.2
QUANTUM PROPULSION FOR INTERSTELLAR TRAVEL: ANALYSIS AND EXPLORATION OF KEY CHALLENGES
PRATYAKSHA SHETTY, India

IAC-23.C4.9.3
ATMOSPHERE-BREATHING ELECTRIC PROPULSION (ABEP) SYSTEM USING A CATHODE-LESS RF PLASMA THRUSTER: DESIGN AND ROBUST OPTIMISATION FOR VLEO
Mirko Magarotto, University of Padova, Italy

IAC-23.C4.9.4
APPLICATION OF NUCLEAR THERMAL PROPULSION FOR SUSTAINABLE CISLUNAR EXPLORATION
Saroj Kumar, Propulsion Research Center, University of Alabama in Huntsville, United States

IAC-23.C4.9.7
INTEGRATED OPTIMIZATION OF SPACECRAFT LAYOUT AND SCENARIOS FOR LONG-TERM MAINTENANCE OF ELLIPTICAL ORBITS WITH ULTRA-LOW PERICENTERS USING ONLY RENEWABLE RESOURCES
Alexander S. Filatyev, Lomonosov Moscow State University, Russian Federation

IAC-23.C4.9.8
FEASIBILITY OF HYBRID PHOTONIC PROPULSION TECHNOLOGY(HOPT) FOR FUTURE SPACE MISSION
Anand Nagesh, Big Dipper Exploration Technologies, India

IAC-23.C4.9.9
EFFICIENCY EVALUATION OF EMITTED CHARGED DROPLETS IN ULTRASONIC-ASSISTED ELECTRIC PROPULSION SYSTEM
Weiguo HE, Shanghai University, China

IAC-23.C4.9.10
THE CASE STUDY OF ADVANCED NUCLEAR PROPULSION METHODS FOR INTERSTELLAR UNMANNED PROBE TO ALPHA CENTAURI
Ugur Guven, UN CSSTEAP, United Kingdom

IAC-23.C4.9.11
OPTIMAL DESIGN AND CURRENT CONTROL STRATEGIES OF AN ELECTRODYNAMIC TAPE FOR ISS STATION-KEEPING
Alice Brunello, CISAS "G. Colombo" - University of Padova, Italy

C4.10-C3.5. Joint Session on Nuclear Power and Propulsion Systems, and Propellantless Propulsion

October 6 2023, 13:45 — BCC A8

Co-Chair(s): Leopold Summerer, ESA - European Space Agency, The Netherlands; Christian Bach, Technical University Dresden, Germany; Lisa May, Lockheed Martin (Space Systems Company), United States;
Rapporteur(s): Markus Jaeger, The Exploration Company GmbH, Germany; Saroj Kumar, University of Alabama in Huntsville, United States;

IAC-23.C4.10-C3.5.1
KEYNOTE: NUCLEAR THERMAL PROPULSION – PROGRESS AND POTENTIAL
Dale Thomas, University of Alabama in Huntsville, United States

IAC-23.C4.10-C3.5.2
DEPLOYMENT OF THE LARGE SIZE SOLAR SAIL
Roman Ya. Kezerashvili, New York City College of Technology, The City University of New York, United States

IAC-23.C4.10-C3.5.3
ADAPTIVE ORBIT DESIGN AND CONTROL OF SOLAR SAILS IN COMPLEX AND UNCERTAIN SPACE ENVIRONMENTS
Yuying Liang, ISAS, JAXA, China

IAC-23.C4.10-C3.5.5
LAYOUT OPTIMIZATION AND UNLOADING STRATEGY FOR SOLAR SAILS USING REFLECTIVITY CONTROL DEVICE
Guanwei He, National University of Defense Technology, China

IAC-23.C4.10-C3.5.6
RECENT PROGRESS ON NUCLEAR FUEL TESTING CAPABILITIES IN THE MIT REACTOR FACILITY
Roger X. Lenard, LPS, United States

IAC-23.C4.10-C3.5.7
APPLICATION OF THE RELIABILITY-DRIVEN DESIGN AND TEST METHODOLOGY TO NUCLEAR THERMAL PROPULSION SYSTEMS
Samantha Rawlins, University of Alabama in Huntsville, United States

IAC-23.C4.10-C3.5.8
DEVELOPMENT OF A HIGH POWER NUCLEAR ELECTRIC PROPULSION SYSTEM FOR INTERPLANETARY MISSIONS
Vlad-George Tirila, University of Southampton, United Kingdom

IAC-23.C4.10-C3.5.9
RESEARCH PROGRESS TOWARD ENGINEERING FEASIBILITY OF THE CENTRIFUGAL NUCLEAR THERMAL ROCKET
Dale Thomas, University of Alabama in Huntsville, United States

IAC-23.C4.10-C3.5.10
SYSTEM DESIGN OPTIMIZATION FOR A CENTRIFUGAL NUCLEAR THERMAL ROCKET
Mitchell Schroll, Propulsion Research Center, University of Alabama in Huntsville, United States

IAC-23.C4.10-C3.5.12
SUB-SCALE DEMONSTRATION OF AN AXIAL PULSED MAGNETIC NOZZLE FOR NUCLEAR PROPULSION SYSTEMS
Nathan Schilling, Kyushu University, United States

D1. IAF SPACE SYSTEMS SYMPOSIUM

Coordinator(s): Reinhold Bertrand, European Space Agency (ESA), Germany; Jill Prince, National Aeronautics and Space Administration (NASA), United States; Tibor S. Balint, Jet Propulsion Laboratory, United States;

D1.1. Innovative and Visionary Space Systems

October 2 2023, 15:15 — HAC Hall A

Co-Chair(s): Tibor Balint, Jet Propulsion Laboratory, United States; Peter Dieleman, Netherlands Aerospace Centre (NLR), The Netherlands;
Rapporteur(s): Camillo Richiello, CIRA Italian Aerospace Research Centre, Italy;

IAC-23.D1.1.1
A CONCEPTUAL FRAMEWORK FOR CLIMATE CHANGE MITIGATION ACTIONS EMPLOYING IN-SPACE GEOENGINEERING
Bruce Chesley, Teaching Science and Technology, Inc (TSTI), United States

IAC-23.D1.1.2
SPACECRAFT ATTITUDE CONTROL USING INERTIAL MORPHING
Suraj James Aranha, RMIT University (Royal Melbourne Institute of Technology), Australia

IAC-23.D1.1.3
BIO-TRLS: AN EVOLVED TECHNOLOGY READINESS LEVELS FOR BIOLOGICALLY ACTIVE MATERIALS AND ORGANISMS.
Layla A. van Ellen, Newcastle University, United Kingdom

IAC-23.D1.1.4
A CONCEPTUAL SYSTEM ANALYSIS OF MICRO SATELLITE CONSTELLATION
Büşra Şimşek, TAI - Turkish Aerospace Industries, Inc, Türkiye

IAC-23.D1.1.5
QUANTUM COMPUTING FOR SPACE: EXPLORING QUANTUM CIRCUITS ON PROGRAMMABLE NANOPHOTONIC CHIPS
Priyank Dubey, University of Luxembourg, Luxembourg

IAC-23.D1.1.6
DEVELOPMENT OF COMMERCIAL SPACECRAFT EDUCATION AND TRAINING SIMULATOR USING THE METAVERSE
Taichi Yamazaki, ASTRAX, Inc., Japan

IAC-23.D1.1.7
INNOVATIVE AND VISIONARY SPACE SYSTEMS: SPACE-BASED SOLAR POWER SYSTEMS
Asad Hasanov, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.D1.1.8
LTA VEHICLES FOR EXPLORATION OF MARTIAN CAVES
Pranjal Mhatre, University of Mumbai, India

IAC-23.D1.1.9
NEW GENERATION OF ONBOARD COMPUTERS FOR LONG MISSIONS
Rania Toukebri, Airbus D&S, Germany

D1.2. Space Systems Architectures

October 3 2023, 10:15 — HAC Hall A

Co-Chair(s): Matteo Emanuelli, Airbus Defence and Space, Germany; Thierry Floriant, Centre National d'Etudes Spatiales (CNES), France;
Rapporteur(s): Eberhard Gill, Delft University of Technology, The Netherlands;

IAC-23.D1.2.1
BUILDING BLOCK-BASED EARTH OBSERVATION GROUND SEGMENT ARCHITECTURE: A FLEXIBLE AND SCALABLE APPROACH TO DESIGNING AND BUILDING GROUND SYSTEMS
Baptiste Schandeler, Airbus Defence & Space, France

IAC-23.D1.2.2
LUNAR COMMUNICATION RELAY ARCHITECTURE DESIGN VIA MULTIPERIOD FACILITY LOCATION PROBLEM
Yuri Shimane, Georgia Institute of Technology, United States

IAC-23.D1.2.4
DESIGN CHALLENGES OF AUTONOMOUS FORMATION CONTROLLER FOR SMALL SATELLITE MISSIONS
Sanjeeviraja Thangavel, Singapore, Republic of

IAC-23.D1.2.7
MODULARITY IN THE LIFE CYCLE OF SATELLITE SYSTEMS: A REVIEW OF BARRIERS, DRIVERS, AND IMPACTS
Victoria Krivova, Politecnico di Milano, Italy

IAC-23.D1.2.8
FACING THE COMPUTATIONAL COMPLEXITY THREAT OF AUTONOMOUS LUNAR MINING
Rafal Graczyk, University of Luxembourg, Luxembourg

IAC-23.D1.2.9
POINT CLOUD-BASED REINFORCEMENT LEARNING FOR AUTONOMOUS NAVIGATION OF A ROBOTIC ROVER ON PLANETARY SURFACES
Federico Mustich, Politecnico di Torino, Italy

IAC-23.D1.2.10
DESIGN OPTIMIZATION AND STATISTICAL PERFORMANCE EVALUATION OF OPTICAL COMMUNICATIONS RELAY ARCHITECTURES
Julia Milton, Massachusetts Institute of Technology (MIT), United States

IAC-23.D1.2.11
CONCEPT AND DESIGN OF AN AUTONOMOUS MICRO ROVER FOR LONG TERM LUNAR EXPLORATION
Joel Gützlaff, FH Aachen University of Applied Sciences, Germany

IAC-23.D1.2.12
NESTED AUTONOMOUS ORBIT DETERMINATION AND CONTROL FOR DISTRIBUTED SATELLITE SYSTEMS: A CASE STUDY ON CONSTELLATION OF FORMATIONS FOR EARTH OBSERVATION
Khaja Faisal Hussain, Khalifa University of Science and Technology (KUST), United Arab Emirates

IAC-23.D1.2.13
OPTIMIZING ON-ORBIT PROCESSING AND SYSTEM ARCHITECTURE FOR OPEN-PLATFORM SATELLITES
Ravneet Kaur, TU Berlin, Germany

D1.3. Technologies to Enable Space Systems

October 3 2023, 15:00 — HAC Hall A

Co-Chair(s): Steven Arnold, The John Hopkins University Applied Physics Laboratory, United States; Xavier Roser, Thales Alenia Space France, France;
Rapporteur(s): Yoshihisa Arikawa, Japan Aerospace Exploration Agency (JAXA), Japan;

IAC-23.D1.3.1
STEP: THE TECHNOLOGY PROGRAM OF ITALIAN SPACE AGENCY
Marco Di Clemente, Italian Space Agency (ASI), Italy

IAC-23.D1.3.2
USING REINFORCEMENT LEARNING FOR SATELLITE FORMATION
Hari Bharath Chitta, Technical University of Berlin, Germany

IAC-23.D1.3.3
DESIGN OF IN-ORBIT ASSEMBLY OF LARGE REFLECTOR BASED ON PARALLEL ROBOT
Guangyao Zhu, China Aerospace Science and Technology Corporation (CASC), China

IAC-23.D1.3.4
AUTOROTATION: AN INNOVATIVE ALTERNATIVE TO PARACHUTES FOR SPACECRAFT LANDING
Clemens Riegler, Julius Maximilians Universität Würzburg, Germany

IAC-23.D1.3.5
SCIENTIFIC RESULTS OF FARGO - A VERIFICATION OF NOVEL FERROFLUID SYSTEMS ON THE ISS
Manfred Ehresmann, Institute of Space Systems, University of Stuttgart, Germany

IAC-23.D1.3.6
FORFABSAT: APPROACHES TO PRODUCTION OF MULTI-SATELLITE SYSTEMS
Klaus Schilling, Zentrum für Telematik, Germany

IAC-23.D1.3.7
REUSABILITY POTENTIAL OF SPACECRAFT SOLAR PANELS
Margot Clauss, Luleå University of Technology, Sweden

IAC-23.D1.3.8
DESIGN AND DEVELOPMENT OF AN ACTIVE MAGNETIC BEARING FOR ENHANCED LONGEVITY OF EARTH SENSOR
Mayur Pawar, India

IAC-23.D1.3.9
ARTIFICIAL INTELLIGENCE IN PLANETARY EXPLORATION: ENABLING AUTONOMOUS DECISION-MAKING FOR SPACECRAFT
Anton Ivanov, Technology Innovation Institute (TII), United Arab Emirates

IAC-23.D1.3.10
A REVIEW ON PHOTONIC SENSING SYSTEMS FOR SPACECRAFT APPLICATIONS
Ahmed E. S. NOSSEIR, University of Trento, Italy

IAC-23.D1.3.11
ANALYSIS OF AI ALGORITHMS USED IN AUTONOMOUS NAVIGATION FOR MOBILE ROBOTS IN SPACE EXPLORATION
Andrea Abascal Molina, ITESM, Mexico

IAC-23.D1.3.12
PRECISE POWER DESCENT FAULT TOLERANT CONTROL OF A LUNAR LANDER
Krishna Kumar, Ryerson University, Canada

IAC-23.D1.3.13
ADVANCEMENTS IN IN-SPACE MANUFACTURING USING PHOTOPOLYMERS: INSIGHTS INTO EXPERIMENTS PERFORMED AND APPROACHES TOWARDS A MATURE TECHNOLOGY.
Markus Pietras, Munich University of Applied Sciences, Germany

D1.4A. Space Systems Engineering - Methods, Processes and Tools (1)

October 5 2023, 10:15 — HAC Hall A

Co-Chair(s): Dapeng Wang, Beihang University, China; Peter Dieleman, Netherlands Aerospace Centre (NLR), The Netherlands;
Rapporteur(s): Hui Du, Institute of Spacecraft System Engineering,China Academy of Space Technology (CAST), China;

IAC-23.D1.4A.1 (unconfirmed)
AI4CE - LATEST DEVELOPMENTS ON THE AI-BASED SYSTEM GENERATION PLATFORM
Jan-Peter Ceglarek, TU Darmstadt, Germany

IAC-23.D1.4A.2
A SIMULATION AND ANALYSIS TOOL FOR ITERATIVELY DESIGNING AND SIZING SOLAR ARRAYS AND BATTERIES FOR SMALL SATELLITE MISSIONS
Marlin Kanzow, Institute of Space Systems, University of Stuttgart, Germany

IAC-23.D1.4A.3
ORBIT MANOEUVRE STRATEGIES FOR VERY LOW EARTH ORBIT (VLEO) SATELLITES
Sui Chen, Politecnico di Milano, Italy

IAC-23.D1.4A.4
LEVERAGING LANGUAGE MODELS SEMANTIC SIMILARITY CAPABILITIES TO FACILITATE INFORMATION REUSE IN SYSTEM ENGINEERING
Paul Darm, University of Strathclyde, United Kingdom

IAC-23.D1.4A.6
ARCHITECTURE OF A GENERATIVE DESIGN TOOL FOR SPACECRAFT AND USER FRONT-END IMPLEMENTATION THROUGH A CHATBOT SMART DESIGN ASSISTANT
Ramon Maria Garcia Alarcia, Technical University of Munich, Germany

IAC-23.D1.4A.7
A MODEL-BASED APPROACH FOR THE PRELIMINARY DESIGN OF SMALL SATELLITES CONSTELLATIONS BASED ON USER NEEDS ANALYSIS. THE IRIDE OPTICAL SUB-CONSTELLATION CASE STUDY
Federica Conti, Sapienza University of Rome, Italy

IAC-23.D1.4A.9
SAFE APPROACH OF A SMALL SATELLITE WITH A LARGE SPACECRAFT. ANALYSIS OF NOMINAL AND OFF-NOMINAL SOLUTIONS.
Antonio D'Ortona, Politecnico di Torino, Italy

IAC-23.D1.4A.11
A SEMI-STOCHASTIC, NUMERIC SIMULATION TOOL IN MODEL BASED SYSTEMS ENGINEERING FOR TUMBLEWEED ROVERS
Markus Renoldner, Team Tumbleweed, Austria

IAC-23.D1.4A.12
ENHANCING 5G GLOBAL CONNECTIVITY VIA SATELLITE CONSTELLATIONS: PRELIMINARY SIZING OF PHASED ARRAY ANTENNAS USING A HEURISTIC SOLVER WITH GENETIC ALGORITHMS
Anton Koenig, Cranfield University, United Kingdom

IAC-23.D1.4A.13
MAXIMIZING LIMITED VOLUME: A GENETIC ALGORITHM-BASED APPROACH TO CUBESAT SOLAR PANEL AND ANTENNA DEPLOYMENT PATTERN DESIGN
Mohammadamin Alandihallaj, University of Luxembourg, Luxembourg

D1.4B. Space Systems Engineering - Methods, Processes and Tools (2)

October 5 2023, 15:00 — HAC Hall A

Co-Chair(s): Geilson Loureiro, Instituto Nacional de Pesquisas Espaciais (INPE), Brazil; Norbert Frischauf, TU Graz, Austria;
Rapporteur(s): Jon Holladay, National Aeronautics and Space Administration (NASA), United States;

IAC-23.D1.4B.1
MULTIVERSE: A NOVEL HIGH PERFORMANCE ASTRODYNAMIC TOOL IN JULIA
Michele Ceresoli, Politecnico di Milano, Italy

IAC-23.D1.4B.2
DISTRIBUTED HARDWARE-IN-THE-LOOP SATELLITE SIMULATION ARCHITECTURE FOR CREATING "DIGITAL SHADOWS" OF SATELLITE CONSTELLATIONS
Jaspar Sindermann, Technical University of Munich, Germany

IAC-23.D1.4B.3
DEFINITION OF ARCHITECTURES & TECHNOLOGIES FOR SUSTAINABLE HUMAN EXPLORATION OF THE MOON
Giuseppe Narducci, Politecnico di Torino, Italy

IAC-23.D1.4B.4
LARGE LANGUAGE MODEL APPLICATIONS TO SPACE SYSTEMS ENGINEERING
Johannes Norheim, Massachusetts Institute of Technology (MIT), United States

IAC-23.D1.4B.5
MODEL-BASED MISSION PLANNING: ONTOLOGICALLY BESPOKE PROJECT MANAGEMENT SYSTEM GENERATION USING MISSION-UNIQUE ARCHITECTURE AND PROCESS FRAMEWORKS
Michael Halvorson, University of Alabama in Huntsville, United States

IAC-23.D1.4B.6
APPLICATION OF MODEL-BASED SYSTEMS ENGINEERING (MBSE) TO ROCKET ENGINE AFFORDABILITY AND POTENTIALS
Shreyas Lakshmipuram Raghu, University of Alabama in Huntsville, United States

IAC-23.D1.4B.7
TOWARDS A MODEL-BASED DESIGN REVIEW:THE NANOSATC-BR3 CUBESAT STUDY CASE
Geilson Loureiro, Instituto Nacional de Pesquisas Espaciais (INPE), Brazil

IAC-23.D1.4B.8
TRANSITIONING FROM WATERFALL TO AGILE METHODOLOGIES IN SATELLITE DEVELOPMENT: A CASE STUDY OF ORBIT NTNU
Patrick Nikolay Falkeid, NTNU, Norway

IAC-23.D1.4B.9
APPLICATION OF MARKOWITZ PORTFOLIO THEORY FOR SPACE TECHNOLOGIES
Afreen Siddiqi, Massachusetts Institute of Technology (MIT), United States

IAC-23.D1.4B.10
FROM DESIGN TO DELIVERY IN THREE MONTHS: THE FAST DEVELOPMENT OF A 3U CUBESAT
Luisa Iossa, Politecnico di Torino, Italy

IAC-23.D1.4B.11
HYSIM: A TOOL FOR SPACE-TO-SPACE HYPERSPECTRAL RESOLVED IMAGERY
Leonard Felicetti, Cranfield University, United Kingdom

D1.5. Lessons Learned in Space Systems: Achievements, Challenges, Best Practices, Standards.

October 6 2023, 10:15 — HAC Hall A

Co-Chair(s): Yoshihisa Arikawa, Japan Aerospace Exploration Agency (JAXA), Japan; Igor V. Belokonov, Samara National Research University (Samara University), Russian Federation;
Rapporteur(s): Giuseppe Guidotti, Deimos Space SLU, Spain;

IAC-23.D1.5.1
BEST PRACTICES AND LESSONS LEARNED ON PRODUCT AND QUALITY ASSURANCE ACTIONS ON CUBESAT MISSIONS: THE SAPIENZA S5LAB STUDY CASE
Michela Boscia, Sapienza University of Rome, Italy

IAC-23.D1.5.2
THE STUDY ON THE RELIABILITY INCREASING OF NEWLY DEVELOPED SPACE TECHNOLOGY
SANGSOON YONG, Korea Aerospace Research Institute (KARI), Korea, Republic of

IAC-23.D1.5.3
LESSONS LEARNED AND BEST PRACTICES FROM THE BIRDS-5 PROJECT
Yukihisa Otani, Kyushu Institute of Technology, Japan

IAC-23.D1.5.4
THE EFFECT ON THE ITERATIVE DESIGN APPROACH OF DIFFERENT STARLINK SATELLITE GENERATIONS AND VERSIONS AS SEEN BY THE APPARENT BRIGHTNESS CHARACTERISTICS
Andreas Hornig, AerospaceResearch.net, Germany

IAC-23.D1.5.5
LESSONS LEARNED WITH RISK MANAGEMENT: A SYSTEMS ENGINEER'S PERSPECTIVE
Charles Baker, NASA Goddard Space Flight Center (USRA), United States

IAC-23.D1.5.6
SPACECRAFT DIGITAL ENGINEERING: THE TALE OF "DIGITAL TWINS" AND LESSONS LEARNED
Anton Ivanov, Technology Innovation Institute (TII), United Arab Emirates

IAC-23.D1.5.7
STANDARDIZING CUBESAT INTERIORS: SAFEGUARDING MISSIONS AND ADVANCING THE MARKET
Miraslava Kazlouskaya, International Space University (ISU), France

IAC-23.D1.5.8
THE EFFECTS OF THE DESIGN ON THE SATELLITE REFUELING SYSTEM EFFICIENCY.
Samir Bairamov, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.D1.5.9
THE PRACTICE OF REDUCING COST IN THE DEVELOPMENT OF SMALLSATS
Lianxiang Jiang, China Academy of Space Technology (CAST), China

IAC-23.D1.5.10
JAXA'S SYSTEMS ENGINEERING/PROJECT MANAGEMENT PROCESSES AND BEST PRACTICES IN HAYABUSA2 MISSION
Yuto Takei, Japan Aerospace Exploration Agency (JAXA), Japan

D1.6. Cooperative and Robotic Space Systems

October 6 2023, 13:45 — HAC Hall A

Co-Chair(s): Otfrid G. Liepack, National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States; Klaus Schilling, Zentrum für Telematik, Germany;
Rapporteur(s): Steven Arnold, The John Hopkins University Applied Physics Laboratory, United States; Audrey Berquand, European Space Agency (ESA), The Netherlands;

IAC-23.D1.6.1
MULTI-AGENT 3D MAP RECONSTRUCTION AND CHANGE DETECTION IN MICROGRAVITY WITH FREE-FLYING ROBOTS
Julia Di, Stanford University, United States

IAC-23.D1.6.2
ADAPTIVE SPACE ROBOT MOTION SYNCHRONIZATION TOWARDS TUMBLING UNCOOPERATIVE TARGET GRASPING
Lorenzo Capra, Politecnico di Milano, Italy

IAC-23.D1.6.3
AN EFFICIENT PDDLSTREAM-BASED TASK AND MOTION PLANNING METHOD FOR CHINA SPACE STATION MANIPULATOR
JinTao Li, Northwestern Polytechnical University, China

IAC-23.D1.6.5
DYNAMICS CONTROL AND VIBRATION SUPPRESSION OF FLEXIBLE DUAL-ARM SPACE ROBOT FOR FACILITY CONSTRUCTION IN LOW GRAVITY ENVIRONMENT
Xiaodong Fu, Tsinghua University, China

IAC-23.D1.6.6
ADAPTIVE DUAL LAYER SLIDING MODE IMPEDANCE CONTROLLER FOR SPACE ROBOT ON-ORBIT AUXILIARY DOCKING OPERATION
An Zhu, Fuzhou University, China

IAC-23.D1.6.7
ORU-BOAS: DEVELOPING REUSABLE BUILDING BLOCKS FOR SATELLITE MODULARISATION
Ana Ruiz Perez, SENER Aeroespacial, Spain

IAC-23.D1.6.8
MULTIFUNCTIONAL INTERCONNECT FOR FUTURE MODULAR PLANETARY ROBOTS
Wiebke Brinkmann, DFKI Robotics Innovation Center Bremen, Germany

IAC-23.D1.6.9
PANGOLIN SWARM ROBOTICS FOR LUNAR HABITATS: EXCAVATING UNDERGROUND STRUCTURES ON THE MOON
Akanksha Bhagat, India

IAC-23.D1.6.10
COMPARISON OF LEGGED SINGLE-ROBOT AND MULTI-ROBOT ANALOG EXPLORATION SYSTEMS
Philip Arm, ETHZ, Switzerland

D2. IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM

Coordinator(s): Yuguang Yang, China Aerospace Science & Industry Corporation (CASIC), China; Markus Jaeger, The Exploration Company GmbH, Germany; Randolph Kendall, The Aerospace Corporation, United States; John M. Horack, The Ohio State University College of Engineering, United States;

D2.1. Launch Vehicles in Service or in Development

October 2 2023, 15:15 — BCC A3

Co-Chair(s): Danilo Sakay, Brazilian Space Agency (AEB), Brazil; Yorichika Mihara, Mitsubishi Heavy Industries, Ltd., Japan;
Rapporteur(s): Martin Sippel, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;

IAC-23.D2.1.1
THE YL-2 LAUNCH VEHICLE AND ITS FUTURE PLANS
Fan Shaobing, Orienspace Ltd., China

IAC-23.D2.1.2
REIMAGINING SCIENTIFIC DISCOVERY WITH SPACE LAUNCH SYSTEM UNIQUE LAUNCH CAPABILITY
James Green, National Aeronautics and Space Administration (NASA), United States

IAC-23.D2.1.3
THE FLIGHT RESULTS OF H3 AND NEXT STEP FOR INNOVATIVE SPACE TRANSPORTATION SYSTEM
Shoyo Hyodo, Mitsubishi Heavy Industries, Ltd., Japan

IAC-23.D2.1.4
LONG MARCH 6A AND ITS TECHNICAL CHARACTERISTICS
Gang Hong, Shanghai Academy of Spaceflight Technology (SAST), China Aerospace and Technology Corporation (CASC), China

IAC-23.D2.1.5
VEGA-C GUIDANCE IMPROVEMENT FOR OPTIMIZED SRM RE-ENTRY
Angela Trombetta, AVIO S.p.A., Italy

IAC-23.D2.1.6
PR-1 FOR SCIENCE EXPLORATION DEVELOPED BY CHINESE ACADEMY OF SCIENCES
Aizhen Ming, CAS Space, China

IAC-23.D2.1.7 (unconfirmed)
STUDY ON LIFT AND DRAG CHARACTERISTICS OF RETRO-PROPULSION STAGE OF REUSABLE ROCKETS
Chenxi Zhang, Northwestern Polytechnical University, China

IAC-23.D2.1.8
RESEARCH ON RECOVERY TECHNOLOGY DEVELOPMENT STRATEGY OF LAUNCH VEHICLE IN CHINA
Jianbin Su, Beijing Special Engineering Design and Research Institute (BSEDI), China

D2.2. Launch Services, Missions, Operations, and Facilities

October 3 2023, 15:00 — BCC A3

Co-Chair(s): Francesco Santoro, Altec S.p.A., Italy; Vincent Taponier, Centre National d'Etudes Spatiales (CNES), France; John M. Horack, The Ohio State University College of Engineering, United States;
Rapporteur(s): Jeremy Pinier, National Aeronautics and Space Administration (NASA), Langley Research Center, United States;

IAC-23.D2.2.1
THE NEW GENERATION OF THE EUROPEAN LAUNCH BASE, IN FRENCH GUIANA, IS ON THE WAY!
Egalgi Joël, Centre National d'Etudes Spatiales (CNES), French Guiana

IAC-23.D2.2.2
THE SPACE LAUNCH SYSTEM (SLS): A DIGITALLY TRANSFORMED FACTORY FOR THE FUTURE
Benjamin Thompson, The Boeing Company, United States

IAC-23.D2.2.3
CREATION AND IMPLEMENTATION OF THE MANAGEMENT SYSTEM FOR ONE-STOP LAUNCH SERVICES ON A SHARED LAUNCH VEHICLE
Xiangyu Li, China Great Wall Industry Corporation (CGWIC), China

IAC-23.D2.2.4
WIND PROFILER UPPER AIR OBSERVATIONS FOR SPACE LAUNCH OPERATIONS
Meka Rajasekhar, Indian Space Research Organisation (ISRO), SDSC SHAR, Astronautical Society of India, India

IAC-23.D2.2.5
IN-ORBIT TRANSPORTATION: THE KEY SERVICE FOR COMMERCIAL SPACE MISSIONS
Paolo Mori, D-Orbit SpA, Italy

IAC-23.D2.2.6
LAUNCH.CTRL SOFTWARE BY PRECIOUS PAYLOAD: UNLOCKING ALL SPACE MOBILITY SOLUTIONS
Andrey Maksimov, United Arab Emirates

IAC-23.D2.2.7
ROCKET LAUNCHING SITE SELECTION IN ETHIOPIA USING WEIGHT DECISION MATRIX ANALYSIS
Eden Habteslasie, Ethiopian Space Science and Technology Institute (ESSTI), Ethiopia

IAC-23.D2.2.8
THE PROSPECTS FOR A SPACEPORT IN PERU: AN OPPORTUNITY FOR AEROSPACE DEVELOPMENT AND THE COUNTRY'S ECONOMY
Juan Salvador Palacios Bett, Universidad Nacional de Ingeniería (Lima, Perù), Peru

IAC-23.D2.2.9
MTG-I1 LAUNCH PREPARATION: A VIEW FROM CUSTOMER SIDE
Christian Corba, EUMETSAT, Germany

IAC-23.D2.2.10
TRAJECTORY OPTIMIZATION FOR MULTI-STAGE SYSTEMS: A COMBINED AIRBREATHING AND ROCKET APPROACH
Lorenzo Beggio, Politecnico di Milano, Italy

D2.3. Upper Stages, Space Transfer, Entry & Landing Systems

October 3 2023, 10:15 — BCC A3

Co-Chair(s): Oliver Kunz, Beyond Gravity, Switzerland; Bryan Smith, NASA Glenn Research Center, United States;
Rapporteur(s): Oleg Ventskovsky, Yuzhnoye SDO European Representation in Brussels, Ukraine;

IAC-23.D2.3.2
READY FOR INAUGURAL MISSION LATE 2026 - NYX EARTH PROPULSION SYSTEM USING GREEN STORABLE PROPELLANTS
Markus Jaeger, The Exploration Company GmbH, Germany

IAC-23.D2.3.4
ADVANCED EUROPEAN RE-ENTRY SYSTEM BASED ON INFLATABLE HEAT SHIELDS: EFESTO-2 PROJECT OVERVIEW
Ysolde Prevereaud, ONERA - The French Aerospace Lab, France

IAC-23.D2.3.5
A STUDY OF THE REEFING SYSTEM OF A SUPERSONIC PARACHUTE FOR MARS EXPLORATION
Weijie Xu, Northwestern Polytechnical University NPU, China

IAC-23.D2.3.6
DEVELOPMENT AND FUTURE OUTLOOK OF AN IN-HOUSE DEVELOPED HEMISFLO RIBBON DROGUE PARACHUTE.
Thomas Britting, Delft Aerospace Rocket Engineering (DARE), The Netherlands

IAC-23.D2.3.7
RETRIEVAL STRATEGIES AND SYSTEMS FOR SOUNDING ROCKTETS AND PAYLOADS
Lars Pepermans, Chutes.nl, The Netherlands

IAC-23.D2.3.9
LANDING GUIDANCE METHOD FOR REUSABLE LAUNCH VEHICLE BASED ON CONVEX OPTIMIZATION
Zhijing ZHANG, CAS Space, China

IAC-23.D2.3.10
EMBEDDED OPTIMIZATION FOR SPACE RIDER REENTRY MODULE PARAFOIL GNC
Jesús Ramírez, SENER Aeroespacial, Spain

IAC-23.D2.3.12
AVUM ORBITAL MODULE GNC ARCHITECTURE FOR SPACE RIDER MISSION
Giulia Broggi, AVIO S.p.A., Italy

D2.4. Future Space Transportation Systems

October 4 2023, 10:15 — BCC A3

Co-Chair(s): José Gavira Izquierdo, European Space Agency (ESA), The Netherlands; Nicolas Bérend, ONERA - The French Aerospace Lab, France; Jamila Mansouri, European Space Agency (ESA), The Netherlands;
Rapporteur(s): Emmanuelle David, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland;

IAC-23.D2.4.1
BRINGING SPACE TRANSPORTATION IN EUROPE TO THE NEXT LEVEL
Giorgio Tumino, European Space Agency (ESA), France

IAC-23.D2.4.2
TOWARDS THE NEXT STEP: SPACELINER 8 PRE-DEFINITION
Martin Sippel, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-23.D2.4.3
CONCEPTUAL STUDY AND DEVELOPMENT PLAN OF REUSABLE SSTO TO REALIZE FREQUENT ACCESS TO SPACE
Tadayoshi Shoyama, Innovative Space Carrier Inc., Japan

IAC-23.D2.4.4
DEVELOPMENT OF TRAJECTORY OPTIMIZATION TOOLS FOR QUICK PERFORMANCE EVALUATION OF REUSABLE LAUNCH VEHICLE CONFIGURATIONS
Riccardo Santoro, AVIO S.p.A., Italy

IAC-23.D2.4.5
CONCEPTS FOR LUNAR SPACE STATION FOR INTERPLANETARY MISSIONS
Jayakumar Venkatesan, Valles Marineris International Private Limited, India

IAC-23.D2.4.7
STUDY OF ASCENT CAPABILITIES FOR A MANNED MISSION ON MARS
Antonio Abruscato, Politecnico di Torino - Thales Alenia Space Italia - ISAE Supaero Toulouse, Italy

IAC-23.D2.4.8
AN ANALYSIS OF THE POINT-TO-POINT CARGO TRANSPORTATION SYSTEM USING REUSABLE LAUNCH VEHICLES
Sang-Don Lee, Korea Advanced Institute of Science and Technology (KAIST), Korea, Republic of

IAC-23.D2.4.9
IO A UNIQUELY EUROPEAN SOLUTION TO THE SUPERHEAVY LAUNCH PROBLEM
Jose Mariano Lopez Urdiales, Zero2infinity, Spain

IAC-23.D2.4.10
A FULL MAGNETIC SAFE MODE FOR SPACE RIDER MISSION
Anton Bahu, AVIO S.p.A., Italy

D2.5. Technologies for Future Space Transportation Systems

October 4 2023, 15:00 — BCC A3

Co-Chair(s): Mathieu CHAIZE, ArianeGroup SAS, France; Lin Shen, China Academy of Launch Vehicle Technology (CALT), China; Daniel McCammon, C6 Launch Systems, Corporation, Canada;
Rapporteur(s): Andrea Esposito, Northrop Grumman Corporation, Italy; Andrea Jaime, Isar Aerospace Technologies GmbH, Germany;

IAC-23.D2.5.1
TOWARDS A NEW CLASS OF ENGINE FOR FUTURE HEAVY LIFT LAUNCH VEHICLES
Amaya Espinosa, Centre National d'Etudes Spatiales (CNES), France

IAC-23.D2.5.3
PARAMETER OPTIMIZATION-BASED AUTOMATIC DESIGN OF LAUNCH VEHICLE'S ATTITUDE CONTROLLER
Ki-Wook Jung, Korea Advanced Institute of Science and Technology (KAIST), Korea, Republic of

IAC-23.D2.5.4
NUMERICAL REBUILDING OF ATMOSPHERIC ENTRIES WITHIN THE EU PROJECT MEESST
Christian Korn, Institute of Space Systems, University of Stuttgart, Germany

IAC-23.D2.5.5
MISSION DESIGN AND SENSITIVITY ANALYSIS FOR IN-AIR CAPTURING OF A WINGED REUSABLE LAUNCH VEHICLE
Martin Sippel, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-23.D2.5.6
SPACE RIDER THERMAL PROTECTION SYSTEM, AN ENABLING TECHNOLOGY FOR REUSABLE SPACE TRANSPORTATION SYSTEMS: DESIGN, DEVELOPMENT AND QUALIFICATION STATUS.
Giuseppe Rufolo, CIRA Italian Aerospace Research Centre, Italy

IAC-23.D2.5.8
FAULT DIAGNOSIS METHOD FOR REDUNDANT HETEROGENEOUS SENSOR OF ELECTROMECHANICAL ACTUATOR IN TVC SYSTEM
Chaoran Wang, Zhejiang University, China

IAC-23.D2.5.9
CANFIELD MECHANISM FOR THRUSTER POINTING APPLICATIONS IN ORBIT TRANSFER VEHICLE
Pranav Keskar, Bellatrix Aerospace Private Limited, India

IAC-23.D2.5.10
RAPID TRANSPORTATION OF FLEXIBLE ASSEMBLY CELL BASED ON NON-SINGULAR TERMINAL SLIDING MODE CONTROL WITH PRE-DEFINED TIME REACHING LAW
Ran Tao, Northwestern Polytechnical University, China

IAC-23.D2.5.11
FUTURE SPACE TRANSPORTATION TECHNOLOGIES
Sima Maniyeva, Baku State University, Azerbaijan

D2.6. Future Space Transportation Systems Verification and In-Flight Experimentation

October 5 2023, 10:15 — BCC A3

Co-Chair(s): David E. Glass, National Aeronautics and Space Administration (NASA), United States; Christie Maddock, University of Strathclyde, United Kingdom;
Rapporteur(s): Tetsuo Hiraiwa, Japan Aerospace Exploration Agency (JAXA), Japan; Aaron Weaver, National Aeronautics and Space Administration (NASA), United States; Nicole Viola, Politecnico di Torino, Italy;

IAC-23.D2.6.2
FIRST TEST FLIGHT OF A REUSABLE SUBORBITAL PERUN ROCKET.
Marek Lubieniecki, SpaceForest, Poland

IAC-23.D2.6.3
OVERVIEW OF THE QUALIFICATION AND REFURBISHMENT APPROACH IMPLEMENTED BY SPACE RIDER SYSTEM TO ACCOMPLISH REUSABLE SPACE MISSIONS.
Vincenzo Giorgio, ALTEC Spa, Italy

IAC-23.D2.6.4
SYSTEM DROP TEST FOR THE VALIDATION OF SPACE RIDER DESCENT AND LANDING MISSION PHASE: STATUS OF DESIGN AND DEVELOPMENT ACTIVITIES.
Giuseppe Rufolo, CIRA Italian Aerospace Research Centre, Italy

IAC-23.D2.6.5
DESIGN OF A LIQUID METHANE-OXYGEN ENGINE-BASED VTVL DEMONSTRATION ROCKET FOR REUSABLE LAUNCH VEHICLES
Liang CHEN, Beijing Interstellar Glory Space Technology Co., Ltd, China

IAC-23.D2.6.6
RECENT STATUS OF EXPERIMENTAL SUBSCALE WINGED ROCKET WIRES#015 AND IT'S FULL EXPANDER CYCLE LOX/LNG ENGINE COMBUSTION TEST
Koichi Yonemoto, Tokyo University of Science, Japan

IAC-23.D2.6.7
IN-FLIGHT PERFORMANCE OF THE SUPERSONIC PARACHUTE EXPERIMENT ABOARD REXUS (SPEAR) VEHICLE
Thomas Britting, Delft Aerospace Rocket Engineering (DARE), The Netherlands

IAC-23.D2.6.8
MISSION POSSIBLE - REENTRY CAPSULE & IN ORBIT DEMONSTRATION PLATFORM
Jon Reijneveld, The Exploration Company GmbH, France

IAC-23.D2.6.9
RESEARCH ON THE BASE HEATING OF SUB-SCALE HYDROGEN/OXYGEN ROCKET
Wang Xu, Beihang University (BUAA), China

IAC-23.D2.6.10
PAYLOAD SERVICE UNIT FOR THE ILR-33 AMBER 2K ROCKET
Karol Bresler, Łukasiewicz Research Network – Institute of Aviation (ILOT), Poland

IAC-23.D2.6.11
EXPERIMENTAL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS OF THE REUSABLE LAUNCH VEHICLE IN VERTICAL LANDING
Ryota Tamai, The University of TOKYO, Graduate school, Japan

D2.7. Small Launchers: Concepts and Operations

October 5 2023, 15:00 — BCC A3

Co-Chair(s): Harry A. Cikanek, National Oceanic and Atmospheric Administration (NOAA), United States; Ulf Palmnäs, Swedish Space Corporation (SSC), Sweden;
Rapporteur(s): Florian Ruhhammer, MT Aerospace AG, Germany;

IAC-23.D2.7.1
SMALLSATS BY THE NUMBERS 2023: GROWING SMALLSAT ACTIVITY AND ITS IMPLICATIONS FOR THE SMALL LAUNCH MARKET
Emma Louden, Bryce Space and Technology, United States

IAC-23.D2.7.2
THE FUTURE OF SATELLITE LAUNCHES: REVOLUTIONIZING THE INDUSTRY WITH ELECTROMAGNETIC TECHNOLOGY
Khatayi Rustamov, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.D2.7.3
RESULT OF CONCEPTUAL DESIGN FOR KOREAN SMALLSAT-DEDICATED LAUNCH VEHICLE
Daeban Seo, Korea Aerospace Research Institute (KARI), Korea, Republic of

IAC-23.D2.7.4
DEVELOPMENT STATUS OF THE COMMERCIAL ROCKET:PR-2
Rui Zhang, CAS Space, China

IAC-23.D2.7.5
MIURA THE FIRST REUSABLE EUROPEAN MICROLAUNCHER LAUNCH CAMPAIGN KICK OFF
Pablo Gallego Sanmiguel, PLD Space, United States

IAC-23.D2.7.6
DESIGN OF A REUSABLE AIR-LAUNCHED ROCKET FOR SMALL SATELLITES LAUNCH
YAN LYU, China Academy of Launch Vehicle Technology (CALT), China

IAC-23.D2.7.7
HIGH-BANDWIDTH TECHNOLOGIES FOR NEXT-GENERATION LAUNCHER NETWORKS: A COMPARATIVE ANALYSIS BETWEEN TTETHERNET AND TIME SENSITIVE NETWORKING (TSN)
Tiziana Fiori, Sapienza University of Rome, Italy

IAC-23.D2.7.8
NOVEL COMMUNICATION AND NAVIGATION SYSTEMS ONBOARD ILR-33 AMBER 2K ROCKET
Janusz Nicolau-Kukliński, Łukasiewicz Research Network – Institute of Aviation (ILOT), Poland

IAC-23.D2.7.10
CONCEPTUAL IMPROVEMENT OF A SOUNDING ROCKET FOR LONG HIGH-QUALITY MICRO-GRAVITY EXPERIMENTS
Alessandro Domenico Corcione, Politecnico di Milano, Italy

D2.8. Space Transportation Solutions for Deep Space Missions

October 6 2023, 10:15 — BCC A3

Co-Chair(s): Kenneth Bruce Morris, Sierra Space, United States; Josef Wiedemann, MT Aerospace AG, Germany; Daniel McCammon, C6 Launch Systems, Corporation, Canada; Xiaowei WANG, China Academy of Launch Vehicle Technology (CALT), China;
Rapporteur(s): Aaron Weaver, National Aeronautics and Space Administration (NASA), United States; Giuseppe Rufolo, , ;

IAC-23.D2.8.1
NUCLEAR ORBITAL COMPLEX "NUKLON": MISSION ARCHITECTURE AND SCIENTIFIC GOALS
Dmitry Zarubin, Space Research Institute (IKI), Russian Academy of Sciences (RAS), Russian Federation

IAC-23.D2.8.2 (unconfirmed)
LUNAR LAUNCHES: A COMPARATIVE STUDY OF FLIGHT TIME AND FUEL REQUIREMENTS FROM EARTH AND THE MOON FOR MISSIONS TO MARS
Vidhu Dixit, University of Petroleum and Energy Studies, India

IAC-23.D2.8.4
CONTROL PROGRAM FOR A MULTI-TYPE ELECTRIC PROPULSION SYSTEM FOR THE EARTH-MARS-EARTH-JUPITER MISSION
Olga Starinova, Samara National Research University (Samara University), Russian Federation

IAC-23.D2.8.5
EXPLORATORY DEEP SPACE MISSION AS A PRECURSOR TO INTERSTELLAR SPACE TRAVEL
Ugur Guven, UN CSSTEAP, United Kingdom

IAC-23.D2.8.6
SKYHOOK: AFFORDABLE AND SUSTAINABLE SPACE TRAVEL
Fakhri Amanov, Azerbaijan State Oil and Industry University (ASOIU), Azerbaijan

D2.9-D6.2. Emerging Space Ventures, including Space Logistics and Space Safety for Sustainability

October 6 2023, 13:45 — BCC A3

Co-Chair(s): Aline Decadi, European Space Agency (ESA), France; Charles E. Cockrell Jr., National Aeronautics and Space Administration (NASA), United States;
Rapporteur(s): Michele Cristina Silva Melo, , Brazil;

IAC-23.D2.9-D6.2.3
COMPARISON OF THE ENVIRONMENTAL IMPACT OF PRODUCTION AND LAUNCH EMISSIONS OF DIFFERENT COMMON LAUNCHER ARCHITECTURES
Jan-Steffen Fischer, Institute of Space Systems, University of Stuttgart, Germany

IAC-23.D2.9-D6.2.4
COST ESTIMATION FOR INNOVATIVE SPACE SYSTEMS: A METHODOLOGY FOR MICROLAUNCHERS AND INFLATABLE HEATSHIELDS
Giuseppe Governale, Politecnico di Torino, Italy

IAC-23.D2.9-D6.2.5
LARGE SCALE LEO CONSTELLATION DEPLOYMENT OPTIMIZATION METHOD BASED ON NSGA II
Wen Xue, Space Engineering University (Beijing), China

IAC-23.D2.9-D6.2.6
THE ROLE OF SMALL LAUNCH VEHICLES IN DEMOCRATIZING ACCESS TO SPACE
Zahra Gasimova, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.D2.9-D6.2.7 (unconfirmed)
CURRENT STATUS AND EMERGING TRENDS IN LAUNCH VEHICLE TECHNOLOGY: A COMPREHENSIVE REVIEW OF OPERATIONAL AND SHORT-TERM DEVELOPMENT VEHICLES
Prakash Kumar, R V College of Engineering, Bengaluru, India

D3. 21st IAA SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND DEVELOPMENT

Coordinator(s): John C. Mankins, ARTEMIS Innovation Management Solutions, LLC, United States; Alain Pradier, European Space Agency (ESA), The Netherlands;

D3.1. Strategies & Architectures as the Framework for Future Building Blocks in Space Exploration and Development

October 4 2023, 10:15 — BCC Balcony C2

Co-Chair(s): John C. Mankins, ARTEMIS Innovation Management Solutions, LLC, United States; Maria Antonietta Perino, Thales Alenia Space Italia, Italy;
Rapporteur(s): Anouck Girard, University of Michigan, United States;

IAC-23.D3.1.1
HOLISTIC RESEARCH FOR CIRCULAR LUNAR DEVELOPMENT: UPDATES FROM SGAC'S TECHNICAL UNIT RESEARCH FOR A THRIVING LUNAR ECOSYSTEM (TURTLE)
Antonino Salmeri, Space Generation Advisory Council (SGAC), Spain

IAC-23.D3.1.2
SPACE SOLAR POWER FOR THE MOON: AN OASIS 2045 USE CASE STUDY
John C. Mankins, ARTEMIS Innovation Management Solutions, LLC, United States

IAC-23.D3.1.4
RISK MAPPING FOR SUSTAINABLE LONG-TERM EXPLORATION OF THE CISLUNAR ENVIRONMENT
KangSan Kim, Space Generation Advisory Council (SGAC), Korea, Republic of

IAC-23.D3.1.5
PROPOSAL FOR A VENEZUELAN NATIONAL PROGRAM FOR ROBOTIC SPACE EXPLORATION
Rogelio Morales, Bolivarian Agency for Space Activities (ABAE), Venezuela

IAC-23.D3.1.6
THE TECHNICAL FEASIBILITY OF 3D PRINTING TECHNOLOGY FOR LUNAR BASE
Bintang Alam Semesta Wisran AM, Skolkovo Institute of Science and Technology, Indonesia

IAC-23.D3.1.7
SPACE WORKS CHALLENGE: A MILO SPACE SCIENCE INSTITUTE CAPACITY BUILDING PROGRAM
David Thomas, Arizona State University, United States

IAC-23.D3.1.8
FUTURISTIC URBANISM ON THE MARS
Aysel Seyfullayeva, Azerbaijan Architecture and Construction University (SABAH groups), Azerbaijan

IAC-23.D3.1.9
LEVERAGING SPACE TO ACHIEVE SUSTAINABLE DEVELOPMENT: THE UAE APPROACH AS AN EXAMPLE
Noora Alameri, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

IAC-23.D3.1.10
MODULAR NUCLEAR REACTOR STATIONS PARKED AT LAGRANGE POINTS FOR SOLAR EXPLORATION
Ugur Guven, UN CSSTEAP, United Kingdom

D3.2A. Systems and Infrastructures to Implement Sustainable Space Development and Settlement - Systems

October 4 2023, 15:00 — BCC Balcony C2

Co-Chair(s): Paivi Jukola, Aalto University, Finland; Gary Barnhard, XISP-Inc, United States; Julie Patarin-Jossec, Spartan Space, France; Frank Preud'homme, QinetiQ Space nv, Belgium;
Rapporteur(s): Christopher Moore, National Aeronautics and Space Administration (NASA), United States; Junjiro Onoda, ISAS/JAXA, Japan;

IAC-23.D3.2A.1
GATEWAY AT THE CROSSROADS OF SUSTAINABLE LUNAR EXPLORATION
Molly Anderson, NASA, United States

IAC-23.D3.2A.2
GROUND-BASED CAPABILITIES FOR LUNAR INFRASTRUCTURE TESTING
Aaron Weaver, National Aeronautics and Space Administration (NASA), United States

IAC-23.D3.2A.3
CISLUNAR COMMUNICATIONS INFRASTRUCTURE – POLICY AND INTERNATIONAL RELATIONS CHALLENGES
Rebecca Palmer, Georgia Institute of Technology, United States

IAC-23.D3.2A.4
IN-SITU REGOLITH BASED NANOTHERMITE HEATING FOR LUNAR ROVERS AND EQUIPMENT DURING THE LUNAR NIGHT
Connor MacRobbie, University of Waterloo, Canada

IAC-23.D3.2A.7
COMPARISON OF ADDITIVE MANUFACTURING TECHNOLOGIES FOR IN-SITU CONSTRUCTION AND FABRICATION ON THE MOON
Maxim Isachenkov, Politecnico di Milano, Italy

IAC-23.D3.2A.8
DIMENSIONING AND COST EVALUATION OF A MARTIAN STEEL PRODUCTION PLANT
Guillaume Leclere, ESTACA, France

IAC-23.D3.2A.10
INVESTIGATION ON MARS GREEN HOME SYSTEM DESIGN AND KEY TECHNOLOGIES
Xiao Zhang, Harbin Institute of Technology, China

D3.2B. Systems and Infrastructures to Implement Sustainable Space Development and Settlement - Technologies

October 6 2023, 10:15 — BCC Balcony C2

Co-Chair(s): Alain Pradier, European Space Agency (ESA), The Netherlands; Christopher Moore, National Aeronautics and Space Administration (NASA), United States;
Rapporteur(s): Gary Barnhard, XISP-Inc, United States;

IAC-23.D3.2B.1
IN-SITU MANUFACTURED LANDING PADS AND BERMS TO ENABLE SUSTAINABLE OPERATIONS ON THE LUNAR SURFACE
Theodor Heutling, Dresden University of Technology (DUT) / Technische Universität Dresden, Germany

IAC-23.D3.2B.2
A CLASSIFICATION SYSTEM FOR SUSTAINABLE HUMAN SPACEFLIGHT (WORKING TITLE)
Paivi Jukola, Aalto University, Finland

IAC-23.D3.2B.3
DESIGN AND ASSESSMENT OF AD-1 LUNAR REGOLITH SIMULANTS
Bo Peng, New York University Abu Dhabi, United Arab Emirates

IAC-23.D3.2B.4
DEFINITION OF REQUIREMENTS FOR PAVEMENT AND TAKEOFF/LANDING AREAS ON THE MOON AND STUDY OF APPLICABILITY OF REGOLITH SINTERED MATERIALS
Yasuhiro Fuchita, Obayashi Corporation, Japan

IAC-23.D3.2B.6
PYRITE BASED SOLAR PANEL IN-SITU PRODUCTION ON THE MOON FOR SPACE-BASED SOLAR POWER
Taavi Raadik, Tallinn University of Technology, Estonia

IAC-23.D3.2B.7
ORBITAL, LUNAR AND PLANETARY INFRASTRUCTURE FOR METAL PROCESSING: ENABLING THE INDUSTRIAL REVOLUTION IN SPACE
Jan Walter Schroeder, CisLunar Industries, Germany

IAC-23.D3.2B.8
MINIATURISED DESIGN OF ON-BOARD ANTENNA USING ADDITIVE MANUFACTURING TECHNIQUES
Anand Nagesh, Big Dipper Exploration Technologies, India

IAC-23.D3.2B.9
AN IN-ORBIT ASSEMBLY CONCEPT FOR LARGE SPACE INFRASTRUCTURES THROUGH MULTIPURPOSE STANDARDIZED TILES AND ROBOTIC ASSEMBLER
Rachel Wright, Cranfield University, UK, United Kingdom

IAC-23.D3.2B.10
SPACE MANIPULATOR ON ORBIT CLEANING SOLAR PANELS OPERATION BASED ON BIAS NEURAL NETWORK FORCE/POSITION CONTROL
An Zhu, Fuzhou University, China

IAC-23.D3.2B.11
EXPLORING OTHERWORLDLY DEPTHS: EVALUATING EARTH'S ROBOTIC CAVE EXPLORATION TECHNOLOGIES FOR SUBSURFACE EXPLORATION ON THE MOON AND MARS
Faith Tng, Space Generation Advisory Council (SGAC), Singapore, Republic of

IAC-23.D3.2B.12
CARGO FIXING ASSEMBLY MODULE FOR INTERPLANETARY TRANSPORT MISSIONS
Rory Dick, University of Glasgow, United Kingdom

D3.3. Space Technology and System Management Practices and Tools

October 6 2023, 13:45 — BCC Balcony C2

Co-Chair(s): John C. Mankins, ARTEMIS Innovation Management Solutions, LLC, United States; Paivi Jukola, Aalto University, Finland;
Rapporteur(s): Maria Antonietta Perino, Thales Alenia Space Italia, Italy;

IAC-23.D3.3.1
MODELING MEGA-PROJECTS: A SPACE SOLAR POWER CASE STUDY
John C. Mankins, ARTEMIS Innovation Management Solutions, LLC, United States

IAC-23.D3.3.2
A MULTI-STAKEHOLDER LUNAR REGISTRY OF OBJECTS AND ACTIVITIES FOR INTERNATIONAL TRANSPARENCY AND COLLABORATION
Rachel Williams, Open Lunar Foundation, United States

IAC-23.D3.3.3
DIGITAL TWIN OF A SATELLITE BATTERY SYSTEM
Martin Macak, TRL Space, Czech Republic

IAC-23.D3.3.5
MAJOR MANAGEMENT COMPETENCES OF SPACE COMPLEX PROJECTS
Aluisio Camargo, Brazilian Space Agency (AEB), Brazil

IAC-23.D3.3.6
AN ALTERNATIVE PERSPECTIVE IN ASSESSING THE SUITABILITY OF SUSTAINABLE SPACE TECHNOLOGY
Mathilde Leuridan, Germany

IAC-23.D3.3.7
LUNAR ECONOMY OR HOW OPPORTUNITIES IN SPACE CAN IMPROVE BUSINESSES AND LIFE ON EARTH
Julian Schroth, European Space Agency (ESA-ESTEC), The Netherlands

IAC-23.D3.3.8
EXANT: EXPLORING NLP AI SYSTEMS FOR REQUIREMENTS DEVELOPMENT
Manfred Ehresmann, Institute of Space Systems, University of Stuttgart, Germany

IAC-23.D3.3.9
OPEN INNOVATION WITH SPACE DATA ECOSYSTEMS
Jeanne Holm, City of Los Angeles, United States

IAC-23.D3.3.10
IN-SPACE ECONOMY IN 2023 - STATISTICAL OVERVIEW AND TRENDS
Erik Kulu, Estonia

IAC-23.D3.3.11
SPACE APPLICATION DEVELOPMENT: RAPID PROTOTYPING AND UI DESIGN METHODOLOGIES
Grecia Olano O'Brien, Concordia University, Canada

IAC-23.D3.3.12
TRL FRAMEWORK FOR HUMAN SPACEFLIGHT AND FOR THE BUILT ENVIRONMENT ON EARTH (WORKING TITLE)
Paivi Jukola, Aalto University, Finland

D4. 21st IAA SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FUTURE

Coordinator(s): Giuseppe Reibaldi, Moon Village Association (MVA), Austria; Jan Kolar, Moon Village Association (MVA), Austria;

D4.1. Innovative Concepts and Technologies

October 2 2023, 15:15 — BCC Balcony C2

Co-Chair(s): Ayman Ahmed, Egyptian Space Agency (EgSA), Egypt; Sahba El-Shawa, Jordan Space Research Initiative (JSRI), Jordan;
Rapporteur(s): Xiaowei WANG, China Academy of Launch Vehicle Technology (CALT), China;

IAC-23.D4.1.1
ICE2THRUST: AN END-TO-END DEMONSTRATION OF THE IN-SITU RESOURCE UTILIZATION OF WATER FOR IN-SPACE PROPULSION
Chiara Manfletti, Technical University of Munich, Germany

IAC-23.D4.1.2
BENCHMARKING JOHN VON NEUMANN'S INFORMED SELF-REPLICATION ARCHITECTURES FOR IN SITU PRODUCTION IN SPACE ENVIRONMENTS
Matthias Frenzl, Space Forward Lab, Austria

IAC-23.D4.1.4
AUTONOMOUS AND ROBUST LOW-THRUST ORBIT TRANSFERS VIA DEEP REINFORCEMENT LEARNING
Matteo Stoisa, AIKO S.r.l., Italy

IAC-23.D4.1.5
THE ROLE OF METAVERSE IN THE FUTURE OF THE SPACE SECTOR
Jacob Cohen, NASA Ames Research Center, United States

IAC-23.D4.1.6
AUTONOMOUS DATA VAULT ORGANIZATION FOR SELF-SOVEREIGN, BORDERLESS & CARBON-LIGHT SPACE TRAFFIC MANAGEMENT (INTER-DOM-STM)
Marek Kosuda, Slovak Republic

IAC-23.D4.1.7
ARTIFICIAL INTELLIGENCE AND DIGITAL TWIN-POWERED SMART LUNAR GATEWAY AND PLANETARY EXPLORATION MISSIONS
Krishna Kumar, Ryerson University, Canada

IAC-23.D4.1.8
AI FOR EARTH: SUSTAINABLE DEVELOPMENT SOLUTIONS FOR GLOBAL ENVIRONMENTAL CHANGE
Alina Vizireanu, Space Generation Advisory Council (SGAC), United Kingdom

IAC-23.D4.1.9
SATELLITE RE-ENTRY SYSTEM - PROPOSAL FOR REUSABLE SATELLITE TECHNOLOGY
Anumadhubala Rajakumari, Skyline Space, India

IAC-23.D4.1.10
LEVERAGING MACHINE LEARNING FOR STREAMLINED METEOR REDUCTION
Aisha Alowais, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

IAC-23.D4.1.11
ARTIFICIAL GENERAL INTELLIGENCE AND NEXT-GENERATION ROCKETS/SPACESHIPS
KOMAL PANCHAL, India

D4.2. Contribution of Moon Village to Solving Global Societal Issues

October 3 2023, 10:15 — BCC Balcony C2

Co-Chair(s): Giuseppe Reibaldi, Moon Village Association (MVA), Austria; Yu Lu, China Academy of Launch Vehicle Technology, China, China;
Rapporteur(s): Paivi Jukola, Aalto University, Finland;

IAC-23.D4.2.1
CONTRIBUTION OF MOON VILLAGE TO SOLVING GLOBAL SOCIETAL ISSUES
Aysu Allazova, Azerbaijan State University of Economics, Azerbaijan

IAC-23.D4.2.2
IS THE LUNAR ECONOMY SOLELY FOR THE SPACE INDUSTRY? OPPORTUNITIES FOR NON-SPACE COMPANIES IN LUNAR INFRASTRUCTURE LEVERAGING TECHNOLOGICAL SYNERGIES.
Simonetta Di Pippo, SDA Bocconi School of Management, Bocconi University, Italy

IAC-23.D4.2.3
LUNAR ENTREPRENEURSHIP, FUTURE CHALLENGES AND RISKS TO BE MANAGED. A COMPREHENSIVE STUDY OF FUTURE LUNAR ECONOMY ISSUES, WHICH SHALL BE SOLVED TODAY.
Katarzyna Malinowska, Kozminski University, Poland

IAC-23.D4.2.4
THE GLOBAL EXPERT GROUP ON SUSTAINABLE LUNAR ACTIVITIES: RECOMMENDED FRAMEWORK AND KEY ELEMENTS FOR PEACEFUL AND SUSTAINABLE LUNAR ACTIVITIES
Giuseppe Reibaldi, Moon Village Association (MVA), Austria

IAC-23.D4.2.5
EMERGING SPACE COUNTRIES AND THE FUTURE OF LUNAR EXPLORATION
Peter Schulte, Moon Village Association (MVA), Saudi Arabia

IAC-23.D4.2.6
THE CONTRIBUTION OF MOON VILLAGE TO SOLVING GLOBAL SOCIETAL ISSUES: A RESEARCH
Debarshi Mukherjee, India

IAC-23.D4.2.8
ERGONOMICS AND USER ORIENTED DESIGN-ENGINEERING FOR HUMAN SPACEFLIGH
Paivi Jukola, Aalto University, Finland

IAC-23.D4.2.9
CONSTRUCTION PLAN OF ASTRAX LUNAR CITY SIMULATION FACILITY IN JAPAN
Taichi Yamazaki, ASTRAX, Inc., Japan

IAC-23.D4.2.10
NEW SPACE MARKET DEVELOPMENT ON LUNAR TECHNOLOGIES THROUGH PROMOMOON INITIATIVE
Bernadette Joy Detera, Moon Village Association (MVA), Japan

D4.3. Modern Day Space Elevators Customer Design Drivers

October 3 2023, 15:00 — BCC Balcony C2

Co-Chair(s): Peter Swan, Teaching Science and Technology, Inc (TSTI), United States; Yoji Ishikawa, Obayashi Corporation, Japan;
Rapporteur(s): Jerry Eddy, International Space Elevator Consortium (ISEC), United States;

IAC-23.D4.3.1
KEYNOTE: "JEROME PEARSON MEMORIAL LECTURE" - RESEARCH INTO CHARACTERISTICS OF A PERMANENT SPACE ACCESS TRANSPORTATION INFRASTRUCTURE
Peter Swan, Teaching Science and Technology, Inc (TSTI), United States

IAC-23.D4.3.2
DUAL SPACE ACCESS STRATEGY ENABLES SIGNIFICANT MISSIONS
Peter Swan, Teaching Science and Technology, Inc (TSTI), United States

IAC-23.D4.3.3
A SURVEYS FOR EFFECT ON THE SPACE ELEVATOR BY ELECTRIC PARTICLES IN SPACE
Ryuta Niinobe, Obayashi Corporation, Japan

IAC-23.D4.3.4
EVALUATION OF THE EFFECT OF CURRENT THROUGH CABLE ON TEMPERATURE AND DYNAMICS OF SPACE ELEVATOR
Yoji Ishikawa, Obayashi Corporation, Japan

IAC-23.D4.3.5
A LARGE-SCALE TETHER DEPLOYMENT CONTROL SCHEME FOR SPACE ELEVATOR CONSTRUCTION
Feng Zhang, China Academy of Launch Vehicle Technology(CALT), China

IAC-23.D4.3.6
CONTROLLED DEPLOYMENT OF A PARTIAL SPACE ELEVATOR
Arun Misra, Mc Gill Institute for Aerospace Engineering (MIAE), Canada

IAC-23.D4.3.7
HIGH-PRECISION MULTIBODY MODEL FOR SPACE ELEVATOR INCLUDING TORSIONAL DEFORMATION
Ryo KUZUNO, Tohoku University, Japan

IAC-23.D4.3.8
EVALUATION OF THE COUNTERWEIGHT TYPE SPACE ELEVATOR: IN THE CASE APPLIED TO THE ALTITUDE UPPER THAN GEO
Yoji Ishikawa, Obayashi Corporation, Japan

IAC-23.D4.3.9
DEVELOPMENT OF SPACE ELEVATOR CLIMBER APPLIED IN HIGH VACUUM SPACE ENVIRONMENT AND EXTRACTION OF ITS PROBLEMS
Fumihiro Inoue, Shonan Institute of Technology, Japan

IAC-23.D4.3.10
PERFORMANCE VERIFICATION OF SPACE ELEVATOR CLIMBER WITH HYBRID DRIVE ROLLER AND DEVELOPMENT OF SMALL MANNED CLIMBER
Momoe Terata, Shonan Institute of Technology, Japan

IAC-23.D4.3.11
THE SPACE ELEVATOR PAYLOAD JOURNEY BEYOND GEO: CLIMBER CONCEPT AND OPTIONS
Peter Robinson, International Space Elevator Consortium, United Kingdom

D4.4. Strategies for Rapid Implementation of Interstellar Missions: Precursors and Beyond

October 5 2023, 10:15 — BCC Balcony C2

Co-Chair(s): Mae Jemison, 100 Year Starship, United States; Giancarlo Genta, Politecnico di Torino, Italy;
Rapporteur(s): Les Johnson, National Aeronautics and Space Administration (NASA), Marshall Space Flight Center, United States;

IAC-23.D4.4.1
COMMUNICATIONS RECEIVER DESIGNS FOR INTERSTELLAR PROBE MISSIONS
Philip Mauskopf, Arizona State University, United States

IAC-23.D4.4.2
HIGH TEMPERATURE-SUPERCONDUCTOR MATERIAL (HTSM) USED FOR ELECTRONICS IN RADIO-ISOTROPIC THERMAL HEAT GENERATOR(RTG) WHERE THORIUM RODS ARE BEING USED AS CELLS FOR SOURCE.
Abhishek Singh, National Space Society (USA) -Mumbai chapter, India

IAC-23.D4.4.3
HIGH-SPEED SCIENTIFIC SPACECRAFT LAUNCHES WITH COMMERCIAL LAUNCH VEHICLES
Ralph L. McNutt, Jr., The John Hopkins University, United States

IAC-23.D4.4.6
INTERSTELLAR EXPLORATION USING "EXPLORER" SPACECRAFT - BUILDING THE FOUNDATION
Aditya Prakash, Indian Institute of Technology Kanpur, India

IAC-23.D4.4.7
INTERSTELLAR EXPLORATION: FROM SCIENCE FICTION TO ACTUAL TECHNOLOGY
Giancarlo Genta, Politecnico di Torino, Italy

IAC-23.D4.4.8
EXPLORING INTERSTELLAR TRAVEL IN VIDEO GAMES: SHAPING PUBLIC PERCEPTIONS AND SUPPORT FOR FUTURE INITIATIVES
Jason Batt, 100 Year Starship, United States

IAC-23.D4.4.9
THE CANOPUS AWARD FOR EXCELLENCE IN INTERSTELLAR WRITING: CELEBRATING FICTION AND NONFICTION THAT CHAMPIONS THE DREAM OF INTERSTELLAR TRAVEL
Jason Batt, 100 Year Starship, United States

D4.5. Space Resources, the Enabler of the Earth-Moon Econosphere

October 5 2023, 15:00 — BCC Balcony C2

Co-Chair(s): Roger X. Lenard, LPS, United States; Mark Sundhal, Cleveland State University, ;
Rapporteur(s): Peter Swan, Teaching Science and Technology, Inc (TSTI), United States;

IAC-23.D4.5.1
RANKING NEAR-EARTH OBJECTS FOR LONG-TERM MULTI-RETURN MINING MISSIONS
Ruida Xie, UNSW Australia, Australia

IAC-23.D4.5.2
A COMBINED RESOURCE MAPPER AND EXCAVATION CONCEPT FOR PSRS
Roger X. Lenard, LPS, United States

IAC-23.D4.5.3 (unconfirmed)
THE MOON'S DATA MARKETPLACE
Clement Loneux, ISAE-Supaero University of Toulouse, France

IAC-23.D4.5.5
IS THE FUTURE OF HUMANITY IN SPACE?
Ulviyya Najafli, Azerbaijan

D5. 56th IAA SYMPOSIUM ON SAFETY, QUALITY AND KNOWLEDGE MANAGEMENT IN SPACE ACTIVITIES

Coordinator(s): Jeanne Holm, City of Los Angeles, United States; Roberta Mugellesi-Dow, European Space Agency (ESA), United Kingdom;

D5.1. For a successful space program: Quality and Safety!

October 3 2023, 10:15 — BCC A4

Co-Chair(s): Manola Romero, 3AF, France; Alexander S. Filatyev, Lomonosov Moscow State University, Russian Federation;
Rapporteur(s): Kaitlyn Holm, University of Pennsylvania, United States;

IAC-23.D5.1.1
SPACE CONTAMINATION REDUCTION AND SPACE DEFENSE IN THE TWENTY-FIRST CENTURY
Khanim Azimova, National Aviation Academy - Azerbaijan, Azerbaijan

IAC-23.D5.1.2 (unconfirmed)
AN ANALYSIS OF THE BRAZILIAN SPACE PROGRAM'S PUBLIC SECTOR WORKFORCE
WANDO SA, Brazilian Space Agency (AEB), Brazil

IAC-23.D5.1.3
THE IMPORTANCE AND APPROACHES TO INVOLVE A VERIFICATION AND VALIDATION ENGINEER IN A NEWLY FORMED R&D DEPARTMENT
Rovshana Bahmanli, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.D5.1.4
GUIDELINES FOR PROCESSES AND METHODS FOR A SUCCESSFUL SPACE MISSION IN VERY TIGHT SCHEDULE FOR PROJECT AND PROGRAMME MANAGERS
Imane El Khantouti, Space Generation Advisory Council (SGAC), France

IAC-23.D5.1.5
STUDY THE EFFECTIVENESS OF AIRBAGS IN CAPSULE RECOVERY SYSTEMS FOR SPACECRAFT DURING THE DESCENT PHASE ON DIFFERENT PLANETS WITH VARYING CONDITIONS.
Rathnakar D, R V College of Engineering, Bengaluru, India

IAC-23.D5.1.6
FULL SYSTEM IN-HOUSE DEVELOPED MISSION ASSEMBLY, INTEGRATION AND VERIFICATION CAMPAIGN FOR KVARKENSAT, A 2U CUBESAT AT THE KIRUNA SPACE CAMPUS IN NORTH SWEDEN
Margot Clauss, Luleå University of Technology, Sweden

IAC-23.D5.1.7
PRODUCT ASSURANCE OF KSLV-II, NURI
Sang Yeon Cho, Korea Aerospace Research Institute (KARI), Korea, Republic of

IAC-23.D5.1.9
PAYLOAD FOCUSED PDR PROCESS FOR SMALL SATELLITE MISSIONS IN NEW SPACE
Alexander Schmidt, Institut für Raumfahrttechnik Universität der Bundeswehr München, Germany

D5.2. Emerging trends of knowledge management in organizations

October 4 2023, 10:15 — BCC A4

Co-Chair(s): Roberta Mugellesi-Dow, European Space Agency (ESA), United Kingdom; Jeanne Holm, City of Los Angeles, United States;
Rapporteur(s): Daniel Galarreta, Centre National d'Etudes Spatiales (CNES), France;

IAC-23.D5.2.1
5 PILOT STUDIES TO ENHANCE ESA HUMAN AND ROBOTIC EXPLORATION LESSONS LEARNED WITH NATURAL LANGUAGE PROCESSING AND KNOWLEDGE GRAPHS
Alice Pastor, HE Space, The Netherlands

IAC-23.D5.2.2
THE CREATION OF A SPACE AGENCY'S STRATEGIC PLAN, A CASE STUDY ON BRAZIL
Erik Busnello Imbuzeiro, Brazilian Space Agency (AEB), Brazil

IAC-23.D5.2.3
KNOWLEDGE MANAGEMENT PRACTICES IN THE CREATION OF THE UAE'S FIRST OPEN DATA PORTAL
Kaitlyn Holm, University of Pennsylvania, United States

IAC-23.D5.2.4
SHARING KNOWLEDGE ACROSS ORGANIZATIONS
Daniel Galarreta, Centre National d'Etudes Spatiales (CNES), France

IAC-23.D5.2.5
PRESERVING THE KNOWLEDGE GENERATED BY BRAZILIAN SCIENTIFIC AND TECHNOLOGICAL RESEARCH IN THE SPACE SECTOR: STRATEGIES FOR MITIGATING KNOWLEDGE LOSS.
João Sérgio Lima, Brazilian Space Agency (AEB), Brazil

IAC-23.D5.2.6
TRENDS, CHALLENGES AND OPPORTUNITIES FOR AFRICAN NEWSPACE COMPANIES IN THIS DECADE
Mustapha Iderawumi, Nigeria

IAC-23.D5.2.7
DIGITAL TRANSFORMATION FRAMEWORK FOR SMALL SATELLITE MISSIONS: NSSA'S CASE STUDY IN PROJECT AND KNOWLEDGE MANAGEMENT
Aysha Alharam, National Space Science Agency (NSSA), Bahrain

IAC-23.D5.2.8
LSTM-BASED ESTIMATION OF THE SATELLITE REMAINING USEFUL LIFE IN PRESENCE OF ADCS FAULTS
Mohaddese Daryabari, Sharif University of Technology, Iran

D5.3. Predicting, testing, and measuring the effects of the space environment on space missions

October 5 2023, 10:15 — BCC A4

Co-Chair(s): Henry de Plinval, Office National d'Etudes et de Recherches Aérospatiales (ONERA), France; Teppel Okumura, Japan Aerospace Exploration Agency (JAXA), Japan;
Rapporteur(s): Carlos Soares, NASA Jet Propulsion Laboratory, United States;

IAC-23.D5.3.1
SPACE ENVIRONMENT MODELING AND MISSION PERFORMANCE PREDICTION
Margarita Belali, National Observatory Of Athens, Greece

IAC-23.D5.3.3
EFFECTS OF LONG-TERM STORAGE ON PROPERTIES OF PEROVSKITE SOLAR CELLS
Yoshiyuki Murakami, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.D5.3.5
MAGNETIC TRACES OF PLASMA JETS OF SPACE ENGINES
Ilyas Abushzada, Baku State University, Azerbaijan

IAC-23.D5.3.6
PROBABILISTIC FORECAST OF SOLAR ENERGETIC PARTICLE (SEP) EVENTS
Maher Dayeh, Southwest Research Institute, United States

D5.4. Cybersecurity in space systems, risks and countermeasures

October 6 2023, 10:15 — BCC B5

Co-Chair(s): Julien Airaud, Centre National d'Etudes Spatiales (CNES), France; Stefano Zatti, University of Rome "La Sapienza", Italy;
Rapporteur(s): Nil Angli, ESA - European Space Agency, United Kingdom;

IAC-23.D5.4.1
ANALYSING CYBERATTACKS ON SPACE SYSTEMS IN THE WAR IN UKRAINE
Clémence Poirier, European Space Policy Institute (ESPI), Austria

IAC-23.D5.4.2
ANALYSING SPACE CYBERATTACKS WITH NIST AND SPARTA FRAMEWORKS
Tiago Rebelo, SIMPLYCONNECTED Lda (CONNECTED), Portugal

IAC-23.D5.4.3
THE THREAT OF AI-DRIVEN CYBER ATTACKS ON SPACE SYSTEMS
Giorgio Cardile, Ielo and Associates Law Firm, Italy

IAC-23.D5.4.4
DEVELOPING AN AI-ENABLED CYBERSECURITY MODEL TO PROTECT SATELLITE SYSTEMS FROM CYBER THREATS
Alex Thach, University of Maryland, United States

IAC-23.D5.4.5
TOWARDS A RESILIENT CYBER ARCHITECTURE FOR SPACE INFRASTRUCTURES: MITIGATING THE NEW ATTACK VECTORS
Antonio Carlo, Tallinn University of Technology, Estonia

IAC-23.D5.4.6
SPACE-SPECIFIC SIEM SYSTEMS FOR CYBERSECURITY IN SPACE STATIONS
Feqan Mirzeyev, Azerbaijan

IAC-23.D5.4.7
INVESTIGATING CYBER THREATS AND PROVIDING TECHNICAL SOLUTIONS FOR SPACE CYBER SECURITY
Elkhan Gasimli, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.D5.4.8
DEVELOPING A CCSDS COMPLIANT PLATFORM TO SWIFTLY AND RELIABLY SECURE CURRENT AND FUTURE SPACE COMMUNICATION LINKS
Louis Masson, Cysec SA, Switzerland

IAC-23.D5.4.9 (unconfirmed)
DEVELOPING RISK BASED CYBER MISSION ASSURANCE ONTOLOGIES FOR SPACE LAUNCH MISSION SYSTEMS
Shane Bennett, Australia

IAC-23.D5.4.10
LESSONS LEARNED FROM CYBERSECURITY TRAINING IN THE SPACE DOMAIN: IMPLICATIONS FOR FUTURE WORKFORCE DEVELOPMENT
Bruce Chesley, Teaching Science and Technology, Inc (TSTI), United States

D6. IAF SYMPOSIUM ON COMMERCIAL SPACEFLIGHT SAFETY ISSUES

Coordinator(s): Francesco Santoro, Altec S.p.A., Italy;

D6.1. Commercial Spaceflight Safety and Emerging Issues

October 3 2023, 10:15 — BCC B5

Co-Chair(s): John Sloan, Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States; Francesco Santoro, Altec S.p.A., Italy;
Rapporteur(s): Gennaro Russo, Campania Aerospace District, DAC, Italy;

IAC-23.D6.1.1
AIRSPACE INTEGRATION OF U.S. COMMERCIAL SPACE LAUNCHES AND REENTRIES
Brooke Teferra, Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States

IAC-23.D6.1.2
COMMERCIAL SPACEFLIGHT: REGULATORY FRAMEWORK ASSESSMENT AND SAFETY PERSPECTIVES
Gianpiero Buzzo, CIRA Italian Aerospace Research Centre, Italy

IAC-23.D6.1.3 (unconfirmed)
OVERCOMING LICENSING CHALLENGES FOR SPACE COMPANIES: THE ROLE OF A THIRD-PARTY INTERMEDIARY
Souitat Naoufal, United States

IAC-23.D6.1.4
SPACE SAFETY AND RESCUE IN HUMAN SPACEFLIGHT: WHERE ARE THE GAPS?
Shawna Pandya, International Institute for astronautical Sciences (IIAS), Canada

IAC-23.D6.1.5
THE PATH TO MISSION SUCCESS: THE UK'S MISSION ASSURANCE FRAMEWORK FOR COMMERCIAL LAUNCH SERVICES
Mauro Augelli, UK Space Agency, United Kingdom

IAC-23.D6.1.7
UNREACH FOR THE STARS- THE USE CASE OF A SATELLITE LAUNCH FAILURE AND ITS SAFETY OF COMMERCIAL FLIGHTS IMPLICATIONS
Katarzyna Malinowska, Kozminski University, Poland

IAC-23.D6.1.8 (unconfirmed)
HAND SIGNALS FOR MULTINATIONAL SPACE TRAVELERS
Chikako Murayama, Japan

D6.2-D2.9. Emerging Space Ventures, including Space Logistics and Space Safety for Sustainability

October 6 2023, 13:45 — BCC A3

Co-Chair(s): Aline Decadi, European Space Agency (ESA), France; Charles E. Cockrell Jr., National Aeronautics and Space Administration (NASA), United States;
Rapporteur(s): Michele Cristina Silva Melo, , Brazil;

IAC-23.D6.2-D2.9.1
OPALS ADVANCED KICK STAGE AND SPACE LOGISTICS VEHICLE ARCHITECTURE AND INNOVATIVE TECHNOLOGIES
Arturs Jasjukevics, ArianeGroup, Germany

D6.3. Enabling safe commercial spaceflight: vehicles and spaceports

October 4 2023, 10:15 — BCC B5

Co-Chair(s): John Sloan, Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States; Francesco Santoro, Altec S.p.A., Italy;
Rapporteur(s): Gennaro Russo, Campania Aerospace District, DAC, Italy;

IAC-23.D6.3.1
BUILDING A 21ST CENTURY SPACEPORT: DEVELOPMENT AND APPLICATION OF THE SPACEPORT READINESS LEVEL SCALE
Janet Tinoco, Embry-Riddle Aeronautical University, United States

IAC-23.D6.3.2
SPACEPORT FEASIBILITY ANALYSIS FOR DUBAI: LOGISTICS, SAFETY AND SPACE TOURISM
Ugur Guven, UN CSSTEAP, United Kingdom

IAC-23.D6.3.4
ANALOGY BETWEEN AIR TRAFFIC MANAGEMENT AND SPACE TRAFFIC MANAGEMENT FROM OPERATIONAL ASPECTS
Rania Toukebri, Airbus D&S, Germany

IAC-23.D6.3.5
IMPROVING FLIGHT SAFETY DURING SPACECRAFT LAUNCH OPERATIONS: A STUDY ON TRAJECTORY OPTIMIZATION FROM THE ALCÂNTARA LAUNCH CENTER
Nicolle Lucena, University of Brasilia, Brazil

IAC-23.D6.3.6
STUDY ON THE EVALUATION OF THE COMPETITIVENESS OF SPACEPORTS
Jungho Yang, Korea Aerospace Research Institute (KARI), Korea, Republic of

IAC-23.D6.3.7
NEW PERSPECTIVES FOR ROCKET LAUNCHING IN BRAZIL: THE RISE OF ALCÂNTARA
Rene Gonçalves, Aeronautic Institute of Technology (ITA), Brazil

E1. IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM

Coordinator(s): Jessica Culler, NASA Ames Research Center, United States; Seyed Ali Nasseri, Space Generation Advisory Council (SGAC), Canada;

E1.1. Ignition - Primary Space Education

October 2 2023, 15:15 — HAC Museum GA

Co-Chair(s): Kaori Sasaki, Japan Aerospace Exploration Agency (JAXA), Japan; Carol Carnett, International Space University (ISU), United States;

IAC-23.E1.1.1
RAMON KINDERGARTEN XPLORE; IGNITING THE INNER SPARK
Shimrit Maman, Ben-Gurion University of the Negev, Israel

IAC-23.E1.1.2
SPACE AS A TOOL FOR INSPIRATION: AN INNOVATIVE APPROACH
Darcey Watson, The Andy Thomas Space Foundation, Australia

IAC-23.E1.1.3
THE SPACE EDUCATION AS A TOOL TO BROAD YOUNG STUDENTS PERSPECTIVES IN BRAZIL
Rafael Lobo, Ideia Space, Brazil

IAC-23.E1.1.4
DOMI INTER ASTRA (DIA): A CHILDREN'S BOOK TO EMPOWER THE NEXT GENERATION IN STEAM EXPLORATION AND PURSUIT
Matej Poliacek, Space Generation Advisory Council (SGAC), Slovak Republic

IAC-23.E1.1.5
SPACE CAMP: SPARK INTEREST IN STEM THROUGH SPACE EDUCATION
Nurafiqah Syahirah Md Ridzwan, Universiti Sains Malaysia, Malaysia

IAC-23.E1.1.6
HOW COGNITIVE FUNCTIONS PLAY A VITAL ROLE AMONG CHILDREN, CONSEQUENTLY AIDING CATALYSIS IN ORDER TO IMPLEMENT, AND EXECUTE SPACE EDUCATION AT THE PRIMARY SCHOOL LEVEL CURRICULUM
Sri Venkata Vathsala Musunuri, Polytechnique Montreal, Canada

IAC-23.E1.1.7
DA VINCI SATELLITE – ROLL OF THE DICE
Kim Regnerij, TU Delft, The Netherlands

IAC-23.E1.1.8 (unconfirmed)
IMPROVING STEAM EDUCATION WITH DAILY EARTH IMAGING
Quentin Millette, Planet Labs Inc., United States

IAC-23.E1.1.9
ASTRO PARTY - AN INSPIRING NATIONAL EVENT FOR CHILDREN
Ivo Jokin, Municipal Educenter, Bulgaria

IAC-23.E1.1.10
ILEAD'S DREAMUP TO SPACE AND CUMBERLAND COUNTY SCHOOLS' STARWARD STEM: HOW TWO SCHOOL SYSTEMS ENGAGED K12 STUDENTS IN ISS PAYLOAD COMPETITIONS
Lauren Milord, DreamUp, PBC, United States

E1.2. Lift Off - Secondary Space Education

October 3 2023, 10:15 — HAC Museum GA

Co-Chair(s): Seyed Ali Nasseri, Space Generation Advisory Council (SGAC), Canada; Alina Vizireanu, Space Generation Advisory Council (SGAC), United Kingdom;

IAC-23.E1.2.1
PHONE STATIONS: EMPOWERING SECONDARY EDUCATION THROUGH LOW-COST GROUND STATIONS ON SMARTPHONES
Jorge Soliz, Universidad Privada Boliviana (UPB), Bolivia

IAC-23.E1.2.2
THE ZERO ROBOTICS PROGRAM INVITES YOUTH TO PROGRAM ROBOTS ON THE INTERNATIONAL SPACE STATION
Danielle Wood, Massachusetts Institute of Technology (MIT), United States

IAC-23.E1.2.3
BUILDING THE SCHOOL OF TOMORROW THROUGH SPACE: THE LESSONS LEARNED FROM THE GIS4SCHOOLS PROJECT
Alessandra Vernile, EURISY, France

IAC-23.E1.2.4
ENSURING SPACE RESILIENCE - LEARN TO FAIL, OR FAIL TO LEARN
Shimrit Maman, Ben-Gurion University of the Negev, Israel

IAC-23.E1.2.5
CHALLENGES AND OPPORTUNITIES FOR STEM EDUCATION IN COSTA RICA: EXPLORING THE FEASIBILITY OF A SPACE BOOTCAMP.
Rebeca Jiménez, Space Generation Advisory Council (SGAC), Costa Rica

IAC-23.E1.2.6
YOUNG SPACE POLICY LOBBYIST: OUTCOME OF SECONDARY LEVEL SPACE EDUCATION AND OUTREACH IN NEPAL
Oshan Sharma Kattel, Nepal Astronomical Society (NASO), Nepal

IAC-23.E1.2.7 (unconfirmed)
STEM EDUCATION USING SPACE ROVER AND STUDENT ROVER CHALLENGE(SRC)
Kyunghwan KIM, International Space University (ISU), France

IAC-23.E1.2.8
METHODS AND PRACTICES FOR INTRODUCING PRIVATE SPACE EDUCATION PROGRAMS INTO JAPANESE SCHOOLS
HIKARU OTSUKA, Japan

IAC-23.E1.2.9
MODEL MARS: A COLLABORATIVE LEARNING EXPERIENCE FOR THE MARTIANS OF THE FUTURE
Jennifer Blank, National Aeronautics and Space Administration (NASA), Ames Research Center /Blue Marble Space Institute of Science, United States

IAC-23.E1.2.10
NEED FOR AN EDUCATION MODEL FOR ADOLESCENTS, SPECIFICALLY IN RURAL AREAS
Sri Venkata Vathsala Musunuri, Polytechnique Montreal, Canada

E1.3. On Track - Undergraduate Space Education

October 3 2023, 15:00 — HAC Museum GA

Co-Chair(s): Kathryn Robison Hasani, Flinders University, Australia; Eberhard Gill, Delft University of Technology, The Netherlands;

IAC-23.E1.3.1
FOSTERING SPACE EDUCATION IN AZERBAIJAN THROUGH SMALL SATELLITE DESIGN PROGRAM FOR UNDERGRADUATE STUDENTS
Nadir Atayev, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.E1.3.2
A COMPLETE SCALABLE LEARNING EXPERIENCE FOR AEROSPACE ENGINEERING LEARNING
Cristian Chavez, Chile

IAC-23.E1.3.3
TEAM ANTARIKSH: ITS OBJECTIVE TO PROMOTE SPACE TECHNOLOGY AMONGST THE YOUTH
Darpan Byahatti, R V College of Engineering, Bengaluru, India

IAC-23.E1.3.4
USING CAN-SIZED SATELLITE (CANSAT) SYSTEMS WITH PROBLEM-BASED LEARNING FOR INTERDISCIPLINARY EDUCATION – LESSONS LEARNED
Michael Johnson, University of Limerick (UL), Ireland

IAC-23.E1.3.5
TRIAL ON OBJECTIVE EVALUATION OF STUDENTS COMPETENCE FOR PARTICIPATING IN THE SPACE PROGRAM
Kentaro Kitamura, Kyushu Institute of Technology, Japan

IAC-23.E1.3.6
PROJECT MANAGEMENT CASE STUDY OF STUDENT TEAMS IN A BALLOON PAYLOAD DESIGN COMPETITION
James Xie, International Space University (ISU), Canada

IAC-23.E1.3.7
REFLECTIONS ON SPOCS: STUDENT PAYLOAD OPPORTUNITY WITH CITIZEN SCIENCE
Lauren Milord, DreamUp, PBC, United States

IAC-23.E1.3.8
EDUCATION OPPORTUNITIES UNDER THE UNITED NATIONS ACCESS TO SPACE FOR ALL INITIATIVE: ACHIEVEMENTS IN 2022-2023
Wenbin Zhang, United Nations Office for Outer Space Affairs, Austria

IAC-23.E1.3.9
ADVANCING SPACE EDUCATION FOR SUSTAINABLE DEVELOPMENT IN AZERBAIJAN: IMPORTANCE OF GEOINFORMATION TECHNOLOGIES
Sona Guliyeva, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

E1.4. In Orbit - Postgraduate Space Education

October 4 2023, 10:15 — HAC Museum GA

Co-Chair(s): David Spencer, The Aerospace Corporation, United States; Eberhard Gill, Delft University of Technology, The Netherlands;
Rapporteur(s): Carol Carnett, International Space University (ISU), United States; Remco Timmermans, International Space University (ISU), United Kingdom;

IAC-23.E1.4.1
HANDS-ON EDUCATION WITH CUBESATS MOTIVATING INNOVATIVE NEW SPACE PROJECTS: SMART, SMALL, SELF-ORGANIZING SPACECRAFT SYSTEMS (S5)
Klaus Schilling, Zentrum für Telematik, Germany

IAC-23.E1.4.2
A STRATOSPHERIC BALLOON PROGRAM AS A SPACE MISSION ANALOGUE: AN EDUCATIONAL ACTIVITY AT THE INTERNATIONAL SPACE UNIVERSITY
Scott Madry, International Space University (ISU), United States

IAC-23.E1.4.3
ENHANCING THE EUROPEAN ENTREPRENEURIAL ECOSYSTEM BY CLOSING THE GAP BETWEEN HIGH AND LOW/MODERATE INNOVATION REGIONS: THE ENTREPRENEDU CASE
Valerio Roscani, Fondazione E. Amaldi, Italy

IAC-23.E1.4.4
GET SPACE – GROWTH OF EDUCATION AND TECHNOLOGY FOR SPACE: AN INTERDISCIPLINARY EDUCATION PROJECT ON TETHERED CUBESAT MISSIONS AND ROBOTIC SPACE TECHNOLOGIES AT THE UNIVERSITY OF STUTTGART
Marlin Kanzow, Institute of Space Systems, University of Stuttgart, Germany

IAC-23.E1.4.5
SPACE & ROBOTS IN TEACHER EDUCATION
Ayelet Weizman, Kibbutzim College of Education, Technology and the Arts, Israel

IAC-23.E1.4.6
TEACHING SPACE TECHNOLOGIES THROUGH PRACTICE. THE DEVELOPMENT OF SPACE EDUCATION IN POLAND ON THE EXAMPLE OF UNIVERSITY-BUSINESS COOPERATION AND WITHIN THE FRAMEWORK OF EUROPEAN CONSORTIA.
Maciej Myśliwiec, AGH University of Science and Technology, Poland

IAC-23.E1.4.7
THE IMPORTANCE OF HANDS-ON STUDENT ACTIVITIES: CHALLENGES AND LESSONS LEARNED FROM THE ROMULUS STRATOSPHERIC EXPERIMENT.
Linda Misercola, University of Rome "La Sapienza", Italy

E1.5. Enabling the Future - Developing the Space Workforce

October 4 2023, 15:00 — HAC Museum GA

Co-Chair(s): Kathleen Coderre, Lockheed Martin (Space Systems Company), United States; Olga Zhdanovich, Modis, The Netherlands;

IAC-23.E1.5.1
FORMING A SPACE INDUSTRY ENGINEERING TEAM IN A NEWLY FORMED RESEARCH AND DEVELOPMENT DEPARTMENTS OF DEVELOPING COUNTRIES
Tahir Gadimov, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.E1.5.3
ESA YOUNG PROFESSIONAL SATELLITE: INSPIRING THE NEXT GENERATION OF YOUNG PROFESSIONALS
Julien KROMPHOLTZ, ESA - European Space Agency, France

IAC-23.E1.5.4
THE EUROSPACEHUB PROJECT: BUILDING THE SKILLS OF THE NEXT GENERATION OF SPACE ENTREPRENEURS AND ASTRONAUTS
Bernard Foing, ILEWG "EuroMoonMars", The Netherlands

IAC-23.E1.5.5
MANPOWER INITIATIVES AND THEIR SHORT-TERM EFFECT IN SPACE PIONEER, KOREA NATIONAL SPACE CORE TECHNOLOGY RND PROGRAM
Mi-jin Yoo, Korea Aerospace Research Institute (KARI), Korea, Republic of

IAC-23.E1.5.6
FILLING THE GAPS IN SPACE LEADERSHIP IN AFRICA
Etim Offiong, University of Pretoria, South Africa

IAC-23.E1.5.7
EXPLORING THE PERUVIAN AEROSPACE ECOSYSTEM: OPPORTUNITIES FOR STUDENTS AND PROFESSIONALS
George Steve Fajardo Soria, Agencia Espacial del Peru (CONIDA), Peru

IAC-23.E1.5.8
OVERVIEW OF HANDS-ON SATELLITE DEVELOPMENT TRAINING OF LOCAL COMPANIES IN THE PHILIPPINES AS A MEANS TO DEVELOP A SPACE WORKFORCE
Julie Ann Banatao, Philippine Space Agency, The Philippines

IAC-23.E1.5.9
EVALUATION OF THE SPACE SECTOR IN THE MIDDLE EAST FOR NEXT GENERATIONS
Amna Alhosani, Technology Innovation Institute (TII), United Arab Emirates

IAC-23.E1.5.10
SPACE INDUSTRY WORKFORCE DEVELOPMENT: LESSONS LEARNED AND CASE STUDY WITH THE ANGOLAN NATIONAL SPACE PROGRAM MANAGEMENT OFFICE (GGPEN)
Jerry Sellers, Teaching Science and Technology, Inc., United States

IAC-23.E1.5.11
EMPOWERING THE WORKFORCE OF TOMORROW THROUGH THE WSW 2023 THEME "SPACE AND ENTREPRENEURSHIP"
Ilayda Edali, World Space Week Association, Türkiye

E1.6. Calling Planet Earth - Space Outreach to the General Public

October 5 2023, 10:15 — HAC Museum GA

Co-Chair(s): Remco Timmermans, International Space University (ISU), United Kingdom; Nelly Ben Hayoun, SETI Institute, United Kingdom;
Rapporteur(s): Alina Vizireanu, Space Generation Advisory Council (SGAC), United Kingdom;

IAC-23.E1.6.1
THE SCIENCE OF INSPIRING: HOW TO FOSTER A LOVE FOR SPACE
Oli Perna-Vella, Concordia University, Canada

IAC-23.E1.6.2
INSPIRING THE YOUTH OF THE JORDAN THROUGH SPACE CAMPS AND REALISTIC ANALOG ASTRONAUT MISSIONS IN WADI RUM
Mac Malkawi, Blinc- Borderless lab, United States

IAC-23.E1.6.4
THE PUBLIC ECONOMICS OF SPACE EXPLORATION
Lars Hornuf, TU Dresden, Germany

IAC-23.E1.6.5
SPREAD SPACE KNOWLEDGE TO GENERAL PUBLIC THOROUGH INTERACTIVE EXPERIENCES
Sha You, China Academy of Space Technology (CAST), China

IAC-23.E1.6.6
THE SPACE ECONOMY PROGRAM: INNOVATIVE EDUCATION TO ENHANCE APPLICATIONS AND OPPORTUNITIES OF THE SPACE SECTOR TO THE GENERAL PUBLIC
Chiara Maria Cocchiara, Università degli Studi di Palermo, Italy

IAC-23.E1.6.7
DIGITAL SPACE EDUCATION AND ITS IMPORTANCE TO SPACE FOR ALL
Jayakumar Venkatesan, Valles Marineris International Private Limited, India

IAC-23.E1.6.8
THE NEW PATH OF SPACE EDUCATION
Marcin Giza, Poland

IAC-23.E1.6.9
LEVERAGING CULTURAL PERSPECTIVES AND BIOMEDICAL BREAKTHROUGHS TO INSPIRE THE POST-ARTEMIS GENERATION
Jason-Flor Sisante, United States

IAC-23.E1.6.10
IS THE GROWING INSPIRATIONAL DRIVE TO HUMAN COLONISATION OF SPACE POSITIVELY AFFECTING ORGANISATIONAL INCLUSIVENESS AND WELLNESS ? AN ENQUIRY INSIDE AND OUTSIDE THE SPACE WORKFORCE
Giacomo Primo Sciortino, Italian Space Agency (ASI), Italy

IAC-23.E1.6.11
ACADEMIC EVENTS FOR THE DISSEMINATION OF SPACE ISSUES IN PERU
Josue Airton Lopez Cabrejos, Peru

E1.7. New Worlds - Non-Traditional Space Education and Outreach

October 5 2023, 15:00 — HAC Museum GA

Co-Chair(s): Vera Mayorova, Bauman Moscow State Technical University, Russian Federation; Olga Zhdanovich, Modis, The Netherlands;
Rapporteur(s): Carol Christian, STScI, United States; Remco Timmermans, International Space University (ISU), United Kingdom;

IAC-23.E1.7.1
THE PAYANKEU MOON CIRCUS : A NEW INNOVATIVE CONCEPT FOR OUTREACH TO THE WORLD
Pierre Munoz, U3P (Union pour la Promotion de la Propulsion Photonique), France

IAC-23.E1.7.2
SKYBOX & ASTROBOT - AN ENGAGING AND PERSONALIZED EDUCATIONAL ACTIVITY FOR SPECIAL NEEDS CLASSROOMS FEATURING HANDS-ON ACTIVITIES
Katherine Zamudio-Turcotte, Polytechnique Montreal, Canada

IAC-23.E1.7.4
PILOTING A NOVEL APPROACH TO CROWDSOURCE SCREENING FOR A SYSTEMATIC REVIEW INVESTIGATING THE BIOLOGICAL IMPACT OF IONIZING RADIATION COMING FROM THE SPACE ENVIRONMENT.
Giorgio Lorini, ESA - European Space Agency, Germany

IAC-23.E1.7.5
MAKING DEEP SPACE MORE ACCESSIBLE FOR ALL THROUGH INCLUSIVE INVOLVEMENT IN A VOLUNTEER-BASED RESEARCH LAB
Onė Mikulskytė, Team Tumbleweed, The Netherlands

IAC-23.E1.7.6
HEARING THE UNIVERSE: SONIFICATION AS AN INNOVATIVE TOOL FOR SCIENTIFIC RESEARCH, OUTREACH AND INCLUSION
Xing Yi Ang, United Nations Office for Outer Space Affairs, Austria

IAC-23.E1.7.7
DISCOVERING GALILEO GNSS VIA AN ANDROID APP "CALLISTO - GALILEO'S SPACESHIP"
Matej Poliacek, Space Generation Advisory Council (SGAC), Slovak Republic

IAC-23.E1.7.8
SPACE POPULARIZATION THROUGH INNOVATIVE SPACE DESTINATION SCHOOLS: A PROJECT FOR SPACE AWARENESS & OUTREACH
Najam Naqvi, Institute of Space Technology (IST), Pakistan

IAC-23.E1.7.9
THE UK SPACE AGENCY'S NANOSAT DESIGN COMPETITION – A NOVEL SPACE OUTREACH INITIATIVE
Jodie Howlett, UK Space Agency, United Kingdom

IAC-23.E1.7.10
VIRTUAL MRZ-SAT: DISSEMINATION AND LEARNING THROUGH VIRTUAL REALITY
Raphael Bertrand Delgado, National Autonomous University of Honduras (UNAH), Honduras

E1.8. Hands-on Space Education and Outreach

October 6 2023, 10:15 — International Student Zone

Co-Chair(s): Remco Timmermans, International Space University (ISU), United Kingdom; Carol Carnett, International Space University (ISU), United States;

IAC-23.E1.8.1
PROMOTION OF SPACE AND INTERDISCIPLINARY EDUCATION THROUGH A VENUS EXPLORATION BOARD GAME
Maria Francesca Cecchi, International Space University (ISU), France

IAC-23.E1.8.2
INSPIRING THE NEXT GENERATION OF SPACE ENTHUSIASTS: A NOVEL APPROACH TO SPACE EDUCATION THROUGH THE SPACE SUMMER SCHOOL PROGRAM
Muhammad Aqib Khan, Institute of Space Technology (IST), Pakistan

IAC-23.E1.8.3
GALAXY 101
Gulnar Gasımzade, Azerbaijan State Pedagogical University (ASPU), Azerbaijan

E1.9. Space Culture – Public Engagement in Space through Culture

October 6 2023, 13:45 — HAC Museum GA

Co-Chair(s): Nelly Ben Hayoun, SETI Institute, United Kingdom; Mike Garrett, University of Manchester, United Kingdom;
Rapporteur(s): Remco Timmermans, International Space University (ISU), United Kingdom; Alejandro J. Roman Molinas, Paraguayan Space Agency, Paraguay;

IAC-23.E1.9.1
GAMES AS A TOOL TO RECOGNIZE AND RESOLVE ONGOING SPACE ACTIVITY CHALLENGES
Anna Hurova, International Institute of Space Law (IISL), Ukraine

IAC-23.E1.9.2
TECHNOLOGY, PROBLEMS AND SOLUTIONS FOR DRINKING ALCOHOL IN SPACE
Taiko Kawakami, ASTRAX, Inc., Japan

IAC-23.E1.9.3
LOCAL REVITALIZATION PROJECT TO TURN MY HOMETOWN, KOMONO TOWN, INTO "SPACE TOWN"
HIKARU OTSUKA, Japan

IAC-23.E1.9.4
THE "ZAHRA KOSMOSDA" AN ONLINE SPACE-TECH PLATFORM: ACCESSIBILITY OF SPACE TOPICS FOR ALL AND ITS IMPACT ON THE CREATION OF SPACE CULTURE IN AZERBAIJAN
Zahra Imanova, Azerbaijan

IAC-23.E1.9.6
SPACE CULTURE – PUBLIC ENGAGEMENT IN SPACE THROUGH CULTURE
Aftab Kalantarli, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.E1.9.7
SPACE CULTURAL "CONTAMINATION" THROUGH OUTREACH IN SPELEOLOGY ANALOG MISSIONS: THE SAPIENZA GEA EXPERIENCE
Lorenzo Chiavari, Sapienza University of Rome, Italy

IAC-23.E1.9.8
ASTROLOGY IN THE SPACE AGE: WHAT WILL HAPPEN TO THE HOROSCOPES OF THOSE BORN ON THE MOON?
Masahiko Takehara, ASTRAX LAB, Japan

IAC-23.E1.9.10
STEAM ACCESS AND DISSEMINATION: INSPACE CASE STUDY
Lais Carvalho, Beihang University, Brazil

IAC-23.E1.9.11
FEMALE PARTICIPATION IN THE UK SPACE SECTOR: BARRIERS, PROGRESS, AND RECOMMENDATIONS
Rachel Venn, Space Group of the Royal Aeronautical Society, United Kingdom

IAC-23.E1.9.12
STRUCTURE, ACHIEVEMENTS AND REGIONAL IMPACT: SCIENTIFIC-TECHNOLOGICAL NON-PROFIT CIVIL ASSOCIATION "STARS HUNTERS"
Andrea Dominguez, Instituto Tecnológico de Durango (ITD), Mexico

E2. 51st IAF STUDENT CONFERENCE

Coordinator(s): Franco Bernelli-Zazzera, Politecnico di Milano, Italy; Marco Schmidt, University Wuerzburg, Germany;

E2.1. Student Conference - Part 1

October 2 2023, 15:15 — BCC A5

Co-Chair(s): Franco Bernelli-Zazzera, Politecnico di Milano, Italy; Emmanuel Zenou, Institut Supérieur de l'Aéronautique et de l'Espace (ISAE), France;
Rapporteur(s): Jeong-Won Lee, Korea Aerospace Research Institute (KARI), Korea, Republic of;

IAC-23.E2.1.1
CONCEPTUAL DESIGN FOR A DEPLOYABLE HABITAT FOR EXTREME ENVIRONMENTS ON EARTH AND SPACE
Maria Alejandra Botero Botero, Universidad EAFIT, Colombia

IAC-23.E2.1.2
OBJECT DETECTION AND POSE ESTIMATION FOR NON-COOPERATIVE DOCKING USING DNN FOR SPACE APPLICATIONS
Sanjana Lagisetty, SRM University, kattankulathur, chennai, INDIA, India

IAC-23.E2.1.5
A NEW SPACE DATA PROCESSING PIPELINE PROTOTYPE FOR PASO
Luís Gonçalves, Instituto de Telecomunicações (Portugal), Portugal

IAC-23.E2.1.6
STARTRCKR - 3 AXIS OPEN-SOURCE NIGHT SKY TRACKING DEVICE
Nikodem Bartnik, Silesian University of Technology, Poland

IAC-23.E2.1.7
MULTIFUNCTIONAL ROBOTIC MANIPULATOR ON ISS (MEXARM)
JOSE LUIS LOPEZ SANTIAGO, National Technology of Mexico (TecNM), Mexico

IAC-23.E2.1.8 (unconfirmed)
FEA OF THERMAL COATINGS ON PROPULSION PAYLOAD STRUCTURES PRODUCED BY METALLIC ADDITIVE MANUFACTURING.
Devansh Singhal, Singapore, Republic of

IAC-23.E2.1.9
NON-LINEAR CONTROL STRATEGIES FOR ATTITUDE MANEUVERS OF A LEO CUBESAT BASED ON MODIFIED RODRIGUES PARAMETERS
Ernesto Cortes, Universidad del Valle - Cali, Colombia

IAC-23.E2.1.10
THE DESIGN AND IMPLEMENTATION OF AN LTE NETWORK FOR HIGH-ALTITUDE ROCKET LAUNCHES
Eshan Betrabet, Carleton University, Canada

IAC-23.E2.1.11
OPTICAL SYSTEMS FOR SATELLITE DATA EARTH CHANGE DETECTION
Rustam Rustamov, Azerbaijan

IAC-23.E2.1.12
DESIGN OF CUBESAT-BASED ROBOTIC TENTACLES FOR THE CAPTURE AND REMOVAL OF HIGH-PRIORITY DEBRIS OBJECTS IN LEO
Afnan Malik, Khalifa University of Science and Technology (KUST), United Arab Emirates

E2.2. Student Conference - Part 2

October 3 2023, 10:15 — BCC A5

Co-Chair(s): Marco Schmidt, University Wuerzburg, Germany; Frank Friedlaender, Lockheed Martin Space Systems Company, United States;
Rapporteur(s): Emmanuel Zenou, Institut Supérieur de l'Aéronautique et de l'Espace (ISAE), France;

IAC-23.E2.2.1
SPACECRAFT ORBITAL AND ATTITUDE CONTROL AROUND AN ASTEROID SUBJECTED TO UNDERACTUATED CONDITIONS
Vishrant Dave, Indian Institute of Technology Kanpur, India

IAC-23.E2.2.2
EXPERIMENTAL AND THEORETICAL STUDY OF SCALE EFFECTS OF HYBRID ROCKETS USING LOW-MELTING-POINT FUELS
Naoki Yasunaga, Japan

IAC-23.E2.2.3
COMPLIANT HIGH SUPPORT STIFFNESS ROCKET GIMBAL FOR THRUST VECTOR CONTROL
Guillaume Hueber, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland

IAC-23.E2.2.4
DESIGN AND OPTIMIZATION OF ASCENT TRAJECTORY FOR A GLOBAL DELIVERY SYSTEM
Zhangrui Chen, Tsinghua University, China

IAC-23.E2.2.5
LOW-COST, LIGHTWEIGHT ELECTRONIC FLOW REGULATORS FOR THROTTLING LIQUID ROCKET ENGINES
Vint Lee, U.C. Berkeley, United States

IAC-23.E2.2.7
FAULT DIAGNOSIS OF GRAVITATIONAL WAVE DETECTION SYSTEM OPERATION WITH LIMITED COMPUTING RESOURCES USING SYMBOLIC DIRECTED GRAPH TECHNIQUES
Ruobing Tian, Beijing Institude of technology, China

IAC-23.E2.2.8
INTELLIGENT AND ROBUST CONTROL OF SPACE MANIPULATOR FOR ACTIVE REMOVAL OF SPACE DEBRIS
Shabadini Sampath, University of Strathclyde / Mechanical and Aerospace Engineering, United Kingdom

IAC-23.E2.2.9
AN ATTITUDE-INDEPENDENT PARACHUTE FOR DE-ORBITING INOPERATIVE SATELLITES
Thomas Hale, University of Bath, United Kingdom

IAC-23.E2.2.10
OPTIMIZING LAUNCH WINDOW OPPORTUNITIES FOR ESA'S COMET INTERCEPTOR MISSION USING PRIMER VECTOR THEORY
Miguel De Almeida Rebelo, ISAE - Institut Supérieur de l'Aéronautique et de l'Espace

IAC-23.E2.2.11
AN INNOVATIVE MISSION CONCEPT TO INFER UPPER THERMOSPHERE DENSITY USING A TORQUE-BALANCED CUBESAT
Damien Baclet, ISAE-Supaero University of Toulouse, France

IAC-23.E2.2.12
INVESTIGATION OF PRE-IGNITION PROPELLANT MIXING IN ROTATING DETONATION ROCKET ENGINE
Quentin Roberts, University of Washington, United States

E2.3-GTS.4. Student Team Competition

October 3 2023, 15:00 — BCC B5

Co-Chair(s): Emmanuel Zenou, Institut Supérieur de l'Aéronautique et de l'Espace (ISAE), France; Franco Bernelli-Zazzera, Politecnico di Milano, Italy;
Rapporteur(s): Kathleen Coderre, Lockheed Martin (Space Systems Company), United States;

IAC-23.E2.3-GTS.4.1
ERMES: TESTING AN AUTONOMOUS DOCKING MANOEUVRE DURING ESA FYT 2022 PARABOLIC FLIGHT CAMPAIGN
Alessandro Bortotto, Università degli Studi di Padova, Italy

IAC-23.E2.3-GTS.4.2
HARANG: STUDENT RESEARCHED AND DEVELOPED SOUNDING ROCKET CAPABLE OF DEPLOYING 3U CUBESAT AT 10,000 FT ALTITUDE
Inchul Moon, Seoul National University, Korea, Republic of

IAC-23.E2.3-GTS.4.3
INTEGRATION AND TESTING OF THE FIRST STUDENT-LED AUTOMATED AND ADAPTABLE GROUND STATION IN ARCTIC SWEDEN
Akshata Raut, Luleå University of Technology, Sweden

IAC-23.E2.3-GTS.4.4
ASSESSING THE EFFICACY OF THE STANDING WAVE ELECTRIC CURTAIN IN CLEARING DUST FROM A LUNAR ROVER RADIATOR
Jean-Christophe Lamanque, Polytechnique Montreal, Canada

IAC-23.E2.3-GTS.4.5
THE STUDENT PROJECT FARGO - A FERROFLUID EXPERIMENT ON THE ISS
Bahar Karahan, KSat e.V., Germany

IAC-23.E2.3-GTS.4.6
A CONCEPTUAL STUDY OF HIGH SPATIAL RESOLUTION NEUTRON IMAGING FOR WATER EXPLORATION ON THE MOON WITH A FULL SATELLITE SYSTEM DESIGN
Kentaro Taniguchi, Waseda University, Japan

IAC-23.E2.3-GTS.4.7
THE ROLE OF UNIVERSITY STUDENTS TO THE DEVELOPMENT AND GROWTH OF SPACE BUSINESS: THESTIAS, THE CASE STUDY
Miriam Abreu Neves, University of Coimbra, Portugal

IAC-23.E2.3-GTS.4.8
6S CUBESAT: A STUDENT-MADE IOD MISSION FOR CHARACTERIZATION OF PEROVSKITE SOLAR CELLS AND STRUCTURAL BATTERY
Suhailah Alkhawashke, Politecnico di Milano, Saudi Arabia

IAC-23.E2.3-GTS.4.9 (unconfirmed)
MODELING OF ALBEDO NOISE IN COARSE SUN SENSORS USING A STRATOSPHERIC BALLOON.
Franklin Ticona, Universidad Catolica Boliviana San Pablo, Bolivia

IAC-23.E2.3-GTS.4.10
REVOLUTIONIZING SPECTRAL ANALYSIS OF STARS USING MACHINE LEARNING TECHNIQUES FOR IMPROVED CLASSIFICATION AND IDENTIFICATION
Nihat Abdullayev, Student, Azerbaijan

IAC-23.E2.3-GTS.4.11
DAEDALUS 2: AUTOROTATION ENTRY, DESCENT AND LANDING EXPERIMENT ON REXUS29
Clemens Riegler, Julius Maximilians Universität Würzburg, Germany

E2.4. Educational Pico and Nano Satellites

October 4 2023, 10:15 — BCC A5

Co-Chair(s): Xiaozhou Yu, Dalian University of Technology (DUT), China; Franco Bernelli-Zazzera, Politecnico di Milano, Italy; Anna Guerman, Centre for Mechanical and Aerospace Science and Technologies (C-MAST), Portugal; Igor V. Belokonov, Samara National Research University (Samara University), Russian Federation;

IAC-23.E2.4.1
NINE HIGH SCHOOL STUDENTS TO BUILD NEPAL'S NEXT GENERATION 1U CUBESAT UNDER HIGH SCHOOL CONSORTIUM SATELLITE PROJECT MUNAL
Eliza Sapkota, Nepal Space Foundation, Nepal

IAC-23.E2.4.2
DESIGN AND DEVELOPMENT OF AN ADCS TEACHING PLATFORM FOR EDUCATIONAL SMALL SATELLITE
AMIR HOSSEIN ALIKHAH MISHAMANDANI, Beihang University (BUAA), China

IAC-23.E2.4.3
ALBASAT: AN EDUCATIONAL SATELLITE FOR A MULTI-OBJECTIVES MISSION IN LEO
Federico Basana, CISAS – "G. Colombo" Center of Studies and Activities for Space, University of Padova, Italy

IAC-23.E2.4.4
DEVELOPMENT AND IN-ORBIT VERIFICATION OF THE COILABLE MAST MECHANICAL SYSTEM IN APSCO SSS-1 SATELLITE MISSION
Yu Liu, Beihang University, China

IAC-23.E2.4.5
SUPER RESOLUTION CNN FOR A QUINCUNX SAMPLING-BASED PANCHROMATIC EARTH OBSERVATION IMAGER FOR NANOSATELLITES
Giovanni Maria Capuano, Universita' degli Studi di Napoli Federico II, Italy

IAC-23.E2.4.6
AN INNOVATIVE HIGH-RELIABILITY SUN SENSOR OF MICRO/NANOSATELLITE
Wenlong Zhang, Dalian University of Technology (DUT), China

IAC-23.E2.4.7
THE EVOLUTION FROM DESIGN TO VERIFICATION OF THE ANTENNA SYSTEM AND MECHANISMS IN THE ACUBESAT MISSION
Georgios Kikas, Aristotle University of Thessaloniki, Greece

IAC-23.E2.4.8
ATTITUDE PATH PLANNING TO IMPROVE FULL-MAGNETIC CONTROL PERFORMANCE OF 6S CUBESAT
Davide Perico, Politecnico di Milano, Italy

IAC-23.E2.4.9
HIGH RESOLUTION MULTI-FUNCTIONAL OPTICAL PAYLOAD DESIGN FOR LIANLI MICRO SATELLITE
Chaoli Zeng, Dalian University of Technology (DUT), China

IAC-23.E2.4.10
DEVELOPMENT OF A NEW COMMUNICATION PAYLOAD FOR THE EDUCATIONAL SMALL SATELLITE PROJECT UWE
Marco Schmidt, University Wuerzburg, Germany

IAC-23.E2.4.11
DESIGN OF A SOLAR ARRAY DEPLOYMENT MECHANISM FOR A NANOSATELLITE
Dhananjay Ashok Gujarathi, College of Engineering Pune, India

IAC-23.E2.4.12
PASSIVE ATTITUDE STABILIZATION STRATEGY FOR A 3U STUDENT CUBESAT
Antonio D'Ortona, Politecnico di Torino, Italy

E3. 36th IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS

Coordinator(s): Jacques Masson, European Space Agency (ESA), The Netherlands; Bernhard Schmidt-Tedd, Leuphana University, Germany; Pieter Van Beekhuizen, Stichting Space Professionals Foundation (SSPF), The Netherlands;

E3.1. International cooperation in using space for sustainable development: The "Space2030" agenda

October 3 2023, 10:15 — BCC Auditorium Balcony

Co-Chair(s): Isabelle Duvaux-Bechon, ESA - European Space Agency, France; Dumitru-Dorin Prunariu, Commission d'Astronautique de l'Academie Roumaine, Romania;
Rapporteur(s): Alexander Soucek, Austrian Space Forum, Austria; Peter Stubbe, DLR (German Aerospace Center), Germany;

IAC-23.E3.1.1
SPACE & SUSTAINABILITY USING COMPACT AGREEMENTS-A NEW INITIATIVE TO REALIZE THE SPACE 2030 AGENDA
Joseph Pelton, International Academy of Astronautics, United States

IAC-23.E3.1.2
STRENGTHENING THE ROLE OF THE SPACE SECTOR AS A MAJOR DRIVER OF SUSTAINABLE DEVELOPMENT: AN INVESTIGATION OF THE ESA BUSINESS APPLICATION PROGRAMME
Alessandro Paravano, Politecnico di Milano, Italy

IAC-23.E3.1.3
LEVERAGING SATELLITE IMAGERY FOR GLOBAL CHALLENGES: COLLABORATIVE APPROACHES AND IMPLEMENTATION CHALLENGES
Giulia Costella, Caribou Digital UK, United Kingdom

IAC-23.E3.1.4
SDGS ARE A COMMON GLOBAL LANGUAGE AND AN OPPORTUNITY FOR INNOVATION FOR SOLVING SOCIAL ISSUES: JAXA'S STRATEGY AND INITIATIVES TOWARD SDGS
Ikuko Kuriyama, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.E3.1.5
THE ROLE OF SPACE SCIENCE AND TECHNOLOGIES IN ACHIEVING SUSTAINABLE DEVELOPMENT GOALS.
Aytan Zeynalli, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.E3.1.6
NORWAY: THE SPACE2030 AGENDA AND THE HIGH NORTH
Per Høyland, Norwegian Space Agency (NOSA), Norway

IAC-23.E3.1.7
LEVERAGING SPACE TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT: THE ROLE OF THE MIDDLE EAST'S SPACE SECTOR
Camilo Andres Reyes Mantilla, Space Generation Advisory Council (SGAC), Qatar

IAC-23.E3.1.8
ESG AND SPACE: UNDERSTANDING ESG TOWARDS A SUSTAINABLE DEVELOPMENT - AN SES CASE STUDY
Diego Greenhalgh, France

IAC-23.E3.1.9
LEVERAGING SUSTAINABLE FINANCE AND ASSET-BASED FINANCING TO PROMOTE THE SUSTAINABLE DEVELOPMENT GOALS IN THE SPACE SECTOR
Hamza Hameed, Space Generation Advisory Council (SGAC), Singapore, Republic of

IAC-23.E3.1.10
THE NEW MULTILATERAL AGREEMENT FOR THE HIGH SEAS: WHAT ROLE FOR SPACE?
Gabriele Redigonda, University of Firenze, Italy

E3.2. The future of space exploration and innovation

October 3 2023, 15:00 — BCC Auditorium Balcony

Co-Chair(s): Marc Haese, DLR, German Aerospace Center, Germany; Nicolas Peter, International Space University (ISU), France;
Rapporteur(s): Devanshu Ganatra, International Institute of Space Law (IISL), United States; Anmol Dhawan, International Institute of Space Law (IISL), The Netherlands;

IAC-23.E3.2.1
GLOBAL SPACE FUTURES – 2050
Scott Pace, Space Policy Institute, George Washington University, United States

IAC-23.E3.2.2
EUROPE'S AMBITION IN SPACE EXPLORATION (WORKING TITLE)
Piero Messina, European Space Agency (ESA), France

IAC-23.E3.2.3
DEVELOPING NEW COMMERCIAL SPACE STATIONS: HOW DO POTENTIAL USERS PERCEIVE THEIR VALUE?
Alessandro Paravano, Politecnico di Milano, Italy

IAC-23.E3.2.4
A SET OF PRINCIPLES FOR INTERNATIONAL COOPERATION ON LUNAR EXPLORATION PROJECTS: A PERSPECTIVE FROM CHINA
Hui Du, Institute of Spacecraft System Engineering,China Academy of Space Technology (CAST), China

IAC-23.E3.2.5
PERSPECTIVES OF THE INTERNATIONAL INPPS FLAGSHIP AS A DEVELOPMENT JUMP IN SPACE TRANSPORTATION TO MARS AND BEYOND
Frank Jansen, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-23.E3.2.6
OVERCOMING CHALLENGES AND OPPORTUNITIES FOR EMERGING SPACE NATIONS IN THE ASIA-PACIFIC REGION DESIGNING ROBUST AND RELIABLE ROVERS AND ROBOTS FOR EXTREME CONDITIONS
Dasuni Hewawasam, Space Generation Advisory Council (SGAC), Sri Lanka

IAC-23.E3.2.7
SGAC ETHICS AND HUMAN RIGHTS IN SPACE: A SURVEY OF THE NEXT GENERATION
Anja Sheppard, University of Michigan, United States

IAC-23.E3.2.8
AN OVERVIEW OF SPACE POLICY PERSPECTIVES FROM THE YOUNG SPACE GENERATION
Lindsey Wiser, Arizona State University, United States

IAC-23.E3.2.10
A WAY FORWARD? THE INTERNATIONAL POLITICAL AND LEGAL PRECONDITIONS FOR ESTABLISHING HUMAN SETTLEMENTS ON THE MOON
Héloïse Vertadier, Open Lunar Foundation, New Zealand

E3.3. Space Economy Session – A focus on in-space operations and their potential to stimulate economic development

October 4 2023, 10:15 — BCC Auditorium Balcony

Co-Chair(s): Pieter Van Beekhuizen, Stichting Space Professionals Foundation (SSPF), The Netherlands; Henry Hertzfeld, Space Policy Institute, George Washington University, United States;
Rapporteur(s): Luigi Scatteia, PricewaterhouseCoopers Advisory (PwC), France; Bhavya Lal, National Aeronautics and Space Administration (NASA), United States;

IAC-23.E3.3.1
ANALYSIS OF THE COMMERCIAL SATELLITE INDUSTRY: KEY INDICATORS, GLOBAL TRENDS, AND EMERGING SUSTAINABLE SPACE ACTIVITIES
Emma Louden, Bryce Space and Technology, United States

IAC-23.E3.3.2
ECONOMIC IMPLICATIONS OF NATIONAL SPACE LEGISLATIONS. DEVELOPMENT SUPPORT CLAUSES AS A LEVER FOR INDIGENOUS SECTOR
Kaja Hopej, Kozminski University, Poland

IAC-23.E3.3.3
SPACE ECONOMIC CAPACITY BUILDING IN CHINA: STATUS QUO, CHALLENGES AND POSSIBLE WAYS OUT
YONGLIANG YAN, Beijing Jiaotong University, China

IAC-23.E3.3.4
OOS AS AN ENABLER TO THE SPACE ECONOMY -- SUSTAINABLE OOS BUSINESS CASES THROUGH VALUE-BASED PRICING
Navin Gopal, Astroscale Pte. LTD, Malaysia

IAC-23.E3.3.5
FUNDING NEW SPACE COMPANIES IN EQUITY MARKETS. ASSESSING THE RISK AND UNCERTAINTY OF NEWLY LISTED PUBLIC COMPANIES.
Leonella Gori, SEE Lab - SDA Bocconi School of Management, Italy

IAC-23.E3.3.6
ECONOMIC BENEFITS OF SPENDING ON SPACE DEVELOPMENT
Khadija Aliyeva, National Aviation Academy - Azerbaijan, Azerbaijan

IAC-23.E3.3.7
THE SPACESCAPE: UNDERSTANDING THE BREADTH OF INVESTMENT IN THE SPACE INDUSTRY
Emma Louden, Bryce Space and Technology, United States

IAC-23.E3.3.9
AZERBAIJAN'S SPACE SECTOR: OVERVIEW AND RECOMMENDATIONS FOR ITS FUTURE DEVELOPMENT
Kais Barmawi, International Space University (ISU), France

IAC-23.E3.3.10
CIRCULAR SPACE ECONOMY: ON THE WHY AND HOW TO ACHIEVE CIRCULAR MATERIAL FLOWS IN SPACE.
Bernd M. Weiss, Luleå University of Technology, Sweden

E3.4. Assuring a Safe, Secure and Sustainable Environment for Space Activities

October 4 2023, 15:00 — BCC Auditorium Balcony

Co-Chair(s): Peter Stubbe, German Aerospace Center (DLR), Germany; Jana Robinson, The Prague Security Studies Institute, Czech Republic;
Rapporteur(s): Gina Petrovici, German Aerospace Center (DLR), Germany;

IAC-23.E3.4.1
SPACE SUSTAINABILITY IN LEO: A MULTIDISCIPLINARY APPROACH TO IDENTIFY AND MITIGATE ECONOMIC, OPERATIONAL AND TECHNOLOGICAL RISKS OF ACTIVE DEBRIS REMOVAL SOLUTIONS.
Simonetta Di Pippo, SDA Bocconi School of Management, Bocconi University, Italy

IAC-23.E3.4.3
THE POLITICAL AND LEGAL LANDSCAPE OF SPACE DEBRIS MITIGATION IN EMERGING SPACE NATIONS
Danielle Wood, Massachusetts Institute of Technology (MIT), United States

IAC-23.E3.4.4
ENGAGEMENT AND COMMUNICATION OF THE SPACE SUSTAINABILITY RATING
Andrew Garza, Space Policy Institute, George Washington University, United States

IAC-23.E3.4.5
SUSTAINABILITY OF OUTER SPACE ACTIVITIES THROUGH IMPLEMENTATION OF INTERNATIONAL SPACE LAW: A COMPARATIVE APPROACH
Merve ERDEM BURGER, Switzerland

IAC-23.E3.4.6
A GUIDE MAP FOR EMERGING SPACE ECOSYSTEMS
Matias Campos, Astralintu Space Technologies, Ecuador

IAC-23.E3.4.7
REGIONAL MECHANISMS TO SUPPORT SAFE, SECURE AND SUSTAINABLE ENVIRONMENT FOR SPACE ACTIVITIES: A CASE STUDY OF ASIA-PACIFIC REGION
Aisha Jagirani, Asia-Pacific Space Cooperation Organization (APSCO), China

IAC-23.E3.4.9
MANAGING SPACE AS A GLOBAL COMMONS
Daniel Patton, Secure World Foundation, United States

IAC-23.E3.4.10
AN INTERGENERATIONAL PACT FOR SPACE SUSTAINABILITY
Antonino Salmeri, Space Generation Advisory Council (SGAC), Spain

E3.6. Cost and Procurement impacts on Space Programmes linked to high inflation and world-wide scarcity of components and materials

October 5 2023, 15:00 — BCC Auditorium Balcony

Co-Chair(s): Christine Klein, European Space Agency (ESA), France; Henry Hertzfeld, Space Policy Institute, George Washington University, United States;
Rapporteur(s): Karina Miranda Sanchez, ESA, The Netherlands; Raphaelle Leglise, ESA, Spain;

IAC-23.E3.6.1
KEYNOTE:
Karina Miranda Sanchez, ESA, The Netherlands

IAC-23.E3.6.2
PANEL DISCUSSION
Karina Miranda Sanchez, ESA, The Netherlands

IAC-23.E3.6.3
NAVIGATING THE CHALLENGES OF INFLATION AND MATERIAL SCARCITY IN SPACE PROGRAMMES
Raihana Shams Islam Antara, BRAC University, Bangladesh

IAC-23.E3.6.4
ECONOMIC AND PROGRAMMATIC RISK MANAGEMENT IN LARGE SPACE PROJECTS CONTRACTS
Franck Germes, ESA - European Space Agency, The Netherlands

IAC-23.E3.6.5
COST AND PROCUREMENT IMPACTS ON SPACE PROGRAMMES LINKED TO HIGH INFLATION AND WORLD-WIDE SCARCITY OF COMPONENTS AND MATERIALS
Yagub Ahmadov, Azerbaijan State University of Economics, Azerbaijan

IAC-23.E3.6.6
TEMPORARY MEASURES WITH PERMANENT EFFECTS: SANCTIONS AND EXPORT CONTROLS IN THE SPACE INDUSTRY
Dimitra Stefoudi, Leiden University, The Netherlands

IAC-23.E3.6.7
A COMPREHENSIVE ANALYSIS OF POLICY MAKING TO DEAL WITH THE SPACE TECH SUPPLY CHAIN CRISIS IN INDIA
Siddharth Joshi, R V College of Engineering, Bengaluru, India

IAC-23.E3.6.8
INCREASED AUTONOMY AND INDEPENDENCE IN SPACE THROUGH ROBUST AND RESILIENT SUPPLY CHAINS
Victoria Carter-Cortez, PricewaterhouseCoopers Advisory (PwC), France

IAC-23.E3.6.9
HIGH INFLATION AND SUPPLY CHAIN DISRUPTION
Stephen Airey, European Space Agency (ESA), The Netherlands

E4. 57th IAA HISTORY OF ASTRONAUTICS SYMPOSIUM

Coordinator(s): A. Ingemar Skoog, , Germany; Tal Inbar, [unlisted], Israel; Otfrid G. Liepack, National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States; Sandra Haeuplik-Meusburger, TU Wien, Austria;

E4.1. Memoirs & Organisational Histories

October 4 2023, 15:00 — HAC Balcony 2

Co-Chair(s): Kerrie Dougherty, , Australia; Niklas Reinke, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;
Rapporteur(s): Philippe Cosyn, Independent scholar, Belgium;

IAC-23.E4.1.1
EDWARD A. NEU, JR. (1920-1963) -- THE CREATOR OF THE "SPAGHETTI" ROCKET COMBUSTION CHAMBER, A BIOGRAPHICAL SKETCH
Frank H. Winter, National Air and Space Museum, United States

IAC-23.E4.1.2
FRED HAISE: THE LUNAR MODULE PILOT OF APOLLO 13
Andrew Erickson, Naval War College/Harvard University, United States

IAC-23.E4.1.3
HERMANN OBERTH - "THE ROCKET INTO PLANETARY SPACES" - 1923. THE TURNING POINT FROM IMAGINATION TO REALIZATION - HOW DID THIS FUNDAMENTAL WORK OF ROCKET AND SPACE TECHNOLOGY COME ABOUT IN THE FIRST PLACE?
Karlheinz Rohrwild, Hermann-Oberth-Raumfahrt Museum e.V., Germany

IAC-23.E4.1.5
ROBERT ESNAULT-PELTERIE, THE ONLY AVIATION & SPACE PIONEER INVENTOR OF ASTRONAUTIQUE
Philippe Jung, Airbus SAS, France

IAC-23.E4.1.6
LORENZO M. VARGAS MD, FASME: A PERUVIAN PIONEER OF AEROESPACE MEDICINE AND EDUCATION
David Villanueva, Universidad Nacional Mayor de San Marcos, Peru

IAC-23.E4.1.7
RENAISSANCE OF MEXICAN ASTRONOMY.
Sebastián Sala Baltazar, Universidad Nacional Autónoma de México (UNAM), Mexico

IAC-23.E4.1.8
60 YEARS OF SERVICE TO WORLD COSMONAUTICS. DEDICATED TO THE ANNIVERSARY OF THE INSTITUTE OF BIOMEDICAL PROBLEMS
Anna Kussmaul, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-23.E4.1.9
60TH ANNIVERSARY LEGAL PRINCIPLES DECLARATION
Hannes Mayer, Karl Franzens Universität Graz, Austria

IAC-23.E4.1.11
SPACE RACE FOR PEACE? A HISTORICAL ANALYSIS AND RELATED POLICY RECOMMENDATION ON THE EFFECT OF COLLABORATION AND COMPETITION IN SPACE ON CONFLICT DETERRENCE
Joshua Burns, Northeastern University, United States

E4.2. Scientific and Technical Histories

October 5 2023, 10:15 — HAC Balcony 2

Co-Chair(s): Vera Pinto Gomes, European Commission, Belgium; Randy Liebermann, , United States;
Rapporteur(s): Hannes Mayer, Karl Franzens Universität Graz, Austria; Sandra Haeuplik-Meusburger, TU Wien, Austria;

IAC-23.E4.2.2
THEODORE VON KÁRMÁN, THE CALIFORNIA INSTITUTE OF TECHNOLOGY, AND THE JET PROPULSION LABORATORY: "ROCKETS" FOR PLANES: THE DEVELOPMENT OF RATO
Mike Pavelec, The Johns Hopkins University, United States

IAC-23.E4.2.3
HISTORY OF ANALOG SIMULATIONS IN PROJECT MERCURY
Michal Slomiany, Rzeszow University of Technology, Poland

IAC-23.E4.2.4
BEYOND MISSION CONTROL: THE UNTOLD STORY BEHIND APOLLO 13'S "LUNAR LIFEBOAT" RESCUE
Andrew Erickson, Naval War College/Harvard University, United States

IAC-23.E4.2.5
SALYUT AND SKYLAB - THE ORIGINS, DEVELOPMENT AND LEGACY OF THE FIRST SPACE STATIONS
Amer Khan, United Arab Emirates

IAC-23.E4.2.7
FROM USE IN EARLY 3-AXES-CONTROLLED SATELLITES TO CURRENT CUBESAT FORMATIONS: EVOLUTION IN USE OF PRECISION TURNTABLES
Klaus Schilling, Zentrum für Telematik, Germany

IAC-23.E4.2.8
ROCKETRY PROJECT AT ISRAEL AIRFORCE TECHNICAL SCHOOL
Tal Inbar, Israel

IAC-23.E4.2.9
THE ORIGINS OF THE ASTRONAUT PROGRAM IN ISRAEL: PREPARING FOR THE SPACEFLIGHT - 1999-2001
Tal Inbar, Israel

IAC-23.E4.2.10 (unconfirmed)
WEST ASIA: TRACING THE SCIENTIFIC AND TECHNICAL HISTORIES OF A REGION AT THE CROSSROADS OF CIVILIZATIONS
Atharva Pandit, India

IAC-23.E4.2.11
A STUDY OF THE BIRTH OF SPACE-AGE CULTURE AND AESTHETICS ART IN SEVEN DECADES AGO IN 1950S
Eva Yi-Wei Chang, University of Science & Technology, Taipei

E4.3. History of Western Asia Contribution to Astronautics

October 6 2023, 10:15 — HAC Balcony 2

Co-Chair(s): Otfrid G. Liepack, National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States;
Rapporteur(s): Nathalie Tinjod, European Space Agency (ESA), France; Kerrie Dougherty, , Australia; Piero Messina, European Space Agency (ESA), France;

IAC-23.E4.3.1
KEYNOTE: OVERVIEW OF SPACE SCIENCE AND TECHNOLOGY HISTORY – DESTINY AGAINST OF RULE
Rustam Rustamov, Azerbaijan

IAC-23.E4.3.2
THE POLITICAL, ECONOMIC, SOCIAL, AND TECHNOLOGICAL EVOLUTION OF THE SPACE SECTOR IN AZERBAIJAN
Grecia Olano O'Brien, Concordia University, Canada

IAC-23.E4.3.3
A COMPARATIVE HISTORY OF THE NATIONAL SPACE PROGRAMS OF THE ARABIAN GULF COUNTRIES
Amer Khan, United Arab Emirates

IAC-23.E4.3.4
SPACE APPLICATIONS AND MANAGEMENT OF GLOBAL CHALLENGES IN THE MIDDLE EAST: THE CASE OF LEBANON
Luisa Santoro, Italian Space Agency (ASI), Italy

IAC-23.E4.3.5
MODERN ASPECTS OF THE 11TH - 16TH C. ASIAN ISLAMIC ASTRONOMICAL OBSERVATORIES
Ilias Fernini, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

E5. 34th IAA SYMPOSIUM ON SPACE AND SOCIETY

Coordinator(s): Geoffrey Languedoc, Canadian Aeronautics & Space Institute (CASI), Canada; Olga Bannova, University of Houston, United States;

E5.1. Space Architecture: Habitats, Habitability, and Bases

October 2 2023, 15:15 — BCC A4

Co-Chair(s): Olga Bannova, University of Houston, United States; Paolo Mangili, University of Houston, United States;

IAC-23.E5.1.1
SPACE ARCHITECTURE AND COMPUTATIONAL MODELING OF THE LUNAR GATEWAY MODULES AS A TESTBED FOR ECLSS SYSTEMS ANALYSIS
Margarita Belali, National Observatory Of Athens, Greece

IAC-23.E5.1.2
IMPORTANCE AND CHALLENGES OF INTEGRATING BLSS INTO ECLSS
Megan Kane, University of Arizona, United States

IAC-23.E5.1.5
SPACE TOURISM AND SPACE ARCHITECTURE. CONSTRUCTIVE STRATEGIES USING IN SITU LUNAR RESOURCES TO BUILD A HOTEL ON THE MOON.
Ilaria Pia Fiore, Politecnico di Milano, Italy

IAC-23.E5.1.6
ARCHITECTURAL APPROACH FOR EVALUATION OF RADIATION SHIELDING INTEGRATION IN SPACE HABITATS
Olga Bannova, University of Houston, United States

IAC-23.E5.1.7
FEASIBILITY STUDY OF NOVEL CREW WELLBEING AND ALTERNATIVE COUNTERMEASURES SOLUTIONS FOR RECREATIONAL SPACES IN FUTURE LUNAR PERMANENT SETTLEMENTS
Giancarlo Genta, Politecnico di Torino, Italy

IAC-23.E5.1.8
BEYOND PHYSICAL LIMITS: A FRAMEWORK FOR ACCESSIBLE DESIGN IN SPACE HABITATS
Khushi Shah, Space Generation Advisory Council (SGAC), India

E5.2. Is Space R&D Truly Fostering A Better World For Our Future?

October 3 2023, 15:00 — BCC A4

Co-Chair(s): Olga Bannova, University of Houston, United States; Nona Minnifield Cheeks, Innovatyr, LLC, United States;
Rapporteur(s): Anna Barbara Imhof, Liquifer Systems Group (LSG), Austria; Kerry Leonard, National Aeronautics and Space Administration (NASA), Goddard Space Flight Center, United States;

IAC-23.E5.2.1
ROCKET SCIENCE AND INNOVATION SPILLOVERS – DOES SPACE RESEARCH BENEFIT THE ECONOMY AND SOCIETY?
Daniel Vrankar, TU Dresden, Germany

IAC-23.E5.2.2
DEVELOPMENT AND IMPLEMENTATION OF SPACE ELECTROMYOSTIMULATION TECHNOLOGIES IN TERRESTRIAL MEDICINE: PRESENT AND FUTURE
Maria Bekreneva, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-23.E5.2.4
FROM THE EARTH TO SPACE: NOTES FOR A PLANETARY SPACE HABITAT CATALOGUE
Giacomo D'Amico, University Mediterranea of Reggio Calabria, Italy

IAC-23.E5.2.5
CASE STUDY: HOW FUND-MATCHING IMPROVES RESPONSIBILITY AND RELIABILITY OF COMPANIES WITH TECHNOLOGY TRASFER AND DEVELOPMENT.
Mi-jin Yoo, Korea Aerospace Research Institute (KARI), Korea, Republic of

IAC-23.E5.2.6
TECHNOLOGY TRANSFER FROM CENTERS FOR SPACE STUDIES TO RURAL VILLAGES: CASE STUDY OF THE JICAMARCA RADIO OBSERVATORY RADARS IN THE PERUVIAN HIGHLANDS AND JUNGLE
George Steve Fajardo Soria, Agencia Espacial del Peru (CONIDA), Peru

IAC-23.E5.2.7 (unconfirmed)
AN AFRICAN SPACEPORT – R&D BENEFITS
Sias Mostert, Space Commercial Services Holdings (Pty) Ltd, South Africa

IAC-23.E5.2.8
THE IMPACT OF SPACE EXPLORATION ON OTHER AREAS OF STUDY AND ITS USE FOR A BETTER WORLD
David Alejandro Villa Stopelli, Instituto Politécnico Nacional, Mexico

IAC-23.E5.2.9
IS SPACE EXPLORATION REALLY CREATING A BETTER WORLD FOR OUR FUTURE?
Elvin Huseynov, Baku State University, Azerbaijan

IAC-23.E5.2.10
INNOVATIONS IN BIO-SPACE ARCHITECTURE FOR CLIMATE CHANGE RELIEF
Wiktoria Dziadula, Silesian University of Technology, Poland

E5.3. Contemporary Arts Practice and Outer Space: A Multi-Disciplinary Approach

October 4 2023, 15:00 — BCC A4

Co-Chair(s): Yuri Tanaka, Kyoto City University of Arts, Japan; Yurie Suzuki, Royal College of Art, Japan;

IAC-23.E5.3.1
THE UNIQUE POTENTIAL OF HAND-ILLUSTRATION TO EXPLORE ART AND SCIENCE INTERACTIONS IN THE ENGINES OF ETERNITY SPACE ART PROJECT
Arise Wan, Germany

IAC-23.E5.3.3
COLLABORATIVE DESIGN THROUGH PHYSICS AND ARCHITECTURE - A GARDEN FOR SHARING THE PLEASURE OF LIFE WITHIN THE UNIVERSE
Yuri Tanaka, Kyoto City University of Arts, Japan

IAC-23.E5.3.4
SCIFASE: THE INTERSECTION OF SCIENCE FICTION AND SPACE EXPLORATION
Dhanisha Sateesh, Space Generation Advisory Council (SGAC), India

IAC-23.E5.3.5 (unconfirmed)
STORIES FROM HOME
Nahum Romero Zamora, KOSMICA, Germany

IAC-23.E5.3.7
SPACE ART PRACTICE REVIEW
Yurie Suzuki, Royal College of Art, Japan

IAC-23.E5.3.8
UAE'S SPACE CULTURE FLOURISHING THROUGH ART AND ASTROPHOTOGRAPHY.
Maryam Alqasimi, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

E5.4. Space Assets and Disaster Management

October 5 2023, 15:00 — BCC A4

Co-Chair(s): Geoffrey Languedoc, Canadian Aeronautics & Space Institute (CASI), Canada; Jillianne Pierce, Space Florida, United States;

IAC-23.E5.4.2
SPACE ASSETS AND DISASTER MANAGEMENT
Nasib Karimov, Baku State University, Azerbaijan

IAC-23.E5.4.3
DEVELOPMENT OF THE SPACE TOILET CALLED "SPACE BENKING" 2023
Taichi Yamazaki, ASTRAX, Inc., Japan

IAC-23.E5.4.4
PROTECTING EUROPE: HOW CAN SPACE APPLICATIONS SUPPORT EUROPEAN STATES TO IMPLEMENT THE NEW CRITICAL ENTITIES RESILIENCE DIRECTIVE.
Fiore Grazia Maria, EURISY, France

IAC-23.E5.4.5
EUSPA SPACE ASSETS AND DISASTER MANAGEMENT
Christina Giannopapa, European Union Agency for the Space Programme (EUSPA), Czech Republic

IAC-23.E5.4.6 (unconfirmed)
HARNESSING THE POTENTIAL OF SPACE AND SPACE TECHNOLOGIES FOR GLOBAL SURGERY IN LOW- AND MIDDLE-INCOME COUNTRIES
Yvan Zolo, Space Generation Advisory Council (SGAC), South Africa

IAC-23.E5.4.7
UNLOCKING THE POTENTIAL OF SATELLITE TECHNOLOGIES FOR DISASTER RISK MANAGEMENT: OVERCOMING IMPLEMENTATION CHALLENGES
Giulia Costella, Caribou Digital UK, United Kingdom

IAC-23.E5.4.8
DEPLOYING A PORTABLE GROUND STATION FOR EFFECTIVE DISASTER MANAGEMENT IN BANGLADESH
Abdulla Hil Kafi, BRAC University, Bangladesh

IAC-23.E5.4.9
QHAWASUNCHIS: A PROPOSAL SUPPORT CENTER FOR NATURAL DISASTER MANAGEMENT USING SATELLITE IMAGES IN PERÚ
Avid Roman-Gonzalez, Business on Engineering and Technology S.A.C. (BE Tech), Peru

IAC-23.E5.4.10
EXPLORING THE ROLE OF SPACE-BASED TECHNOLOGIES IN DISASTER MANAGEMENT: CHALLENGES AND OPPORTUNITIES
Sudarsan Nerella, University of Petroleum and Energy Studies, India

IAC-23.E5.4.11
THE NEXT FRONTIER IN HUMANITARIAN DISASTER MANAGEMENT: OPTIMISING SATELLITE DATE IN THE HUMAN RIGHTS DOMAIN
Bas Jacobs, International Institute of Air and Space Law, Leiden University, The Netherlands

IAC-23.E5.4.12
USING GLOBAL SATELLITE DATA TO IMPROVE GENDER EQUITY
Kaitlyn Holm, University of Pennsylvania, United States

E5.5. Sharing space achievements and heritage: space museums and societies

October 6 2023, 10:15 — BCC A4

Co-Chair(s): Peter Buist, European Union Agency for the Space Programme (EUSPA), The Netherlands; Jean-Baptiste Desbois, SEMECCEL Cité de l'Espace, France; Ines Prieto, SEMECCEL Cité de l'Espace, France;

IAC-23.E5.5.1
THE PEDRO E. PAULET MOSTAJO PERUVIAN AEROSPACE MUSEUM THROUGH TIKTOK
David Villanueva, Universidad Nacional Mayor de San Marcos, Peru

IAC-23.E5.5.3
A CHANCE FOR EVERYONE TO STEP IN THE ENVIRONMENT OF SPACE.
Shivam Garg, India

IAC-23.E5.5.4
FUTURE SOCIETY: ROLE OF THE SPACE TECHNOLOGY AND AZERBAIJAN AS DISCOURSE DEFINITION PLATFORM
Mir Elmir Alizada, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.E5.5.5
MOON GALLERY: 100 ARTEFACTS, 100 SEEDS, 100 QUESTIONS
Anna Sitnikova, Stichting Moon Gallery Foundation, The Netherlands

IAC-23.E5.5.6
SPACE CONCORDIA ROCKETRY DIVISION'S JOURNEY TO THE STARS: A STORY OF GRIT, PERSEVERANCE, AND RESILIENCE
Grecia Olano O'Brien, Concordia University, Canada

E5.6. Simulating Space Habitation: Habitats, Design and Simulation Missions

October 6 2023, 13:45 — BCC A4

Co-Chair(s): Monika Lipinska, Lund University, Sweden; Vittorio Netti, Sasakawa International Center for Space Architecture, Italy; Olga Bannova, University of Houston, United States;
Rapporteur(s): Sandra Haeuplik-Meusburger, TU Wien, Austria;

IAC-23.E5.6.2
OPPORTUNITIES FOR VALIDATION OF TECHNOLOGIES AND PRODUCTS INTENDED FOR LONG-TERM SPACEFLIGHT IN ANALOG ISOLATION STUDIES
Agaptseva Tatyana, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-23.E5.6.3
DESIGN AND DEVELOPMENT OF A SPACE SUIT MOCK-UP FOR VR-BASED EVA RESEARCH AND SIMULATION
Vittorio Netti, Sasakawa International Center for Space Architecture, Italy

IAC-23.E5.6.4
AGRITHRIVE: AN EMERGENCY PREPAREDNESS SYSTEM FOR PLANTS IN SPACE
Somayajulu Dhulipala, Massachusetts Institute of Technology (MIT), United States

IAC-23.E5.6.5
GLOBAL STANDARDIZATION OF ANALOG SPACE MISSIONS
Danny Tjokrosetio, Delft University of Technology, The Netherlands

IAC-23.E5.6.6
ECHO V2: CONCEPTUAL DESIGN OF A MODULAR INFLATABLE HABITAT MODULE FOR SUB-SURFACE ANALOG SPACE MISSIONS
Joshika Sachithanandan, Delft University of Technology (TU Delft), The Netherlands, The Netherlands

IAC-23.E5.6.7
SPACE APPLICATIONS IN A MANNED UNDERWATER RESEARCH STATION
Frank Scharmann, Germany

E6. IAF BUSINESSES AND INNOVATION SYMPOSIUM

Coordinator(s): Ken Davidian, , United States; Nancy C. Wolfson, American Institute of Aeronautics and Astronautics (AIAA), United States;

E6.1. Space Entrepreneurship and Investment: The Practitioners' Perspectives

October 5 2023, 15:00 — HAC Balcony 2

Co-Chair(s): Joerg Kreisel, JOERG KREISEL International Consultant (JKIC), Germany; Daria Stepanova, , Germany;

IAC-23.E6.1.1
SHAPING THE FUTURE OF FEMALE ENTREPRENEURSHIP
Shelli Brunswick, Space Foundation, United States

IAC-23.E6.1.2
"BREAKING BARRIERS: THE TRANSFORMATIVE POWER OF BUSINESS AND INNOVATION IN THE SPACE INDUSTRY"
Nigar Aliyeva, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.E6.1.4
START-UP SPACE: GLOBAL INVESTMENT TRENDS
Emma Louden, Bryce Space and Technology, United States

IAC-23.E6.1.5
DEVELOPMENT AND ANALYSIS OF A NEW DEDICATED STOCK MARKET INDEX OF EUROPEAN LISTED SPACE COMPANIES AND COMPARISON WITH EXISTING ONES.
Alexandre-Dimosthénis Benas, International Space University (ISU), France

IAC-23.E6.1.6
ANALYSIS AND FORECAST OF THE BLOCKCHAIN WITH REGARDS TO SPACE FINANCE
Justin Park, United States

IAC-23.E6.1.7
SPACE INVESTING: THE NEW EUROPEAN CROWDFUNDING PLATFORM
Eleonora Lombardi, Fondazione E. Amaldi, Italy

IAC-23.E6.1.8
JAXA'S NEW INITIATIVES FOR INVESTMENT
Sayaka Sashida, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.E6.1.9
AN ANALYSIS OF UNIQUE ENTREPRENEURIAL CHALLENGES IN THE SPACE SECTOR IN THE UNITED ARAB EMIRATES AND AFRICA.
Kaitlyn Holm, University of Pennsylvania, United States

IAC-23.E6.1.10
EMERGING SPACE: PRACTITIONERS' REFLECTIONS ON BUILDING NEW SPACE ECOSYSTEMS AROUND THE WORLD
Daniel Sagath, Slovak Investment and Trade Development Agency (SARIO) - Slovak Space Office, Slovak Republic

IAC-23.E6.1.11
SPACE INVESTMENT TO CONTRIBUTE TO SUSTAINABLE FUTURE INDUSTRY
Misuzu Onuki, Space Access Corporation, Japan

IAC-23.E6.1.12
SIGMA FIT TECH-WEAR FOR SUSTAINABLE COLONIES ON MARS
Omar Metwally, Sigma Fit, Egypt

IAC-23.E6.1.13
BUILDING ROCKETS, TAKING RISKS, AND BREAKING BARRIERS: THE TRAILBLAZING STORY OF GWYNNE SHOTWELL'S CAREER IN AEROSPACE
Grecia Olano O'Brien, Concordia University, Canada

E6.2. Public-Private Partnerships: Traditional and New Space Applications

October 4 2023, 10:15 — HAC Balcony 2

Co-Chair(s): Nancy C. Wolfson, American Institute of Aeronautics and Astronautics (AIAA), United States; Kenneth Bruce Morris, Sierra Space, United States; Nicholas Florio, Space Generation Advisory Council (SGAC), United States;

IAC-23.E6.2.1
KEYNOTE: THE U.S. DEPARTMENT OF COMMERCE AND THE SEIC IAF ON PPP MODELS FOR SPACE RESOURCES AND SUSTAINABILITY
Richard DalBello, National Oceanic and Atmospheric Administration (NOAA), United States

IAC-23.E6.2.2
ORBITAL DEBRIS: A GREAT BUSINESS OPPORTUNITY
Adriano V. Autino, Space Renaissance International, Italy

IAC-23.E6.2.3
THE EVOLUTION OF PNT – HOW COULD PUBLIC-PRIVATE PARTNERSHIPS SUPPORT REQUIRED FUTURE SERVICES OF GNSS TECHNOLOGY
Joshua Critchley-Marrows, The University of Sydney, Australia

IAC-23.E6.2.4
STRATEGY FOR THE MOON: ORIGINS AND DESIGN OF NASA'S HUMAN LANDING SYSTEM PROGRAM
Nantel Suzuki, National Aeronautics and Space Administration (NASA), United States

IAC-23.E6.2.5
EMERGING LAUNCH DEMAND OF SMALLSATS IN KOREA AND THE PRIVATE-LED DEVELOPMENT OF DEDICATED LAUNCH VEHICLES
SeokHee Lim, Korea Aerospace Research Institute (KARI), Korea, Republic of

IAC-23.E6.2.7
THE IAF SEIC WORKING GROUP ON SPACE RESOURCES UTILIZATION AND SUSTAINABILITY
Nancy C. Wolfson, American Institute of Aeronautics and Astronautics (AIAA), United States

IAC-23.E6.2.8
AN ANALYSIS OF THE ITU APPLIED TO SPACE RESOURCES AND ASTEROID MINING
Michele Cristina Silva Melo, Brazil

IAC-23.E6.2.9
THE OPPORTUNITY OF SPACE SOLAR POWER - ECONOMICALLY, GEOPOLITICALLY, AND ENVIRONMENTALLY
Kevin Barry, LightBridge Strategic Consulting, United States

E6.3. Innovation: The Academics' Perspectives

October 3 2023, 15:00 — HAC Balcony 2

Co-Chair(s): Ken Davidian, , United States; Michele Cristina Silva Melo, , Brazil;

IAC-23.E6.3.1
ENTREPREUNERSHIP IN SPACE
Azər İsmayılzadə, Azerbaijan State University of Economics, Azerbaijan

IAC-23.E6.3.2
FUELING DOMESTIC SPACE WITH GLOBAL TALENT: EXPLORING A US SPACE VISA
Gidon Gautel, Moon Village Association (MVA), United Kingdom

IAC-23.E6.3.3
IS THERE A NEW TECHNOLOGICAL PARADIGM FOR THE SPACE SECTOR?
Michele Cristina Silva Melo, Brazil

IAC-23.E6.3.4
SPACE & MEDIA ENTERTAINMENT - INDUSTRY CONVERGENCE
Kais Barmawi, International Space University (ISU), France

IAC-23.E6.3.5
INVESTMENT MODELS IN THE SPACE MARKET – RISK ANALYSIS APPROACH FOR LONG-TERM PERSPECTIVE INVESTMENT OR SHORT-TERM INVESTMENT APPROACH?
Katarzyna Malinowska, Kozminski University, Poland

IAC-23.E6.3.6
ELICITING THE VALUE OF INNOVATION INTERMEDIARIES IN THE COPERNICUS PROGRAMME ECOLOGY: AN EMPIRICAL INVESTIGATION
Alessandro Paravano, Politecnico di Milano, Italy

IAC-23.E6.3.7
INNOVATION PRACTICES: CO-CREATION IN TECH SECTORS IN NORTH AMERICAN CITIES
Katlyn Turner, Massachusetts Institute of Technology (MIT), United States

IAC-23.E6.3.8
PLACEHOLDER FOR "SPACE IS BUSINESS" PAPER-WRITING COMPETITION WINNER
Ken Davidian, United States

E6.4. Strategic Risk Management for Successful Space & Defence Programmes

October 3 2023, 10:15 — HAC Balcony 2

Co-Chair(s): Maria-Gabriella Sarah, European Space Agency (ESA), France; Helen Tung, NewSpace2060, Australia; Ruediger Suess, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;
Rapporteur(s): Andrew Court, TNO, The Netherlands;

IAC-23.E6.4.1
INSURANCE MODEL IN SPACE INDUSTRY
Vali Bayramov, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.E6.4.2
TECHNOLOGY, SAFETY AND THE CUSTOMER FOREMOST: OVERCOMING INSURANCE AND REGULATION RISKS IN NEWSPACE VENTURES
Scott Schneider, Australia

IAC-23.E6.4.3
BEDROCK OF DOMESTIC SPACE "MARKET" TO THEN ACCESS GLOBAL MARKETS - STRUCTURING INDIAN SPACE
Mukund Kadursrinivas Rao, India

IAC-23.E6.4.5
HOW ARE SPACE ECONOMY TRENDS RESHAPING THE RISK LANDSCAPE OF THE SPACE INDUSTRY? A TAXONOMY AND FRAMEWORK
Paolo Trucco, Politecnico di Milano, Italy

IAC-23.E6.4.6
EDUCATIONAL AND INFORMATIVE INITIATIVES FOR THE DECISION MAKERS, NEW NEWCOMER VC FOUND AND BUSINESS ANGLES, AS THE KEY FACTOR TO AVOID THE "SPACE HYPE BUBBLE". THE CASE STUDY OF SPACE ENTREPRENEURSHIP INSTITUTE
Katarzyna Malinowska, Kozminski University, Poland

IAC-23.E6.4.7
MATRIX-BASED RISK MANAGEMENT FRAMEWORK FOR FINANCING OF SPACE ASSETS IN START-UPS AND DEVELOPING SPACE SECTORS
Alvaro Piris Cuiza, France

IAC-23.E6.4.8
EXAMINATION OF THE LANDSCAPE FOR SPACE STARTUPS FROM EMERGING SPACE ECONOMIES AND ITS IMPLICATIONS ON SUSTAINABLE USES OF OUTER SPACE
Rebeca Jiménez, Space Generation Advisory Council (SGAC), Costa Rica

IAC-23.E6.4.9
SPACE-GOV: MITIGATING COMPOUNDED RISKS IN TIMES OF GEOPOLITICAL FLUX – A CASE STUDY ON EXOMARS & VIRGIN ORBIT
S.W. Chiu, University of Exeter, United Kingdom

E6.5-GTS.1. Entrepreneurship Around the World

October 4 2023, 15:00 — BCC B5

Co-Chair(s): Samuel Peterson, Swedish Space Corporation, United States; George A. Danos, Cyprus Space Exploration Organisation (CSEO), Cyprus; Nancy C. Wolfson, American Institute of Aeronautics and Astronautics (AIAA), United States; Susana Fornies Rodriguez, , France;

IAC-23.E6.5-GTS.1.1
THE CURRENT STATE OF ENTREPRENEURSHIP AROUND THE WORLD.
Medina Qurbanova, Azerbaijan State University of Economics, Azerbaijan

IAC-23.E6.5-GTS.1.2
SPACE SECTOR ENTREPRENEURIAL CHALLENGES IN THE THE MENA REGION: OPPORTUNITIES AND CHALLENGES
Kaitlyn Holm, University of Pennsylvania, United States

IAC-23.E6.5-GTS.1.3
NAVIGATING THE NEW SPACE RACE: EMERGING TRENDS, CHALLENGES AND OPPORTUNITIES IN COMMERCIAL LUNAR MARKET
Rama Theertha Kasi, India

IAC-23.E6.5-GTS.1.4
CHALLENGES AND OPPORTUNITIES OF A COSTA RICAN MICROGRAVITY STARTUP DURING THE MANAGEMENT OF THE FIRST SUBORBITAL FLIGHT BY ORBITAL SPACE TECHNOLOGIES
Valeria Dittel Tortós, Orbital Space Technologies, Costa Rica

IAC-23.E6.5-GTS.1.5
THE LEADERSHIP COMPETENCIES OF NEW SPACE ORGANIZATIONS: A COMPARATIVE STUDY OF EMPLOYEE AND EMPLOYER FEEDBACK
Alina Vizireanu, Space Generation Advisory Council (SGAC), United Kingdom

IAC-23.E6.5-GTS.1.6
DEVELOPING A NEW GENERATION OF SPACE ENTREPRENEURS: ESA'S ACTION SUPPORTING THE GROWTH OF THE EUROPEAN COMMERCIAL SPACE ECOSYSTEM
Luca del Monte, ESA - European Space Agency, France

IAC-23.E6.5-GTS.1.7
COMMUNITY IN SPACE(TM) AT 7 YEARS - HOW ENTREPRENEURSHIP, SOVEREIGN INTERESTS AND INVESTMENT HAS HELPED OR HINDERED OUR ABILITY TO GET TO A COMMUNITY WITHIN THE SPACE DOMAIN
Jose Ocasio-Christian, United States

IAC-23.E6.5-GTS.1.8
NEW SPACE MARKET SITUATION ANALYSIS FROM GSAAS BUSINESS VIEWPOINT
Naomi Kurahara, Infostellar, Japan

E7. IISL COLLOQUIUM ON THE LAW OF OUTER SPACE

Coordinator(s): Lesley Jane Smith, Leuphana University of Lüneburg/Weber-Steinhaus & Smith, Germany; Catherine Doldirina, International Institute of Space Law (IISL), Italy; Tanja Masson-Zwaan, International Institute of Air and Space Law, Leiden University, The Netherlands;

E7.1. Young Scholars Session with Keynote Lecture

October 2 2023, 15:15 — HAC Hall B

Co-Chair(s): Ilgar Abdullayev, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan; Lesley Jane Smith, Leuphana University of Lüneburg/Weber-Steinhaus & Smith, Germany;

IAC-23.E7.1.1
KEYNOTE: TRAJECTORY TOWARDS A COMMON UNDERSTANDING - A MULTI-CONTINENTAL NEXT-GENERATIONAL PERSPECTIVE ON THE RULE OF LAW IN OUTER SPACE
Marcia Alvarenga dos Santos, National Institute for Space Research - INPE, Brazil

IAC-23.E7.1.2
SCREENING OF FOREIGN DIRECT INVESTMENTS IN THE SPACE SECTOR: THE ISSUE OF JUSTICIABILITY AND THE CASE OF THE ITALIAN GOLDEN POWER
Andrea Capurso, LUISS Guido Carli University, Italy

IAC-23.E7.1.3
THE FUNCTIONS AND PROBLEMS OF THE "CROSS-WAIVER" CLAUSE AND A NEW PROPOSAL FOR APPROPRIATE DEMARCATION OF LIABILITY.
Hinata Oshima, Nakamura Tsunoda & Matsumoto, Japan

IAC-23.E7.1.4
THE ASSESSMENT OF "HARMFUL INTERFERENCE" CONFLICTS IN OUTER SPACE ACTIVITIES ACCORDING TO INTERNATIONAL TORT LAW STANDARDS; AND SELECTING THE APPROPRIATE DISPUTE SETTLEMENT METHOD FOR SMALL SATELLITE OPERATORS.
Vugar Mammadov, Azercosmos, Space Agency of Republic of Azerbaijan, Azerbaijan

IAC-23.E7.1.6 (unconfirmed)
HOW TO EXPLORE OUTER SPACE INSTEAD OF CONQUERING IT?
Jan Tyczyński, University of Gdansk, Poland

IAC-23.E7.1.8
ARTIFICIAL INTELLIGENCE IN SPACE: AN ANALYSIS OF RESPONSIBLE AI PRINCIPLES FOR THE SPACE DOMAIN
Thomas Graham, Swinburne University of Technology, Australia

IAC-23.E7.1.9
LEGAL ISSUES OF EXPORT CONTROL IN COMMERCIAL AEROSPACE INTERNATIONALIZATION AND CHINA'S INSTITUTIONAL COUNTERMEASURES
Jie Long, Shenzhen University, China

IAC-23.E7.1.10
MOBILE APPLICATIONS USAGE IN SPACE ACTIVITIES: LEGAL FRAMEWORK
Bahar Ramazanova, Azerbaijan

IAC-23.E7.1.11
REALIZING AN INTERNATIONAL SECURED TRANSACTIONS REGIME FOR SPACE ASSETS NATION BY NATION: REASSESSMENT OF THE SPACE PROTOCOL TO THE CAPE TOWN CONVENTION FROM A CHINESE PERSPECTIVE
Haoyue Deng, China University of Political Science and Law, China

IAC-23.E7.1.12
ANALYZING THE OBLIGATION TO RECOVER AND RETURN SPACE OBJECTS UPON CONTROLLED RE-ENTRY UNDER INTERNATIONAL SPACE LAW
Tejas Bharadwaj, India

IAC-23.E7.1.13
INSTITUTIONAL FRAGMENTATION OF GLOBAL SPACE GOVERNANCE AND THE URGENT NEED FOR THE ESTABLISHMENT OF THE GLOBAL SPACE ORGANIZATION
Sima Moradinasab, Shahid Beheshti University, Iran

IAC-23.E7.1.14
THE NON-PEACEFUL USE OF COMMERCIAL SATELLITES: EXISTING ISSUES AND NEW CHALLENGES FROM A LEGAL AND POLICY PERSPECTIVE
David Eagleson, International Institute of Air and Space Law, Leiden University, United Kingdom

E7.2. UNCOPUOS and ITU Registration of Large Constellations

October 3 2023, 10:15 — HAC Hall B

Co-Chair(s): Tare Brisibe, OnAir, Switzerland; Frans G. Von der Dunk, University of Nebraska, College of Law, The Netherlands;
Rapporteur(s): Dimitra Stefoudi, Leiden University, The Netherlands;

IAC-23.E7.2.1
POTENTIAL OF MUTUAL REFERENCE BETWEEN ITU AND UNCOPUOS FOR CONSTELLATION REGISTRATION
Huiliang Liu, China Academy of Space Technology (CAST), China

IAC-23.E7.2.2
POST-DEPLOYMENT REGULATION FOR SATELLITE CONSTELLATIONS: WHAT NEW RULES WILL WRC-23 ADOPT?
Elina Morozova, Intersputnik International Organization of Space Communications, Russian Federation

IAC-23.E7.2.3
ITU'S EVOLVING REGULATORY REGIME FOR SATELLITE REGISTRATION: THE CASE OF LARGE LEO CONSTELLATIONS
Audrey Allison, The Aerospace Corporation, United States

IAC-23.E7.2.4
SOME CONSIDERATIONS ON HOW TO IMPROVE THE UN REGISTER OF OBJECTS LAUNCHED INTO OUTER SPACE IN THE VIEW OF LARGE CONSTELLATIONS
Irina Chernykh, Peoples' Friendship University of Russia (RUDN University), Russian Federation

IAC-23.E7.2.5
LINKING UNCOPUOS AND ITU REGISTRATIONS FOR LARGE SATELLITE CONSTELLATIONS: A CASE STUDY
Chang Dai, Global Law Office, China

IAC-23.E7.2.7
ITU RESOLUTION 261 (2022) ART. 9 AND THE "THIRD WAY"
Marco Franzoso, University of Leiden, The Netherlands

IAC-23.E7.2.8
MANAGEMENT OF ORBITAL MANOEUVRES FOR SATELLITE CONSTELLATIONS AND COMMERCIAL SPACE ACTIVITIES
Patrick Neumann, Australia

E7.3. Legal Issues Relating to Emerging Space Activities on Celestial Bodies

October 3 2023, 15:00 — HAC Hall B

Co-Chair(s): Alexander Soucek, Austrian Space Forum, Austria; Jenni Tapio, International Institute of Space Law (IISL), Finland;
Rapporteur(s): Anne-Sophie Martin, Sapienza University of Rome, Italy;

IAC-23.E7.3.2
DISCUSSING THE NEED FOR A RESPONSIBLE EXPLOITATION OF SPACE RESOURCES IN VIEW OF THE ESTABLISHMENT OF PERMANENT HUMAN SETTLEMENTS ON CELESTIAL BODIES: IMPLICATIONS FOR INTERNATIONAL LAW
George (Georgios) D. Kyriakopoulos, National and Kapodistrian University Of Athens, Greece

IAC-23.E7.3.3
STATES IN SPACE? EXTRATERRESTRIAL EXERCISE OF JURISDICTION AND ITS FUTURE SCENARIOS
Frans G. Von der Dunk, University of Nebraska, College of Law, The Netherlands

IAC-23.E7.3.5
IS THERE A PRINCIPLE OF SCIENTIFIC PRIMACY IN OUTER SPACE LAW?
Hugo Lopez, Centre National d'Etudes Spatiales (CNES), France

IAC-23.E7.3.6
LEGAL STATUS OF CREWED LUNAR STATION ACTIVITIES: FURTHER CONSIDERATIONS ON NON-APPROPRIATION AND JURISDICTION ISSUES ON THE MOON
Jiaying Yu, The University of Hong Kong, China

IAC-23.E7.3.7
SHOULD THE ITU HAVE A ROLE IN GOVERNING TELECOMMUNICATIONS RELATING TO ACTIVITIES ON CELESTIAL BODIES WHEN THE TRANSMISSIONS LACK A TERRESTRIAL NEXUS?
George Anthony Long, United States

IAC-23.E7.3.8
SPACE SETTLEMENTS, AI, AND "FAULT" IN THE LIABILITY FRAMEWORK FOR DEEP SPACE EXPLORATION.
Maria Manoli, University of Aberdeen, United Kingdom

IAC-23.E7.3.9
PERSONAL AND REAL PROPERTY RIGHTS ON CELESTIAL BODIES
Hamza Hameed, Space Generation Advisory Council (SGAC), Singapore, Republic of

IAC-23.E7.3.10
NORWEGIAN PETROLEUM GOVERNANCE: A POTENTIAL INSPIRATION FOR SPACE RESOURCE GOVERNANCE?
Mari Amanda Eldholm, Norwegian Space Agency (NOSA), Norway

IAC-23.E7.3.11
CURRENT STATUS OF JAPAN'S ACTIVE DEVELOPMENT OF SPACE LAWS AND SYSTEMS FOR LEGAL COMPLIANCE IN THE AGE OF CELESTIAL EXPLORATION
SHIMPEI ISHIDO, Japan

IAC-23.E7.3.12
CHINA'S PLAN FOR AN INTERNATIONAL LUNAR RESEARCH STATION: A PATH TOWARDS MULTILATERALISM OR THE BEGINNING OF THE END?
Fabio Tronchetti, Northumbria University, United Kingdom

E7.4. Key Governance Issues in the New Space Age

October 4 2023, 10:15 — HAC Hall B

Co-Chair(s): Gérardine Goh Escolar, Bynkershoek Law Institute, The Netherlands; Kuan-Wei Chen, Institute of Air and Space Law, McGill University, Canada;
Rapporteur(s): Antonino Salmeri, Space Generation Advisory Council (SGAC), Spain;

IAC-23.E7.4.1
NEW AGE SPACE ACTIVITIES: IMPLEMENTING EARTH OBSERVATION AND REDUCE INEQUALITY THROUGH ARTIFICIAL INTELLIGENCE
Maura Zara, AIKO S.r.l., Italy

IAC-23.E7.4.2
ENCODING AND SECURING SPACE ACTIVITIES: LEGAL CHALLENGES ARISING FROM 'QUANTUM TECHNOLOGY FOR SPACE'
Anne-Sophie Martin, Sapienza University of Rome, Italy

IAC-23.E7.4.3
A LEGAL OVERVIEW ON THE USE OF SPACE TECHNOLOGY FOR GOVERNANCE OF RISK ASSESSMENT AND RISK MANAGEMENT OF CLIMATE CHANGE AND ITS IMPACTS
Sagee Geetha Sethu, Amity University, Dubai, United Arab Emirates

IAC-23.E7.4.4
BENEFICIARIES OF THE NEW SPACE AGE: EFFECTIVE GOVERNANCE BY FOLLOWING THE REACH OF BENEFITS TO ALL HUMANKIND
Scott Schneider, Australia

IAC-23.E7.4.7
SPACE GOVERNANCE TO ACHIEVE SUSTAINABLE DEVELOPMENT IN THE NEW SPACE AGE
Beauler Wozhele, Zimbabwe

IAC-23.E7.4.8
A THEORY OF SPACE GOVERNANCE
PJ Blount, Cardiff University, United Kingdom

IAC-23.E7.4.9
THE NUANCES OF RESPONSIBILITY OF ARTIFICIAL INTELLIGENCE FOR IRRESPONSIBLE SPACE ACTIVITY
Larysa Soroka, NAS of Ukraine, Ukraine

IAC-23.E7.4.10
PER ANTITRUST AD ASTRA: MONOPOLIES AND INTERNATIONAL SPACE LAW
Maximilian Gartner, University of Vienna, Austria

E7.5. Supervision of Space Activities

October 4 2023, 15:00 — HAC Hall B

Co-Chair(s): Ulrike M. Bohlmann, European Space Agency (ESA), France; Bernhard Schmidt-Tedd, Leuphana University, Germany;
Rapporteur(s): Laetitia Zarkan Cesari, University of Luxembourg, Luxembourg ;

IAC-23.E7.5.1
UAE NATIONAL SPACE LAW: AMBIT OF 'AUTHORIZATION & SUPERVISION' FOR A STABLE AND PROTECTED PRIVATE SPACE ACTIVITIES
Sethu Nandakumar Menon, University of Vienna, United Arab Emirates

IAC-23.E7.5.3
ECONOMIC AND TECHNOLOGICAL DISPARITY AMONG STATES AND THE OBLIGATION TO SUPERVISE NATIONAL SPACE ACTIVITIES
George Anthony Long, United States

IAC-23.E7.5.4
EFFECTIVE AND REASONABLE LEGAL MEASURES TO APPROPRIATELY SUPERVISE PRIVATE NATIONAL SPACE ACTIVITIES
Setsuko Aoki, Keio University, Japan

IAC-23.E7.5.5
SUPERVISION OF SPACE ACTIVITY IN INDIA
Pranav Prakash Singh, Indian Space Researh Organisation, India

IAC-23.E7.5.6
USAGE OF "SOFT LAW" INSTRUMENTS AT NATIONAL LEVEL: OBJECTIVE NECESSITY OR VOLUNTARY OBLIGATION
Darya Bohdan, Belarusian State University, Belarus

IAC-23.E7.5.7
ICAO PRINCIPLES FOR A SAFE, SECURE, AND SUSTAINABLE SPACE ENVIRONMENT
Quinn McKemey, Space Generation Advisory Council (SGAC), United States

IAC-23.E7.5.8
ENHANCING THE PRACTICE OF NON-FUNCTIONAL SPACE OBJECT REGISTRATION BY UTILIZING SSA DATA: LESSONS LEARNED FROM THE JAPANESE PRACTICE
Kazushi Kobata, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-23.E7.5.10
BEST PRACTICES AND LESSONS LEARNED FROM EUROPEAN SPACE-FARING NATIONS IN THE DEVELOPMENT OF A REGULATORY FRAMEWORK FOR ACTIVITIES IN OUTER SPACE IN SPAIN
Alvaro Piris Cuiza, France

IAC-23.E7.5.11
SUPERVISION OF SPACE ACTIVITIES—THE ROLE, PERSPECTIVE AND EXPERIENCE OF COMMERCIAL SPACE SECTOR
Kang Duan, China Great Wall Industry Corporation (CGWIC), China

IAC-23.E7.5.12
STATES AS GUARDIAN ANGELS; NATIONAL REGULATORY FRAMEWORKS IN PROMOTING SAFETY AND SUSTAINABILITY IN OUTER SPACE
Panagiota Brouma, National and Kapodistrian University Of Athens, Greece

E7.7. Recent Developments in Space Law with Particular Focus on Space Debris Remediation

October 6 2023, 13:45 — HAC Hall B

Co-Chair(s): Peter Stubbe, DLR (German Aerospace Center), Germany; Maria-del-Carmen Muñoz-Rodriguez, University of Jaen, Spain;
Rapporteur(s): Gina Petrovici, German Aerospace Center (DLR), Germany;

IAC-23.E7.7.1
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George Anthony Long, United States

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Alexander Solntsev, Peoples' Friendship University of Russia (RUDN University), Russian Federation

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Valentin Uvarov, International Institute of Space Law (IISL), Russian Federation

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Clémence Lambrecht, Centre National d'Etudes Spatiales (CNES), France

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Charles Mudd, Mudd Law, United States

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Jie Long, Shenzhen University, China

E8. IAA MULTILINGUAL ASTRONAUTICAL TERMINOLOGY SYMPOSIUM

Coordinator(s): Susan McKenna-Lawlor, Space Technology (Ireland) Ltd., Ireland; Tetsuo Yoshimitsu, Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan;

E8.1. Multilingual Astronautical Terminology

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Co-Chair(s): Susan McKenna-Lawlor, Space Technology (Ireland) Ltd., Ireland; Tetsuo Yoshimitsu, Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan;
Rapporteur(s): Fabrice Dennemont, International Academy of Astronautics (IAA), France;

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Anumadhubala Rajakumari, Skyline Space, India

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Milica Milosev, Econnects, Serbia

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SPACEGPT: A SUPERVISED LLAM DEVELOPMENT PROJECT FOR STANDARDIZED TERMINOLOGIES COLLECTION, TRANSLATION AND EXPLANATION FOR SPACE IN VARIOUS LANGUAGES AND DIALECTS
Aagashram Neelakandan, TU Bergakademie Freiberg (TUBAF), Germany

E9. IAF SYMPOSIUM ON SECURITY, STABILITY AND SUSTAINABILITY OF SPACE ACTIVITIES

Coordinator(s): Serge Plattard, University College London (UCL), United Kingdom; Stefano Zatti, University of Rome "La Sapienza", Italy;

E9.1-A6.8. Policy, Legal, Institutional, Economic and Security Aspects of Debris Mitigation, Debris Remediation and STM

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Co-Chair(s): David Spencer, The Aerospace Corporation, United States; Andrea Capurso, LUISS Guido Carli University, Italy;
Rapporteur(s): Maruska Strah, Space Sustainability Rating, Switzerland;

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Maruska Strah, Space Sustainability Rating, Switzerland

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Mahhad Nayyer, Purdue University, Pakistan

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Abhinav Srivastava, Bellatrix Aerospace Private Limited, India

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J Patrick Mathewson, Astroscale Ltd, United Kingdom

IAC-23.E9.1-A6.8.12
COMPENSATION VERSUS PREVENTION. QUO VADIS SPACE LIABILITY REGIME? MATRIX OF SPACE, ENVIRONMENT AND INSURANCE LAWS.
Bartosz Malinowski, Polish Academy of Sciences - Space Research Centre, Poland

E9.2. Cyber-based security threats to space missions: establishing the legal, institutional and collaborative framework to counteract them

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Co-Chair(s): Julien Airaud, Centre National d'Etudes Spatiales (CNES), France; Stefano Zatti, University of Rome "La Sapienza", Italy;

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Clémence Poirier, European Space Policy Institute (ESPI), Austria

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Laura Morelli, International Space University (ISU), Italy

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VERA PALIALEXI, National and Kapodistrian University Of Athens, Greece

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Nicolò Boschetti, Cornell University, United States

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Aurélie Trur, Graduate Institute for Policy Studies GRIPS Tokyo, Japan

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HEY YOU! GET OFF OF MY SATELLITE!
Paul Coggin, United States

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Charles Mudd, Mudd Law, United States

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Co-Chair(s): Peter Martinez, Secure World Foundation, United States; Annamaria Nassisi, Thales Alenia Space Italia, Italy;
Rapporteur(s): Rachel Venn, Space Generation Advisory Council (SGAC), United Kingdom;

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Clémence Poirier, European Space Policy Institute (ESPI), Austria

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Liberty Shockley, United States

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Andrea Harrington, Institute of Air and Space Law, McGill University, Canada

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Bernd M. Weiss, Luleå University of Technology, Sweden

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Nicolas Peter, International Space University (ISU), France

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Omar Pimentel Marte, Stanford University, United States

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Vladislav Kozarev, Lomonosov Moscow State University, Russian Federation

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Coordinator(s): Alex Karl, Space Applications Services, Belgium; Alissa J. Haddaji, Harvard University, United States;

E10.1. Planetary Defense from Asteroids and Comets

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Co-Chair(s): Daniel Mazanek, NASA, United States; Changyin Zhao, Purple Mountain Observatory (PMO), China;
Rapporteur(s): Alejandro J. Roman Molinas, Paraguayan Space Agency, Paraguay; Alex Karl, Space Applications Services, Belgium;

IAC-23.E10.1.1
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Jason Kalirai, Johns Hopkins University Applied Physics Laboratory, United States

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James Harpur, Cosine Remote Sensing B.V., The Netherlands

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Cristopher Alexander Ochoa Villanueva, Peru

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Yirui Wang, University of Strathclyde, United Kingdom

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Zizheng Gong, Beijing Institute of Spacecraft Environment Engineering, China Academy of Space Technology (CAST), China

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Alex Karl, Space Applications Services, Belgium

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Co-Chair(s): Daniel Mazanek, NASA, United States; Alissa J. Haddaji, Harvard University, United States;
Rapporteur(s): Philipp Maier, Institute of Space Systems, University of Stuttgart, Germany;

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Mohmmad Talafha, Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates

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Marilena Amoroso, Italian Space Agency (ASI), Italy

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Nicolo' Stronati, Cranfield University, United Kingdom

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Zizheng Gong, Beijing Institute of Spacecraft Environment Engineering, China Academy of Space Technology (CAST), China

GTS. GLOBAL TECHNICAL SYMPOSIUM

Coordinator(s): Stephanie Wan, Space Generation Advisory Council (SGAC), United States; Seyed Ali Nasseri, Space Generation Advisory Council (SGAC), Canada;

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Stirling Forbes, International Space University (ISU), France

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Alifanov, Oleg	CA	IAC-23.C2.4.11
Alifanov, Oleg	CA	IAC-23.C2.8.9
Alikhah Mishamandani, Amir Hossein	S	IAC-23.E2.4.2
Alimova, Mirvari	CA	IAC-23.D2.4.5
Alirzayev, Uzeyir	A	IAC-23.D5.4.6
Alisheva, Kamala	CA	IAC-23.A7.2.8
Alishov, Sabahaddin	CA	IAC-23.A7.3.3
Aliyev, Ilkin	S	IAC-23.C2.6.9
Aliyeva, Fidan	CA	IAC-23.D3.1.8
Aliyeva, Khadija	S	IAC-23.E3.3.6
Aliyeva, Nigar	S	IAC-23.E6.1.2
Aliyeva, Vusala	CA	IAC-23.A7.2.8
Alizada, Mir Elmir	S	IAC-23.E5.5.4
Alizade, Rasim	A	IAC-23.A3.2A.7
Alizade, Rasim	A	IAC-23.A3.3B.9
ALjbour, Diana	S	IAC-23.B4.1.11
AlKaabi, Tarifa	A	IAC-23.B4.9-GTS.5.3
AlKaabi, Tarifa	CA	IAC-23.A7.2.7
Alketbi, Fatima	CA	IAC-23.B4.9-GTS.5.3
Alketbi, Fatima	CA	IAC-23.A7.2.7
Alkhalifa, Munya	CA	IAC-23.D4.1.10
Alkhateri, Fatima	S	IAC-23.A7.2.9
Alkhawashke, Suhailah	S	IAC-23.E2.3-GTS.4.8
Allahverdiyev, Ramin	CA	IAC-23.D5.3.5

Name		Paper
Allahyarov, Elshad	CA	IAC-23.A2.7.5
Allazova, Aysu	S	IAC-23.D4.2.1
Alleyne, Camille	S	IAC-23.B3.2.1
Allison, Audrey	S	IAC-23.E7.2.3
Allworth, James	CA	IAC-23.D1.4B.11
AlMarzooqi, Hamad	CA	IAC-23.A3.2C.8
Almarzooqi, Hessa	S	IAC-23.C4.3.7
Almeida, Renan	S	IAC-23.C4.5.1
Almenar, Roser	CA	IAC-23.E7.1.14
Almigdady, Rahaf	CA	IAC-23.B4.1.11
Alnaqbi, Fatima	S	IAC-23.B4.8.11
Alonso, Mercedes	CA	IAC-23.A3.3B.10
Alonso Portillo, Igor	S	IAC-23.B6.3.2
Alotaibi, Ghanim	A	IAC-23.D4.2.5
Alowais, Aisha	S	IAC-23.D4.1.10
Alowais, Aisha	CA	IAC-23.E4.3.5
Alowais, Aisha	CA	IAC-23.A6.1.6
Alqasimi, Maryam	CA	IAC-23.D3.1.9
Alqasimi, Maryam	S	IAC-23.E5.3.8
Alqasimi, Maryam	CA	IAC-23.A7.2.1
Alqasimi, Maryam	S	IAC-23.A7.2.3
Alqasimi, Maryam	CA	IAC-23.A7.2.7
Alqassab, Yaqoob	CA	IAC-23.A3.2B.2
Alqassab, Yaqoob	CA	IAC-23.D5.2.7
Alqassab, Yaqoob	S	IAC-23.C2.7.10
Alqattan, Yusuf	CA	IAC-23.A3.2B.2
Alqattan, Yusuf	CA	IAC-23.C2.7.10
Alrefaie, Mohammad	CA	IAC-23.B4.1.11
Alshamlan, Nayef	S	IAC-23.C2.6.2
Alsubaihi, Abdullah	CA	IAC-23.C2.6.2
Altınışık, Süleyman	S	IAC-23.A6.9.8
Alvarenga dos Santos, Marcia	S	IAC-23.E7.1.1
Alvares, Lillian	CA	IAC-23.D5.2.5
Alves, Lincoln	A	IAC-23.B1.6.2
Alzarouni, Alreem	CA	IAC-23.A6.1.6
Alão, Sara	CA	IAC-23.D3.2B.9
Amabili, Paride	CA	IAC-23.B4.2.2
Amadio, Diego	CA	IAC-23.B4.3.2
Amadio, Diego	CA	IAC-23.B4.6B.10
Amanov, Fakhri	S	IAC-23.D2.8.6
Amar Salokhe, Siddhi	CA	IAC-23.A3.5.6
Amar Salokhe, Siddhi	CA	IAC-23.C3.4.10
Ambrosin, Alessandro	CA	IAC-23.E1.9.7
Ambrosino, Simone	CA	IAC-23.B3.2.3
Ambrosino, Simone	CA	IAC-23.A5.2.7
Ambrosio, Ana Maria	CA	IAC-23.B6.1.12
Amin, Deddy El	CA	IAC-23.B4.1.7
Aminou, Donny M.A.	S	IAC-23.B1.2.1
Aminou, Donny M.A.	CA	IAC-23.B1.3.6
Amirfazli, Alidad	S	IAC-23.A2.3.8
Ammannito, Eleonora	CA	IAC-23.A3.3A.1
Ammirante, Giorgio	CA	IAC-23.B4.6B.9
Ammirante, Giorgio	CA	IAC-23.D1.4B.10
Amodio, Angelo	S	IAC-23.B1.1.6
Amoroso, Marilena	S	IAC-23.A3.3A.1
Amoroso, Marilena	CA	IAC-23.A3.4A.6
Amoroso, Marilena	S	IAC-23.E10.2.2
Amoruso, Leonardo	CA	IAC-23.B4.9-GTS.5.8
Anagnostopoulou, Dimitra	CA	IAC-23.E7.5.12
Anand, Deep	S	IAC-23.A7.3.8
Ancona, Elena	CA	IAC-23.A6.8-E9.1.5
Anderson, Molly	S	IAC-23.D3.2A.1
Anderson, Rhys	CA	IAC-23.C3.2.10
Andert, Tom	CA	IAC-23.B6.2.2
Andreeva, Elena	CA	IAC-23.A1.8.8
Andrews, Daniel	S	IAC-23.A3.2A.3
Andrews, Shaun	CA	IAC-23.C4.5.10
Andrews, Shaun	CA	IAC-23.C4.6.5
Andrews, Shaun	A	IAC-23.C4.9.3
Andreyeva, Kristina	S	IAC-23.C2.7.6
Andriani, Roberto	CA	IAC-23.C4.8-B4.5A.12
Andrianova, Irina	CA	IAC-23.A1.8.8
Andrioli, Lorenzo	CA	IAC-23.B3.8.2
Andriulli, Raoul	A	IAC-23.C4.5.10
Andriulli, Raoul	CA	IAC-23.C4.6.5

Name		Paper
Balaji, Ashwin	CA	IAC-23.B4.6B.4
Balakrishnan, Hamsa	CA	IAC-23.A6.1.3
Balali, Paniz	S	IAC-23.A1.2.2
Balali, Paniz	CA	IAC-23.A1.2.5
Balcer, Marta	CA	IAC-23.D6.1.7
Baldissera, Mauro	CA	IAC-23.A6.3.4
Balossino, Alessandro	CA	IAC-23.B4.2.2
Balossino, Alessandro	CA	IAC-23.A3.2B.5
Balossino, Alessandro	CA	IAC-23.B2.1.7
Balossino, Alessandro	S	IAC-23.B4.3.7
Balossino, Alessandro	S	IAC-23.B4.8.10
Balsamo, Michele	CA	IAC-23.A1.3.7
Balsamo, Michele	CA	IAC-23.A1.8.6
Bammens, Sam	CA	IAC-23.B6.3.5
Banatao, Julie Ann	S	IAC-23.B4.1.5
Banatao, Julie Ann	S	IAC-23.E1.5.8
Banchereau, Clara	CA	IAC-23.D3.3.6
Bando, Kosuke	CA	IAC-23.E5.3.3
Bando, Mai	CA	IAC-23.C1.9.2
Bando, Mai	CA	IAC-23.C1.2.3
Bando, Mai	CA	IAC-23.C1.3.4
Bando, Mai	CA	IAC-23.C1.3.10
Bando, Mai	CA	IAC-23.C1.6.6
Bando, Mai	CA	IAC-23.C1.6.10
Bando, Mai	CA	IAC-23.C1.7.2
Bando, Nobutaka	CA	IAC-23.B4.8.2
Bani, Daniele	CA	IAC-23.A1.3.7
Bannach-Brown, Alexandra	CA	IAC-23.E1.7.4
Bannova, Olga	S	IAC-23.E5.1.6
Bannova, Olga	S	IAC-23.A3.5.4
Bannova, Olga	CA	IAC-23.E5.6.3
Bano, Hoor	CA	IAC-23.B4.7.10
Baptista, Victor	CA	IAC-23.E1.1.3
Baranwal, Prerna	A	IAC-23.A6.6.9
Barapatre, Prathmesh	CA	IAC-23.D4.4.2
Barapatre, Prathmesh	S	IAC-23.C3.4.5
Barasch, Albert	CA	IAC-23.A6.7.8
Barato, Francesco	S	IAC-23.C4.4.5
Barato, Francesco	S	IAC-23.B4.5.3
Baratto de Albuquerque, Thiago	CA	IAC-23.B4.2.4
Barazia, Andrew	CA	IAC-23.A1.8.9
Barbato, Vincenzo	CA	IAC-23.C4.1.6
Barberi Spirito, Daniele	S	IAC-23.C1.9.5
Barbier, Pascal	CA	IAC-23.A3.2A.10
Barclay, Chris	CA	IAC-23.A3.3B.8
Bardazzi, Riccardo	CA	IAC-23.B1.3.6
BARI, ANDREA	CA	IAC-23.B3.3.6
Barilaro, Leonardo	S	IAC-23.A6.3.4
Barison, Marco	CA	IAC-23.B4.9-GTS.5.8
Barker, Nicolas	CA	IAC-23.A3.2C.3
Barmawi, Kais	S	IAC-23.E6.3.4
Barmawi, Kais	S	IAC-23.E3.3.9
Barmawi, Kais	CA	IAC-23.E1.8.1
Barnett, Nicholas	S	IAC-23.A5.1.7
Barnhart, David	S	IAC-23.A6.6.10
Barnhart, David	CA	IAC-23.C2.7.6
Barocsi, Attila	CA	IAC-23.B2.8-GTS.3.5
Barrientos-Díez, Jorge	CA	IAC-23.A3.2B.3
Barrios, Camila	CA	IAC-23.C2.2.7
Barrios, Camila	CA	IAC-23.C2.9.7
Barrios, Elizabeth	CA	IAC-23.B1.6.2
Barry, Kevin	S	IAC-23.C3.1.11
Barry, Kevin	S	IAC-23.E6.2.9
Barteczka-Wilk, Beata	CA	IAC-23.D2.7.8
Bartholomäus, Julian	CA	IAC-23.B4.3.4
Barthó, Bence	CA	IAC-23.E2.3-GTS.4.11
Bartle, Hannes	CA	IAC-23.B2.4.4
Bartnik, Nikodem	S	IAC-23.E2.1.6
Bartnik, Nikodem	CA	IAC-23.B4.4.6
Bartocci, Simona	CA	IAC-23.A7.3.6
Bartolini, Matteo	CA	IAC-23.D2.2.5
Bartoloni, Alessandro	S	IAC-23.A1.5.8
Bartolucci, Luca	CA	IAC-23.B4.6B.9
Barua, Joyjit	S	IAC-23.C2.4.7
Basana, Federico	CA	IAC-23.E2.3-GTS.4.1

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Basana, Federico	S	IAC-23.E2.4.3
Baserga, Alessandro	CA	IAC-23.C3.4.1
Basler, Alessia	CA	IAC-23.C4.8-B4.5A.3
Batchelor, Emmanuel	CA	IAC-23.C4.8-B4.5A.4
Batt, Jason	S	IAC-23.D4.4.8
Batt, Jason	S	IAC-23.D4.4.9
Battaglia, Daniele	CA	IAC-23.B4.2.5
Battaglia, Giacomo	CA	IAC-23.E2.4.3
Battaglini, Matteo	CA	IAC-23.A1.8.6
Battipede, Manuela	CA	IAC-23.A6.9.7
Bauer, Frank H.	CA	IAC-23.B2.7.2
Bauernfeind, Maximillian	CA	IAC-23.E5.4.5
Baxter, Stephen	CA	IAC-23.A4.2.2
Baylan, Sevil	CA	IAC-23.D1.1.4
Baynes, Katie	CA	IAC-23.B1.1.3
Bayramov, Vali	S	IAC-23.E6.4.1
Baysal, Mustafa	CA	IAC-23.C4.4.8
Bayt, Robert	CA	IAC-23.B3.7.1
Bazzocchi, Michael	CA	IAC-23.C3.2.9
Beblo-Vranesevic, Kristina	CA	IAC-23.A1.8.5
Becerra Acosta Rodríguez, Hero Sebastian	CA	IAC-23.B1.7.8
Bechini, Michele	CA	IAC-23.A6.5.10
Beck, Fabian	CA	IAC-23.A5.3-B3.6.1
Beck, Matthew	CA	IAC-23.A1.8.9
Beck, Matthew	CA	IAC-23.A2.7.1
Becker, Anna	CA	IAC-23.A2.5.1
Beckman, Arthur	CA	IAC-23.D2.1.2
Bedoya, Juan	CA	IAC-23.E2.3-GTS.4.8
Beeley, James	CA	IAC-23.B4.7.3
Beggio, Lorenzo	S	IAC-23.D2.2.10
Behar-Lafenetre, Stéphanie	CA	IAC-23.D1.6.7
Behrouzitabar, Morteza	CA	IAC-23.C3.4.1
Bekreneva, Maria	CA	IAC-23.A1.3.9
Bekreneva, Maria	S	IAC-23.E5.2.2
Bekreneva, Maria	CA	IAC-23.A1.4.1
Bekreneva, Maria	S	IAC-23.B3.8.5
Belakovskiy, Mark	CA	IAC-23.A1.4.1
Belakovsky, Mark	CA	IAC-23.E4.1.8
Belakovsky, Mark	CA	IAC-23.E5.6.2
Belali, Margarita	S	IAC-23.E5.1.1
Belali, Margarita	S	IAC-23.D5.3.1
Belfi, Jacopo	A	IAC-23.B2.7.9
Belkhiria, Aziz	CA	IAC-23.B4.9-GTS.5.4
Belki, Sindhu	S	IAC-23.B4.5.5
Bell, James	CA	IAC-23.D3.1.7
Bella, Daniele	CA	IAC-23.A6.4.2
Bellarosa, Renato	CA	IAC-23.B2.6.5
Belli, Adrian	CA	IAC-23.B3.4-B6.4.7
Belloni, Enrico	CA	IAC-23.B4.4.9
Belloni, Enrico	CA	IAC-23.A3.4A.6
Belloni, Enrico	S	IAC-23.C1.4.1
Belloni, Enrico	S	IAC-23.B4.8.8
Belokonov, Igor V.	S	IAC-23.B4.2.6
Belyaev, Mikhail Yu.	A	IAC-23.B3.5.8
Benani, Wijdane	A	IAC-23.E3.4.6
Benas, Alexandre-Dimosthénis	S	IAC-23.E6.1.5
Benas, Alexandre-Dimosthénis	CA	IAC-23.GTS.2-B3.9.6
Bencheikh, Ismael	CA	IAC-23.C2.4.7
Bencini, Carlo	CA	IAC-23.B1.3.3
Benikhlef, Abdelhak	CA	IAC-23.B4.1.2
Benmansour, jalal eddine	S	IAC-23.B2.8-GTS.3.10
Bennett, Eli	CA	IAC-23.E3.3.7
Bennett, Shane	S	IAC-23.D5.4.9
Bensikaddour, Elhabib	CA	IAC-23.C3.3.9
Bentoutou, Houari	S	IAC-23.C3.3.4
Benvenuti, Matteo	CA	IAC-23.C3.4.1
Benvenuto, Riccardo	CA	IAC-23.B1.6.12
Beolchi, Alessandro	A	IAC-23.C1.7.1
Beraun, Piero	CA	IAC-23.A1.7.2
Bergmann, Benedikt	CA	IAC-23.E3.2.5
Bergmann, Kevin	CA	IAC-23.D2.3.4
Bergmann, Kevin	CA	IAC-23.D2.5.5
Bergmann, Nathalie	CA	IAC-23.D2.6.8
Bergmann, Philip	A	IAC-23.E2.3-GTS.4.11
Bergonzi, Cristina	CA	IAC-23.C3.4.1

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Bowman, Emily	CA	IAC-23.A3.3A.3
Boyarintsev, Valery	CA	IAC-23.A1.2.1
Boyer, Laure	CA	IAC-23.A1.4.6
Bozkurt, Betül	CA	IAC-23.D1.1.4
Bozzoli, Ludovica	CA	IAC-23.B4.2.2
Bozzoli, Ludovica	CA	IAC-23.A3.2B.5
Bozzoli, Ludovica	S	IAC-23.B2.1.7
Bozzoli, Ludovica	CA	IAC-23.B4.8.10
Bracaglia, Francesca	CA	IAC-23.C2.2.1
Bradbury, Laura	A	IAC-23.B6.3.2
Braga, João Pedro Polito	S	IAC-23.B6.1.10
Brahim, Gueddache	S	IAC-23.C2.3.3
Bramha Naren Athreyas, Kashyapa	CA	IAC-23.D1.4A.3
Brandić Lipińska, Monika	CA	IAC-23.D1.1.3
Brandon, Cedric	CA	IAC-23.D1.2.1
Brandonisio, Andrea	CA	IAC-23.C1.2.4
Brandt, Pontus	CA	IAC-23.D4.4.3
Branz, Francesco	CA	IAC-23.E2.3-GTS.4.1
Branz, Francesco	CA	IAC-23.A6.5.9
Brault, Guillaume	CA	IAC-23.B1.6.2
Braun, Max	CA	IAC-23.A3.3B.8
Braun, Vitali	S	IAC-23.A6.4.2
Braun, Vitali	CA	IAC-23.A6.4.5
Braun, Vitali	CA	IAC-23.A6.4.9
Braun, Vitali	CA	IAC-23.C2.6.11
Brayzier, Benjamin	CA	IAC-23.A3.3B.8
Brecher, Johanna Noria	A	IAC-23.A2.2.9
Brecher, Johanna Noria	CA	IAC-23.A2.3.4
Breda, Alessandro	CA	IAC-23.B3.2.3
Breda, Alessandro	CA	IAC-23.D2.4.7
Breda, Paola	CA	IAC-23.E6.4.2
Breda, Paola	CA	IAC-23.D5.4.5
Bresler, Karol	S	IAC-23.D2.6.10
Bresser, Andreas	CA	IAC-23.D1.2.11
Brichta, Michal	CA	IAC-23.E6.1.10
Briges, Alexandre	S	IAC-23.C4.5.6
Brighenti, Chiara	CA	IAC-23.B4.9-GTS.5.8
Brighenti, Francesco	CA	IAC-23.B4.9-GTS.5.8
Brilli, Simone	CA	IAC-23.B1.3.6
Brinkmann, Wiebke	S	IAC-23.D1.6.8
Brioche, Thomas	CA	IAC-23.A1.2.10
Briskman, Robert D.	S	IAC-23.B2.2.4
Brito, Claude-Martin	S	IAC-23.C4.5.7
Britting, Thomas	S	IAC-23.D2.3.6
Britting, Thomas	CA	IAC-23.D2.3.7
Britting, Thomas	S	IAC-23.D2.6.7
Brix, Bianca	CA	IAC-23.A1.3.2
Broggi, Giulia	S	IAC-23.D2.3.12
Bronnikov, Sergey	S	IAC-23.B3.4-B6.4.5
Bronstein, Clémence	CA	IAC-23.A1.2.10
Brouma, Panagiota	S	IAC-23.E7.5.12
Brown, Patrick	CA	IAC-23.B4.2.1
Browne, Hannah	CA	IAC-23.D6.1.1
Broz, Petr	CA	IAC-23.A3.2A.9
Brucato, John Robert	CA	IAC-23.B4.2.4
Brucato, John Robert	CA	IAC-23.A3.4A.6
Brucato, John Robert	CA	IAC-23.E10.2.2
Bruce, David	CA	IAC-23.E1.4.2
Brudna, Timon	CA	IAC-23.D3.3.8
Brun-Buisson, Céline	CA	IAC-23.D2.9-D6.2.3
Brunello, Alice	S	IAC-23.C4.9.11
Brunetti, Bruno	CA	IAC-23.A1.7.13
Brunetti, Gianmarco	S	IAC-23.C2.5.4
Brunetti, Giuseppe	CA	IAC-23.A6.7.2
Brunswick, Shelli	S	IAC-23.E6.1.1
Bruzzone, Lorenzo	CA	IAC-23.A3.2A.9
Brydon, George	CA	IAC-23.D1.4B.11
Bråten, Lars-Erling	CA	IAC-23.B4.4.12
Bucchioni, Giordana	CA	IAC-23.C1.5.8
Bucci, Silvia	CA	IAC-23.B4.3.7
Bucciarelli, Mascia	CA	IAC-23.A6.9.4
Bucciarelli, Mascia	CA	IAC-23.A5.1.10
Bucciarelli, Mascia	CA	IAC-23.E1.9.7
Buchfink, Manuel	CA	IAC-23.D1.3.5
Buchfink, Manuel	CA	IAC-23.E2.3-GTS.4.5

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Buckley, Tessa	S	IAC-23.B5.2.1
Buckley, Tessa	S	IAC-23.B1.5.12
Budholiya, Sejal	A	IAC-23.E1.1.4
Budholiya, Sejal	CA	IAC-23.E5.1.8
Budnik, Sergey	CA	IAC-23.C2.7.1
Bueno dos Santos, Marcio	CA	IAC-23.C2.7.9
Buffenoir, François	CA	IAC-23.E9.3.1
Buffington, Brent	CA	IAC-23.C1.6.7
Bukala, Aleksandra	CA	IAC-23.D6.1.7
Bulchandani, Krishna	CA	IAC-23.C2.5.7
Buldrini, Nembo	A	IAC-23.C4.5.4
Bunyatzada, Ali	S	IAC-23.C3.3.2
Buongiorno, Maria Fabrizia	CA	IAC-23.B4.4.9
Burat, İlksen	A	IAC-23.C4.6.6
Buravkova, Ludmila	S	IAC-23.A1.8.8
Burger, Eduardo Escobar	CA	IAC-23.D1.4B.7
Burgio, Nunzio	CA	IAC-23.B4.2.4
Burgis, Simon	S	IAC-23.A6.7.3
Burgis, Simon	CA	IAC-23.B6.5.9
Burgoyne, Hailey	CA	IAC-23.C2.5.2
Burke, Marissa	CA	IAC-23.A1.5.7
Burns, Joshua	CA	IAC-23.E3.2.8
Burns, Joshua	S	IAC-23.E4.1.11
Burroni, Tomás Ignacio	CA	IAC-23.D1.2.12
Bursachi, Noé	CA	IAC-23.D1.3.7
Buryak, Dimitri	CA	IAC-23.C2.7.5
Buscicchio, Alessandro	CA	IAC-23.C2.8.4
Busmann, Dirk	CA	IAC-23.C4.2.1
Busnello Imbuzeiro, Erik	S	IAC-23.D5.2.2
Bussler, Leonid	CA	IAC-23.D2.4.2
Bussler, Leonid	CA	IAC-23.D2.5.5
Bussolino, Massimiliano	CA	IAC-23.E2.3-GTS.4.8
Bussolino, Massimiliano	CA	IAC-23.E2.4.8
Bussolino, Massimiliano	S	IAC-23.A6.6.3
Busuladzic-Begic, Mia	CA	IAC-23.C2.5.2
Busà, Franco	CA	IAC-23.C2.1.2
Buta, Cristian-Mihai	CA	IAC-23.B4.4.6
Butilkin, Yurii	CA	IAC-23.A1.7.5
Buxton, Lisa	CA	IAC-23.C4.3.9
Buzelim dos Santos, Ana Carolina	S	IAC-23.C4.4.1
Buzzo, Gianpiero	S	IAC-23.D6.1.2
Byahatti, Darpan	S	IAC-23.A3.2A.4
Byahatti, Darpan	S	IAC-23.E1.3.3
Byahatti, Darpan	CA	IAC-23.C4.7.6
Byahatti, Darpan	CA	IAC-23.E3.6.7
Byahatti, Darpan	S	IAC-23.B3.9-GTS.2.2
Böck, Clemens	CA	IAC-23.B3.3.1
Bölke, Daniel	CA	IAC-23.D1.3.5
Bölke, Daniel	CA	IAC-23.E2.3-GTS.4.5
Böttcher, Lorenz	S	IAC-23.A6.2.1
Böttger, Ute	CA	IAC-23.A3.4A.5
Børvik, Tore	CA	IAC-23.A6.3.6

C

Caballa Huaman, Lielka Noelia	CA	IAC-23.A1.7.2
Cabello, Andrea	CA	IAC-23.E6.3.3
Cabello, Andrea	CA	IAC-23.E6.2.8
Cabodi, Giorgio	CA	IAC-23.C2.1.2
Cachinjumba, Atanilson Tucker	CA	IAC-23.B1.5.9
Cader, Sarah	CA	IAC-23.E6.5-GTS.1.5
Cagna, Diego	S	IAC-23.A5.4.3
Caiani, Enrico	CA	IAC-23.A1.2.5
Caiani, Enrico	CA	IAC-23.A1.2.8
Cal, Baris	S	IAC-23.C4.6.6
Calabretta, Vincenzo	CA	IAC-23.B4.6B.9
Calabretta, Vincenzo	CA	IAC-23.D1.4B.10
Calamia, Simone	CA	IAC-23.D1.4B.10
Calaprice, Massimiliano	CA	IAC-23.A3.4B.4
Calcagno, Davide	CA	IAC-23.B4.2.2
Caldas, Francisco	S	IAC-23.A6.9.2
Califano, Pietro	CA	IAC-23.E2.3-GTS.4.8
Califano, Pietro	CA	IAC-23.E2.4.8
Califano, Pietro	CA	IAC-23.C1.6.4
Callsen, Steffen	CA	IAC-23.D2.3.4

Name		Paper
Callsen, Steffen	CA	IAC-23.D2.4.2
Calnan, Gary	CA	IAC-23.D3.2B.7
Calosso, Claudio Eligio	CA	IAC-23.B2.7.9
Calveras, Anna	CA	IAC-23.B2.3.12
Calzi, Alessandro	CA	IAC-23.E6.3.6
Camargo, Aluisio	S	IAC-23.D3.3.5
Camoriano, Raffello	CA	IAC-23.D1.2.9
Campa, Annamaria	CA	IAC-23.B2.7.9
Campagna, Gianluca Maria	CA	IAC-23.B2.4.3
Campagna, Gianluca Maria	S	IAC-23.B6.2.7
Campagnola, Stefano	CA	IAC-23.C1.6.7
Campana, Marie	CA	IAC-23.A3.3A.6
Campbell, Ben	S	IAC-23.B6.5.4
Campbell, Megan	S	IAC-23.C3.2.10
Campioli, Serena	S	IAC-23.B4.8.12
Campiti, Giulio	S	IAC-23.A6.7.2
Campos, Matias	S	IAC-23.E3.4.6
Canales Garcia, David	A	IAC-23.C1.6.1
Canizares, L Alberto	CA	IAC-23.B4.4.6
Cannelli, Selene	CA	IAC-23.E1.1.4
Cano, Samuel	S	IAC-23.B4.3.6
Canto, Elber Einstein	CA	IAC-23.A2.7.2
Cantos Gálvez, Daniel	S	IAC-23.C4.3.9
Cantos Gálvez, Daniel	CA	IAC-23.B3.3.6
Cao, Yan	CA	IAC-23.A6.3.1
Cao, Yan	CA	IAC-23.A6.3.10
Caon, Alex	CA	IAC-23.E2.3-GTS.4.1
Capannolo, Andrea	CA	IAC-23.E10.2.2
Capardo, Gracielle	CA	IAC-23.B4.1.5
Capasso, Roberto	CA	IAC-23.E2.3-GTS.4.8
Capell, Elliot	CA	IAC-23.D1.4A.12
Capobianco, Antonio	CA	IAC-23.B2.6.1
Cappa, Martina	CA	IAC-23.B2.1.3
Cappella, Matteo	CA	IAC-23.B2.2.6
Cappelletti, Chantal	CA	IAC-23.A6.5.9
Capra, Lorenzo	CA	IAC-23.C1.2.4
Capra, Lorenzo	S	IAC-23.D1.6.2
Caprace, Denis-Gabriel	CA	IAC-23.A2.6.7
Capuano, Giovanni Maria	S	IAC-23.E2.4.5
Capuano, Giuseppe	CA	IAC-23.B4.4.3
Capuano, Maurizio	CA	IAC-23.A3.3A.5
Capuano, Vincenzo	CA	IAC-23.C1.4.9
Capurso, Andrea	S	IAC-23.E7.1.2
Caputo, Domenico	CA	IAC-23.B4.2.4
Carannante, Salvatore	CA	IAC-23.A6.7.1
Carbone, Marianna	A	IAC-23.B6.1.5
Cardellach, Estel	CA	IAC-23.B4.4.4
Cardenas Solano, Michael	CA	IAC-23.B4.1.3
Cardi, Margherita	CA	IAC-23.C4.8-B4.5A.3
Cardile, Giorgio	S	IAC-23.D5.4.3
Cardona Ortiz, Viviana Itzel	CA	IAC-23.C4.6.2
Cardone, Tiziana	CA	IAC-23.A6.3.6
Cardoso dos Santos, Josué	S	IAC-23.C1.8.9
Carletta, Stefano	S	IAC-23.B4.2.4
Carletta, Stefano	S	IAC-23.C1.8.1
Carletta, Stefano	CA	IAC-23.B4.5A-C4.8.5
Carlo, Antonio	S	IAC-23.D5.4.5
Carmignani, Alessio	CA	IAC-23.A1.8.6
Carnelli, Ian	CA	IAC-23.E10.1.2
Carnelli, Ian	CA	IAC-23.A3.4B.1
Carnelli, Ian	CA	IAC-23.A3.4B.2
Carnevale, Alanna	S	IAC-23.B3.7.1
Carosi, Mattia	CA	IAC-23.B2.7.5
Carosi, Mattia	CA	IAC-23.B2.1.3
Carpentiero, Rita	CA	IAC-23.A7.3.6
Carrera, Erasmo	CA	IAC-23.B5.1.2
Carrera, Erasmo	CA	IAC-23.C2.2.1
Carrera, Erasmo	CA	IAC-23.C2.2.2
Carrera, Erasmo	CA	IAC-23.C2.3.2
Carrera, Erasmo	CA	IAC-23.C2.5.11
Carrossa, Michela	CA	IAC-23.E2.4.3
Carrubba, Elisa	CA	IAC-23.A1.8.6
Carter, Merlin	CA	IAC-23.E5.3.5
Carter-Cortez, Victoria	CA	IAC-23.E6.2.3
Carter-Cortez, Victoria	S	IAC-23.E3.6.8

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Carvajal-Godinez, Johan	CA	IAC-23.A2.3.3
Carvalho, Lais	S	IAC-23.E1.9.10
Casadesus Vila, Guillem	A	IAC-23.B2.2.2
Casas del Valle Pacheco, Isi	CA	IAC-23.E6.3.2
Caseiro, Rodrigo	CA	IAC-23.B4.9-GTS.5.10
Casini, Andrea Emanuele Maria	CA	IAC-23.C2.9.4
Casini, Stefano	S	IAC-23.B2.7.6
Casique Coronado, Luzmila	CA	IAC-23.A4.2.7
Casir Ricaño, Jorge Rubén	S	IAC-23.B4.9-GTS.5.5
Casquero Zaidman, Julio César	CA	IAC-23.D2.2.8
Cassese, Sergio	CA	IAC-23.C4.4.7
Cassese, Sergio	S	IAC-23.C4.8-B4.5A.9
Cassiano Julio Filho, Antonio	S	IAC-23.B6.1.12
Cassibry, Jason	CA	IAC-23.C4.10-C3.5.9
Cassibry, Jason	CA	IAC-23.C4.10-C3.5.12
Castellanos López, Pablo	CA	IAC-23.A3.3B.10
Castellanos Urciaga, Inri Yutlanitl	CA	IAC-23.C4.6.2
Castelvetri, Alessandro	CA	IAC-23.D2.2.10
Castiglione, Luigi	CA	IAC-23.B4.4.1
Castiglione, Luigi	CA	IAC-23.E10.1.2
Castro Garcia, Carlos	CA	IAC-23.B2.6.4
Cataldo, Giuseppe	CA	IAC-23.A3.3A.3
Cataldo, Giuseppe	S	IAC-23.A3.3A.4
Catesini, Giulio	CA	IAC-23.A5.1.10
Catlow, Ruth	CA	IAC-23.A4.2.4
Cattani, Benedetta Margrethe	CA	IAC-23.A6.8-E9.1.1
Catuogno, Tommaso	A	IAC-23.B2.1.9
Cavalieri, Luciano	CA	IAC-23.A5.1.10
Cavalli, Lorenzo	CA	IAC-23.D2.5.6
Cawley, Sarah	CA	IAC-23.A6.5.2
Cazin, Benoit	CA	IAC-23.D2.6.8
Ceccarelli, Carlo	CA	IAC-23.A7.3.6
Ceccaroni, Marta	S	IAC-23.B4.5.2
Ceccaroni, Marta	CA	IAC-23.E10.2.4
Cecchi, Maria Francesca	S	IAC-23.E1.8.1
Cecchi, Maria Francesca	S	IAC-23.A1.8.11
Cecchi, Maria Francesca	CA	IAC-23.A3.2C.3
Cecconello, Andrea	CA	IAC-23.C3.2.5
Cecconello, Andrea	CA	IAC-23.C3.4.1
Cederle, Luca	CA	IAC-23.D2.7.10
Ceglarek, Jan-Peter	S	IAC-23.D1.4A.1
Celette, Marius	CA	IAC-23.C4.3.5
Celik, Kemal	CA	IAC-23.D3.2B.3
Cena, Carlo	A	IAC-23.B4.3.7
Centuori, Simone	S	IAC-23.A6.4.9
Ceresoli, Michele	S	IAC-23.D1.4B.1
Ceresoli, Michele	CA	IAC-23.B4.6A.12
Ceresoli, Michele	CA	IAC-23.E10.2.2
Ceriola, Giulio	CA	IAC-23.B1.1.6
Ceriotti, Matteo	CA	IAC-23.C1.3.6
Cerisano, Jody	CA	IAC-23.B3.8.5
Cervone, Angelo	CA	IAC-23.B2.7.6
Cervone, Angelo	CA	IAC-23.D1.3.10
Cervone, Angelo	CA	IAC-23.C4.6.5
Cervone, Angelo	S	IAC-23.B4.6B.3
Cervone, Angelo	CA	IAC-23.C2.9.2
Ceylan, Mustafa	CA	IAC-23.A3.2B.1
Chacón B, Rodrigo	CA	IAC-23.E7.1.14
Chai, Patrick	CA	IAC-23.A3.1.1
Challot, Juliette	CA	IAC-23.B2.4.4
Chamika, Withanage Dulani	S	IAC-23.B1.3.9
Champagne, Gaston	CA	IAC-23.C4.3.9
Champion, James	CA	IAC-23.B1.2.1
Champion, James	CA	IAC-23.D2.2.9
Chan, Manwei	CA	IAC-23.E5.6.4
Chandra, Adarsh	CA	IAC-23.A2.4.5
Chandrashekaran, Megha	CA	IAC-23.B3.2.3
Chang, Binhan	CA	IAC-23.B3.3.2
Chang, Eva Yi-Wei	S	IAC-23.E4.2.11
Charpigny, Noé	CA	IAC-23.A6.7.4
Charruaz, Gilbert	CA	IAC-23.C2.9.4
Chartsiriwattana, Pearachad	S	IAC-23.C2.1.5
Chassagnoux, Bastien	CA	IAC-23.B3.2.3
Chassagnoux, Bastien	CA	IAC-23.D2.4.7
Chatar, Keenan	CA	IAC-23.D1.5.3

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Chatterjee, Subhamoy	CA	IAC-23.D5.3.6
Chatziargyriou, Eleftheria	CA	IAC-23.E2.4.7
Chatzicharalampous, Georgios	CA	IAC-23.E9.2.3
Chau-Vo, Anh-Khoa	CA	IAC-23.E5.5.6
Chaumal, Aarya	S	IAC-23.B2.7.7
Chavers, Greg	CA	IAC-23.E6.2.4
Chaves Jiménez, Adolfo	CA	IAC-23.B4.6B.1
Chavez, Cristian	S	IAC-23.E1.3.2
Chawla, Surinder Kaur	CA	IAC-23.D4.2.5
Chebotarev, Yuriy	CA	IAC-23.B3.5.5
Chebykin, Evgenii	A	IAC-23.C4.6.3
Cheekhooree, Gauravsingh	CA	IAC-23.E1.4.2
Chen, Ao	CA	IAC-23.B6.2.12
Chen, Caobin	CA	IAC-23.C4.7.3
Chen, Chuan	CA	IAC-23.A6.3.1
Chen, Chuan	CA	IAC-23.A6.3.10
Chen, Chuan	CA	IAC-23.E10.1.6
Chen, Chuan	CA	IAC-23.E10.2.6
Chen, Dan	CA	IAC-23.A3.2B.11
Chen, Dan	CA	IAC-23.B4.8.6
Chen, Deming	CA	IAC-23.B2.7.10
Chen, Hailong	CA	IAC-23.A1.1.8
Chen, Hui	CA	IAC-23.E3.3.3
Chen, Jiale	S	IAC-23.A6.5.5
Chen, Jianlin	CA	IAC-23.C1.8.4
Chen, Jianlin	CA	IAC-23.C1.4.8
Chen, Li	CA	IAC-23.A6.5.6
Chen, Li	CA	IAC-23.D3.2B.10
Chen, Li	CA	IAC-23.D1.6.6
CHEN, Liang	S	IAC-23.D2.6.5
Chen, Maosheng	CA	IAC-23.B4.4.10
Chen, Pengxin	CA	IAC-23.C4.7.7
Chen, Qingzhen	CA	IAC-23.C2.3.10
Chen, Shiyu	CA	IAC-23.B2.4.2
Chen, Sui	S	IAC-23.D1.4A.3
Chen, Xiangling	S	IAC-23.C2.3.9
Chen, Xiaodong	CA	IAC-23.C4.7.7
Chen, Xiaoping	S	IAC-23.A1.8.2
Chen, Yongjie	CA	IAC-23.C1.8.8
Chen, Yuchi	A	IAC-23.B4.6A.8
Chen, Zhangrui	S	IAC-23.E2.2.4
Chen, Zixuan	CA	IAC-23.A1.2.7
Cheng, Boyang	CA	IAC-23.D1.3.3
Cheng, Lei	CA	IAC-23.C1.4.8
CHENG, Xin	CA	IAC-23.D2.2.3
Cheng, Yuqiang	CA	IAC-23.B2.7.10
Cheng, ZhengAi	S	IAC-23.C3.4.4
Cherciu, Claudiu	CA	IAC-23.B4.6A.11
Chermak, Lounis	CA	IAC-23.D1.4B.11
Chern, Jeng-Shing (Rock)	CA	IAC-23.E4.2.11
Chernenko, Pavel	CA	IAC-23.C4.3.10
Chernov, Kirill	S	IAC-23.C1.4.5
Chernykh, Irina	S	IAC-23.E7.2.4
Chernykh, Irina	CA	IAC-23.E7.7.7
Cherubini, Florent	CA	IAC-23.A5.2.6
Chesley, Bruce	S	IAC-23.D1.1.1
Chesley, Bruce	S	IAC-23.D5.4.10
Chesnokov, Dmitry	CA	IAC-23.C2.2.11
Chełstowski, Tomasz	CA	IAC-23.D2.6.2
Chi, Zhang	CA	IAC-23.D2.1.1
Chia, Andy	CA	IAC-23.E2.1.8
Chiaia, Piero	CA	IAC-23.C2.2.2
Chiampi, Massimo	CA	IAC-23.C2.1.2
Chiavari, Lorenzo	CA	IAC-23.A5.1.10
Chiavari, Lorenzo	S	IAC-23.E1.9.7
Chiavetta, Pierfrancesco	CA	IAC-23.GTS.2-B3.9.6
Chiba, Hironori	CA	IAC-23.C4.4.11
Chikazawa, Takuya	CA	IAC-23.C4.8-B4.5A.1
Chikusa, Ayumi	S	IAC-23.C1.3.10
Chimura, Kentaro	CA	IAC-23.E5.4.3
Chiodini, Sebastiano	CA	IAC-23.B1.3.5
Chiozzi, Alberto	CA	IAC-23.D2.2.10
Chirulli, Donato	CA	IAC-23.B4.9-GTS.5.8
Chitta, Hari Bharath	S	IAC-23.D1.3.2
Chiu, S.W.	S	IAC-23.E6.4.9

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Chiu, S.W.	CA	IAC-23.E6.4.9
Chmielewski, Cezary	CA	IAC-23.C2.7.7
Cho, Hancheol	CA	IAC-23.C1.3.9
Cho, Kiejoo	CA	IAC-23.A2.5.2
Cho, Mengu	CA	IAC-23.B4.2.9
Cho, Mengu	CA	IAC-23.D1.3.7
Cho, Mengu	CA	IAC-23.B1.3.9
Cho, Mengu	S	IAC-23.B4.9-GTS.5.1
Cho, Mengu	CA	IAC-23.B4.9-GTS.5.5
Cho, Mengu	CA	IAC-23.D1.5.3
Cho, Sang Yeon	S	IAC-23.D5.1.7
Cho, Yonghyun	CA	IAC-23.E2.3-GTS.4.2
Cho, Yuichiro	CA	IAC-23.A3.4A.5
Cho, Yun-Hang	CA	IAC-23.D3.2B.11
Chocheyras, Eric	CA	IAC-23.C4.1.9
Choi, Joon Min	S	IAC-23.C3.1.5
Choi, Joon Min	CA	IAC-23.C3.2.4
Choi, Yire	CA	IAC-23.A3.2A.1
Chojnacki, Kent	S	IAC-23.B3.1.10
Chopard, Angèle	CA	IAC-23.A1.2.10
Chou, Joshua	CA	IAC-23.A2.7.6
Choudhary, Megha	CA	IAC-23.B3.5.7
Chow, Chee Lap	CA	IAC-23.B4.2.9
Chowdhury, Arshad	CA	IAC-23.B4.1.6
Choza, Carmen	S	IAC-23.A4.1.3
Christensen, Carissa	CA	IAC-23.E3.3.1
Christensen, Carissa	CA	IAC-23.E3.3.7
Christensen, Carissa	CA	IAC-23.D2.7.1
Christensen, Carissa	CA	IAC-23.E6.1.4
Christensen, Ian	CA	IAC-23.D4.2.4
Christenson, Lane	CA	IAC-23.A1.5.7
Christiansen, Rowena	CA	IAC-23.B3.8.10
Christiansen, Rowena	CA	IAC-23.B3.9-GTS.2.7
Christophe, Antoine	CA	IAC-23.D3.2A.8
Chroustova, Eva	CA	IAC-23.A1.1.6
Chroustova, Eva	CA	IAC-23.A1.1.7
Chu, Haiyang	S	IAC-23.B6.1.7
Chu, Jingjiang	S	IAC-23.A6.9.9
Chua, Angela Clarisse	CA	IAC-23.B4.8.12
Chudinov, Nikita	S	IAC-23.B3.4-B6.4.3
Chujo, Toshihiro	CA	IAC-23.C1.2.6
Chung, Dae-Won	CA	IAC-23.B6.1.11
Chávez Sánchez, Liz	CA	IAC-23.A4.2.7
Cialdai, Francesca	CA	IAC-23.A1.3.7
Ciania, Rafał	CA	IAC-23.D2.6.2
Ciazela, Jakub	CA	IAC-23.D3.2B.6
Cicalò, Stefano	CA	IAC-23.B4.2.2
Cieslak, Daniel	CA	IAC-23.A2.3.6
Ciminelli, Caterina	CA	IAC-23.A6.7.2
Ciminieri, U B	CA	IAC-23.D3.2B.7
Cimino, Lorenzo	CA	IAC-23.A6.9.4
Cimino, Lorenzo	CA	IAC-23.A5.1.10
Cimino, Lorenzo	CA	IAC-23.B4.9-GTS.5.6
Cimino, Lorenzo	CA	IAC-23.A6.1.5
Cimino, Lorenzo	CA	IAC-23.E1.9.7
Cimmino, Nicola	S	IAC-23.A6.1.7
Ciofani, Gianni	S	IAC-23.A1.8.6
Cipkova, Pavla	CA	IAC-23.A1.1.6
Cirkovic, Elena	CA	IAC-23.E9.1-A6.8.6
Civardi, Gaia Letizia	CA	IAC-23.A6.5.10
Civardi, Gaia Letizia	CA	IAC-23.A6.6.3
Civati, Lucia Francesca	CA	IAC-23.D2.7.10
Ciążela, Marta	CA	IAC-23.D3.2B.6
Ciżman, Agnieszka	CA	IAC-23.C2.8.7
Cladellas Sanjuan, Uma	S	IAC-23.A3.3B.2
Cladellas Sanjuan, Uma	S	IAC-23.B1.6.2
Claeys, Kato	CA	IAC-23.A1.1.3
Clarizia, Maria Paola	CA	IAC-23.B4.4.4
Clark, Ruaridh	CA	IAC-23.C1.7.4
Clauss, Margot	S	IAC-23.D5.1.6
Clauss, Margot	S	IAC-23.D1.3.7
Clauss, Margot	CA	IAC-23.C2.6.11
Clement, Brian	CA	IAC-23.A3.3A.4
Coccarelli, Giuseppe	CA	IAC-23.C2.6.7
Cocchiara, Chiara Maria	S	IAC-23.E1.6.6

Name		Paper
Dai, Lei	CA	IAC-23.C3.3.5
Dai, Lisi	CA	IAC-23.E3.3.3
Dai, Zhuoan	CA	IAC-23.E5.3.3
DalBello, Richard	S	IAC-23.E6.2.1
Dall'Ora, Massimo	CA	IAC-23.E10.2.2
Dammacco, Giada	CA	IAC-23.D2.3.4
Dangeti, Jahnavi	S	IAC-23.A3.1.10
Dangoisse, Carole	CA	IAC-23.B3.8.10
Daniol, Mateusz	S	IAC-23.A1.1.5
Daoud-Moraru, Anthonius	CA	IAC-23.A3.3B.8
Darfilal, Djamal	S	IAC-23.C4.8-B4.5A.11
Darm, Paul	S	IAC-23.D1.4A.4
Darya, Abdollah	CA	IAC-23.B2.8-GTS.3.9
Darya, Abdollah	CA	IAC-23.B5.1.6
Darya, Abdollah	CA	IAC-23.A7.2.5
Daryabari, Mohaddese	S	IAC-23.D5.2.8
Das, Shaibal	CA	IAC-23.E5.4.8
Das, Shubham	S	IAC-23.A2.4.5
Das, Shubham	S	IAC-23.C2.6.12
Dasgupta, Upasana	CA	IAC-23.E3.1.1
Data, Prabhpreet	CA	IAC-23.D1.2.13
Dauner, Johannes	A	IAC-23.C1.1.1
Dauner, Johannes	CA	IAC-23.C1.1.7
Dauvois, Yann	CA	IAC-23.D2.3.4
Dave, Vishrant	S	IAC-23.E2.2.1
David, Emmanuelle	S	IAC-23.A6.8-E9.1.4
Davidian, Ken	S	IAC-23.E6.3.8
Davidsson, Björn	CA	IAC-23.A3.4B.4
Davies, Philip	S	IAC-23.B4.8.4
Davies, Philip	S	IAC-23.B4.6A.2
Davis, Richard	CA	IAC-23.A3.3A.1
Dawe, Hannah	CA	IAC-23.B3.2.3
Dawe, Hannah	CA	IAC-23.D2.4.7
Dawkins, Urska	CA	IAC-23.C3.2.10
Dayarathna, Tharindu	CA	IAC-23.B4.2.9
Dayarathna, Tharindu	CA	IAC-23.B4.9-GTS.5.5
Dayeh, Maher	S	IAC-23.D5.3.6
De Almeida Rebelo, Miguel	S	IAC-23.E2.2.10
de Bruijn, Marie-Claire	CA	IAC-23.E1.1.4
De Carlo, Paola	CA	IAC-23.A6.5.10
De Carlo, Paola	CA	IAC-23.B2.6.1
De Cecio, Francesco	CA	IAC-23.B4.4.9
de Cesare, Giampiero	CA	IAC-23.B4.2.4
de Courson, Sibyl-Anna	CA	IAC-23.A6.8-E9.1.1
De Donno, Carmela Agnese	CA	IAC-23.B4.9-GTS.5.8
De Fenza, Angelo	CA	IAC-23.D2.5.6
De Fenza, Angelo	CA	IAC-23.D2.6.4
de Jong, Nicolás	CA	IAC-23.C2.8.13
de la Taille, Lionel	CA	IAC-23.D2.2.9
De la Torre, David	CA	IAC-23.A1.7.2
De Leo, Laura	CA	IAC-23.B2.7.5
De Leo, Laura	CA	IAC-23.B2.1.3
De Lima Viana, Dylan	CA	IAC-23.C4.3.5
De Lisle, Daniel	CA	IAC-23.B1.2.3
De Luca, Alessandro	CA	IAC-23.B4.2.5
De Luca, Alessandro	CA	IAC-23.C3.2.5
De Luca, Giuseppe	CA	IAC-23.A1.7.10
De Marchi, Pietro	CA	IAC-23.D4.1.4
De Marchi, Pietro	CA	IAC-23.B4.4.3
de Paor, Conall	CA	IAC-23.B3.3.6
De Paula, Anderson	CA	IAC-23.E1.9.10
De Rosa, Marco	CA	IAC-23.C4.1.5
De Santis, Cristian	CA	IAC-23.A7.3.6
De Smaele, Kasper	A	IAC-23.B4.6B.3
De Stefano, Ilaria	CA	IAC-23.A1.5.6
De Stefano, Marco	CA	IAC-23.D1.6.7
De Stefano Fumo, Mario	CA	IAC-23.D2.5.6
de Sá Amaral Oliveira, Carlos Eduardo	CA	IAC-23.A6.8-E9.1.5
De Toni, Alberto	CA	IAC-23.B2.3.4
de Veld, Frank	S	IAC-23.A6.7.7
De Vittori, Andrea	CA	IAC-23.A6.7.8
de Weck, Olivier	CA	IAC-23.D1.4B.4
de Weck, Olivier	CA	IAC-23.D1.4B.9
de Weck, Olivier	CA	IAC-23.B6.2.5
De Winne, Frank	CA	IAC-23.B3.1.4

Name		Paper
de Winter, Bram	CA	IAC-23.A3.1.2
de Winter, Bram	CA	IAC-23.D3.3.6
de Winter, Bram	CA	IAC-23.E5.6.5
Debbah, Yassir	CA	IAC-23.B3.9-GTS.2.1
Debeir, Olivier	CA	IAC-23.A1.2.2
DeChurch, Leslie	CA	IAC-23.A1.1.2
Decker, Alyson	CA	IAC-23.B3.9-GTS.2.7
Deferrez, Maxence	S	IAC-23.A2.2.8
Deffacis, Maurizio	CA	IAC-23.A3.3A.6
Degl'Innocenti, Andrea	CA	IAC-23.A1.8.6
Degli Agli, Giuliano	CA	IAC-23.E2.3-GTS.4.1
DeKlotz, Michael	CA	IAC-23.E6.2.4
del Barco, María	CA	IAC-23.A2.3.3
del Barco, María	CA	IAC-23.E6.5-GTS.1.4
Del Bianco, Marta	CA	IAC-23.B4.3.2
Del Gaudio, Costantino	CA	IAC-23.A1.3.5
Del Mastro, Antonio	CA	IAC-23.A5.2.8
del Monte, Luca	S	IAC-23.E6.5-GTS.1.6
del Olmo, Encarna	CA	IAC-23.D2.9-D6.2.3
Del Rio Vera, Jorge	CA	IAC-23.B4.1.1
Del Rio Vera, Jorge	CA	IAC-23.E1.3.8
Del Rio Vera, Jorge	CA	IAC-23.A2.6.3
Del Rosario, Manuel Jr.	CA	IAC-23.E1.5.8
Delfini, Andrea	S	IAC-23.A2.2.7
Delfini, Andrea	S	IAC-23.C2.8.2
Delfini, Andrea	S	IAC-23.C2.8.8
Delgado, Oscar	CA	IAC-23.B2.5.1
Delgado Ortiz, Rosaura Patricia	S	IAC-23.C4.6.2
Dell'Acqua, Simone	CA	IAC-23.D2.7.10
Dell'Elce, Lamberto	CA	IAC-23.A6.7.7
Della Corte, Vincenzo	CA	IAC-23.A3.4A.6
Della Corte, Vincenzo	CA	IAC-23.E10.2.2
Della Posta, Giacomo	CA	IAC-23.C3.2.7
Dellacasa, Amalia	CA	IAC-23.B4.6B.9
Dellandrea, Brice	CA	IAC-23.A3.1.3
Dellandrea, Brice	CA	IAC-23.B4.8.4
delle Fave, Danilo	CA	IAC-23.E7.1.14
Delloro, Luca	CA	IAC-23.B1.1.4
Delobel, Pierre	CA	IAC-23.A1.2.10
Dempster, Andrew	CA	IAC-23.D4.5.1
Denaro, Angelo	A	IAC-23.D2.6.3
Deng, Haoyue	S	IAC-23.E7.1.11
Deng, Yulin	CA	IAC-23.A1.2.7
Dengler, Sascha	CA	IAC-23.D4.1.1
Denisov, Mikhail	CA	IAC-23.A3.5.4
Denning, Kathryn	CA	IAC-23.A4.2.2
Denning, Kathryn	CA	IAC-23.A4.2.3
Dente, Laura	CA	IAC-23.B4.4.4
Depalma, Marco Vito	CA	IAC-23.B4.9-GTS.5.8
Depaolis, Elisa	CA	IAC-23.E1.4.7
Depuma, Christopher	CA	IAC-23.C3.2.1
Deremetz, Mathieu	CA	IAC-23.C3.4.8
Dergunova, Viktoria	CA	IAC-23.E5.3.5
Derrico, Vinicius	CA	IAC-23.C2.7.9
Derzy, Igor	CA	IAC-23.A1.7.4
Desai, Shailen	S	IAC-23.B1.6.4
Deshapriya, Prasanna	CA	IAC-23.E10.2.2
Desormeau, Vincent	CA	IAC-23.D1.2.1
Despotellis, Steven	CA	IAC-23.B4.5A-C4.8.13
Destro, Matteo	CA	IAC-23.B4.9-GTS.5.8
Detera, Bernadette Joy	S	IAC-23.D4.2.10
Detrell, Gisela	CA	IAC-23.B3.3.6
Deutsch, Sascha	S	IAC-23.B5.3.3
Dewsyl, S J Amy	S	IAC-23.C3.3.8
Dhankar, Krish	CA	IAC-23.C4.5.2
Dhankar, Krish	CA	IAC-23.C2.9.3
Dhawan, Anmol	CA	IAC-23.E5.4.11
Dhesi, Mekhi	CA	IAC-23.D1.4B.11
Dhiyaulhaq, M Zulfa	CA	IAC-23.B4.1.7
Dhulipala, Somayajulu	S	IAC-23.E5.6.4
Dhungana, Bikalpa	CA	IAC-23.B6.3.10
Dhungana, Bikalpa	CA	IAC-23.E2.4.1
Dhungana, Bikalpa	CA	IAC-23.B5.3.6
Dhunnoo, Kirtan	A	IAC-23.A2.5.6
Di, Julia	S	IAC-23.D1.6.1

Name		Paper
Di Clemente, Marco	S	IAC-23.D1.3.1
Di Clemente, Marco	CA	IAC-23.B4.4.3
Di Clemente, Marco	S	IAC-23.C2.8.6
Di Domenico, Gianfranco	CA	IAC-23.C1.4.7
Di Filippo, Simone	CA	IAC-23.B4.7.1
Di Fino, Luca	S	IAC-23.A2.6.1
Di Giacomo, Alessia	CA	IAC-23.A5.1.10
Di Giacomo, Alessia	S	IAC-23.B2.4.8
Di Giacomo, Alessia	CA	IAC-23.E1.9.7
di Gruttola Giardino, Nicola	CA	IAC-23.D1.4B.10
Di Lauro, Carmine	S	IAC-23.B2.7.5
Di Lauro, Carmine	S	IAC-23.B2.1.3
Di Lauro, Carmine	CA	IAC-23.B2.1.9
Di Lizia, Pierluigi	CA	IAC-23.A6.7.8
Di Martire, Diego	CA	IAC-23.B4.7.13
Di Matteo, Francesco	CA	IAC-23.C4.1.5
Di Matteo, Giuseppe	CA	IAC-23.B2.6.5
Di Nunzio, Clara	A	IAC-23.E1.4.7
Di Paola, Alessandro	A	IAC-23.B4.8.10
Di Pasquale, Fabrizio	CA	IAC-23.D1.3.10
Di Pasquale, Fabrizio	CA	IAC-23.C2.9.2
Di Pippo, Simonetta	S	IAC-23.D4.2.2
Di Pippo, Simonetta	A	IAC-23.E3.3.5
Di Pippo, Simonetta	S	IAC-23.E3.4.1
Di Pippo, Simonetta	A	IAC-23.A6.8-E9.1.10
Diaz, Fabio	CA	IAC-23.E2.3-GTS.4.9
Diaz Alvarez, David Andres	S	IAC-23.A5.3-B3.6.6
Diaz Salinas, Joao Gabriel	CA	IAC-23.B4.1.3
Diaz Sotelo, Joel	A	IAC-23.B1.5.1
Diaz-Carrasco, Montserrat	CA	IAC-23.D1.6.7
Dick, Rory	S	IAC-23.D3.2B.12
Dickey, Chuck	A	IAC-23.E7.7.8
Dietlein, Ingrid Monika	CA	IAC-23.D2.3.4
Dietrich, George	CA	IAC-23.A6.9.3
Dietrich, George B.	CA	IAC-23.C3.1.8
Dietrich, George B.	CA	IAC-23.C3.2.10
Dietrich, George B.	CA	IAC-23.C3.2.11
Dietrich, George B.	CA	IAC-23.C3.2.12
Dietrich, Janoah	A	IAC-23.D1.3.5
Dietrich, Janoah	CA	IAC-23.E2.3-GTS.4.5
Diez, Adrian	CA	IAC-23.B6.5.9
Dignam, Aishling	S	IAC-23.A6.1.1
Dignani, Mattia	CA	IAC-23.E2.3-GTS.4.1
Dikarev, V.A.	CA	IAC-23.B3.5.1
Dimitriadis, Mandi	CA	IAC-23.E1.1.2
Dimitrova, Pavlina	CA	IAC-23.B6.5.9
Dimoska, Martina	CA	IAC-23.D4.1.8
Dimoska, Martina	CA	IAC-23.E6.5-GTS.1.5
Dimoska, Martina	CA	IAC-23.E5.6.5
Dimov, Viktoriya	S	IAC-23.B4.4.7
Dinan, Richard	CA	IAC-23.C4.10-C3.5.8
Ding, Guopeng	CA	IAC-23.A1.3.13
Ding, Jie	CA	IAC-23.D2.2.3
Ding, Jinghang	CA	IAC-23.A1.7.11
Ding, Jixin	S	IAC-23.C1.9.6
Ding, Jixin	CA	IAC-23.C4.10-C3.5.3
Ding, Suquan	S	IAC-23.B3.7.2
Dingare, Sunil V	CA	IAC-23.D1.3.8
Dingwell, Donald Bruce	CA	IAC-23.C2.2.12
Dinkel, Holly	A	IAC-23.D1.6.1
Dinsdale, Michael	CA	IAC-23.A3.3B.8
Dittel Tortós, Valeria	CA	IAC-23.A2.3.3
Dittel Tortós, Valeria	S	IAC-23.E6.5-GTS.1.4
Divoky, Martin	CA	IAC-23.A3.2A.9
Dixit, Vidhu	CA	IAC-23.A3.4B.5
Dixit, Vidhu	S	IAC-23.D2.8.2
Djachkova, Maya	S	IAC-23.A3.3B.5
Djojodihardjo, Harijono	S	IAC-23.C2.3.1
Dmitry, Karavaev	CA	IAC-23.B3.5.8
Doherty, Hannah Louise	CA	IAC-23.B5.2.7
Dolgopolov, Anton	CA	IAC-23.E3.3.1
Dolgov, Pavel	CA	IAC-23.B3.5.1
Dominguez, Andrea	S	IAC-23.E1.9.12
Dominik, Martin	CA	IAC-23.A4.2.2
Donahue, Benjamin	A	IAC-23.D2.2.2
Donahue, Benjamin	A	IAC-23.A3.5.2
Donahue, Benjamin	CA	IAC-23.B3.8.8
Donati, Annalisa	CA	IAC-23.B1.1.8
Donati, Annalisa	CA	IAC-23.E1.2.3
Donati, Annalisa	CA	IAC-23.E5.4.4
Donati, Serena	CA	IAC-23.B4.4.4
Dong, Chao	CA	IAC-23.A3.3B.4
Dong, Ge	CA	IAC-23.B3.3.5
Dong, Shi-Wei	S	IAC-23.C3.2.3
Dong, Shuonan	CA	IAC-23.D4.3.7
Doran, Peter	CA	IAC-23.A3.1.4
Doreswamy, Rajiv	S	IAC-23.B3.2.4
Doron, Gil	CA	IAC-23.E1.1.1
Doron, Gil	CA	IAC-23.E1.2.4
Dorrington, Scott	S	IAC-23.A3.2C.8
Dotsenko, Oleg	S	IAC-23.C2.6.1
Dotto, Elisabetta	CA	IAC-23.B4.8.10
Dotto, Elisabetta	CA	IAC-23.E10.2.2
Dottori, Alice	CA	IAC-23.A3.2B.9
Dottori, Alice	A	IAC-23.A3.2C.11
Doucet, Aloïs	CA	IAC-23.E2.2.11
Douglas, Jonathon	CA	IAC-23.A3.3B.8
Douglas-Bradshaw, Donya	S	IAC-23.A3.4A.2
Dovis, Fabio	A	IAC-23.B2.7.2
Dragone, Roberto	CA	IAC-23.A1.7.13
Drayson, Olivia	CA	IAC-23.E1.1.4
Drayson, Olivia	CA	IAC-23.E1.7.4
Drenthe, Nigel	CA	IAC-23.B5.2.7
Drescher, Juergen	CA	IAC-23.A1.3.4
Drescher, Juergen	CA	IAC-23.A1.4.5
Drevet, Robin	S	IAC-23.C2.6.11
Drigo, Daniele	CA	IAC-23.C2.5.4
Drimaco, Daniela	CA	IAC-23.B1.1.6
Drozdowski, Olaf	CA	IAC-23.B4.7.9
Du, Gang	CA	IAC-23.B1.4.7
Du, Hui	S	IAC-23.E3.2.4
Du, Hui	S	IAC-23.A6.8-E9.1.3
Du Plessis, Stefan	CA	IAC-23.A1.3.2
Duan, Kang	S	IAC-23.E7.5.11
Duan, Shiyang	CA	IAC-23.E2.4.2
Dubey, Priyank	S	IAC-23.D1.1.5
Dubey, Priyank	S	IAC-23.B2.3.5
Dubey, Shreyansh	S	IAC-23.A5.4.2
Dubey, Shreyansh	S	IAC-23.A6.3.9
Dubey, Shreyansh	S	IAC-23.B3.8.7
Dubrov, Petr	CA	IAC-23.A1.2.4
Ducai, Tomas	CA	IAC-23.B3.5.7
Dueñas Parapar, Diego Adolfo	CA	IAC-23.A1.7.2
Duggan, Matthew	CA	IAC-23.A3.5.2
Duggan, Matthew	A	IAC-23.B3.8.8
Dugué, Marion	CA	IAC-23.A5.1.9
Duke, Richard	CA	IAC-23.B4.1.2
Dulgeroglu, Ayberk	CA	IAC-23.A6.8-E9.1.5
Dumlupınar, Tuğçağ	CA	IAC-23.A6.8-E9.1.5
Dunn, Brian	CA	IAC-23.E6.1.4
Dunschen, Frederik	CA	IAC-23.E2.3-GTS.4.11
Durgude, Siddhesh	CA	IAC-23.A1.6.3
Durgude, Siddhesh	CA	IAC-23.D1.6.9
Durr, Nathanaël	CA	IAC-23.A6.3.5
Dutra Duarte, Paulo Henrique	CA	IAC-23.B6.1.10
Duzzi, Matteo	CA	IAC-23.B4.4.3
Duzzi, Matteo	CA	IAC-23.B4.4.9
Dwa, Manisha	CA	IAC-23.E1.2.6
Dworski, Szymon	CA	IAC-23.C4.8-B4.5A.4
Dyer, Richard	CA	IAC-23.B6.3.4
Dyke, Shirley	CA	IAC-23.A1.7.12
Dysli, Alain	CA	IAC-23.A3.3B.8
Dziadula, Wiktoria	S	IAC-23.E5.2.10
Dzik, Marek	S	IAC-23.C4.3.10
Dzimira, Maciej	CA	IAC-23.A2.2.3
Dziuban, Jan	CA	IAC-23.A3.3B.3
Dániel, Vladimír	CA	IAC-23.B4.2.1
Dąbrowski, Adam	CA	IAC-23.D1.2.11
Dąbrowski, Adam	CA	IAC-23.A2.3.6

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E		
E Mansoor, Naqsh	CA	IAC-23.C2.5.2
E. Briggs, Ariel	CA	IAC-23.C2.5.2
Eagleson, David	S	IAC-23.E7.1.14
Eastwood, Jonathan	CA	IAC-23.B4.2.1
Eckersley, Steve	S	IAC-23.B4.2.1
Edali, Ilayda	S	IAC-23.E1.5.11
Eddy, Jerry	A	IAC-23.D4.3.2
Edgar, Mujuni	CA	IAC-23.D1.5.3
Edler von Ruedorffer, Paul	CA	IAC-23.E1.4.4
Egan, Michael	CA	IAC-23.B1.1.3
Eggenfellner, Yara	CA	IAC-23.C2.2.4
Egoshin, Denis	CA	IAC-23.C4.8-B4.5A.8
Ehresmann, Manfred	S	IAC-23.D1.3.5
Ehresmann, Manfred	CA	IAC-23.E2.3-GTS.4.5
Ehresmann, Manfred	S	IAC-23.B4.6A.1
Ehresmann, Manfred	S	IAC-23.D3.3.8
Eishima, Takashi	CA	IAC-23.B2.3.7
Eismont, Natan	CA	IAC-23.C1.6.9
Eixenberger, Josh	CA	IAC-23.C2.5.2
El Atrach, Mohamad	CA	IAC-23.C4.1.9
El Atrach, Mohamad	CA	IAC-23.C4.2.1
El Khantouti, Imane	S	IAC-23.D5.1.4
El-Megharbel, Hoda Awny	CA	IAC-23.B4.2.9
El-Shawa, Sahba	CA	IAC-23.D4.2.4
El-Shawa, Sahba	CA	IAC-23.E3.2.7
Elachi, Charles	CA	IAC-23.A3.4B.4
Elango, Purnanand	CA	IAC-23.C1.5.9
Elawad, Mohamed	CA	IAC-23.C4.8-B4.5A.14
Elburn, Darcy	A	IAC-23.B3.1.7
Eldholm, Mari Amanda	S	IAC-23.E7.3.10
Elisha, Yossi	CA	IAC-23.B1.4.5
Elisov, Nikolay	CA	IAC-23.B4.2.6
Ellina, Ioanna Styliani	CA	IAC-23.B4.4.6
Elliott, John	A	IAC-23.A4.2.2
Elliott, John	CA	IAC-23.A4.2.4
Elliott, Robert	S	IAC-23.B4.6A.9
Elmetwally, OMAR	CA	IAC-23.A1.3.3
Elmore, Michael	CA	IAC-23.C1.3.8
Els, Sebastian	CA	IAC-23.A3.2C.8
Elsner, Lisa	CA	IAC-23.C1.1.1
Elwertowska, Agnieszka	CA	IAC-23.B3.7.11
Elyazid, Belaidi	CA	IAC-23.C2.3.3
Elyazid, Belaidi	CA	IAC-23.C3.3.4
Elyazid, Belaidi	CA	IAC-23.C3.3.9
Engin, Mehmet Fatih	A	IAC-23.D1.1.4
Enokida, Kentaro	CA	IAC-23.C4.8-B4.5A.1
Enoto, Teruaki	CA	IAC-23.E2.3-GTS.4.6
Enriquez, Cesar	CA	IAC-23.A6.4.9
Entekhabi, Dara	CA	IAC-23.B1.5.10
Enzo, Samuele	CA	IAC-23.E2.4.3
Eramo, Vincenzo	A	IAC-23.D2.7.7
Erdei, Gabor	CA	IAC-23.B2.8-GTS.3.5
ERDEM BURGER, Merve	S	IAC-23.E3.4.5
Erdoğan, Aleyna	CA	IAC-23.D1.1.4
Erickson, Andrew	S	IAC-23.E4.1.2
Erickson, Andrew	S	IAC-23.E4.2.4
Erkan, Yılmaz Barış	CA	IAC-23.A6.9.8
Errico, Roberto	CA	IAC-23.B6.2.8
Escalante, Alfredo	A	IAC-23.C1.5.5
Escobar Antón, Diego	CA	IAC-23.A6.7.8
Escobar Antón, Diego	CA	IAC-23.A6.2.8
Eslavath, Bhoopathi Sai Naik	CA	IAC-23.A6.6.9
ESPEJEL, CARLOS	CA	IAC-23.A3.2A.10
Espinosa, Amaya	S	IAC-23.D2.5.1
Espinoza Gastelum, Guadalupe	S	IAC-23.B3.5.4
Espinoza Valles, Angelo	S	IAC-23.B1.5.13
Esposito, Marco	CA	IAC-23.B4.4.1
Esposito, Marco	CA	IAC-23.E10.1.2
Esquer, Manuel	CA	IAC-23.A3.2B.3
Estrada, David	S	IAC-23.C2.5.2
Etou, Daisuke	CA	IAC-23.C1.8.7
Etsunaga, Yudai	CA	IAC-23.B4.9-GTS.5.5
Etti-Balogun, Husseinat	CA	IAC-23.A3.5.6
Eugeni, Marco	CA	IAC-23.D1.4A.7
Evangelista, Santiago	CA	IAC-23.B4.9-GTS.5.4
Evans, David	CA	IAC-23.B6.3.5
Everett, David	CA	IAC-23.D1.5.5
Evetts, Simon	CA	IAC-23.B6.3.6
Ezhilrajan, Elayaperumal	S	IAC-23.C4.2.5
F		
Fabbri, Francesco	CA	IAC-23.C2.5.10
Fabbrizi, Angelo	CA	IAC-23.A6.4.1
Fabbrizi, Angelo	S	IAC-23.A5.1.10
Fabbrizi, Angelo	CA	IAC-23.B2.4.8
Fabbrizi, Angelo	CA	IAC-23.E1.9.7
Faber, Nils	CA	IAC-23.E5.3.1
Fabiani, Marco	CA	IAC-23.C4.1.6
Fabiani, Marco	CA	IAC-23.C4.2.10
Facchinetti, Claudia	CA	IAC-23.B2.7.2
Factor, Daniella	CA	IAC-23.A2.4.8
Fadiga, André	CA	IAC-23.E2.3-GTS.4.7
Fagetti, Marco	CA	IAC-23.C1.3.8
Fajardo Soria, George Steve	S	IAC-23.B4.1.3
Fajardo Soria, George Steve	S	IAC-23.E5.2.6
Fajardo Soria, George Steve	S	IAC-23.E1.5.7
Falco, Gregory	CA	IAC-23.E9.2.6
Falkeid, Patrick Nikolay	S	IAC-23.D1.4B.8
Falzini, Stefano	CA	IAC-23.B2.6.5
Fan, Caizhi	CA	IAC-23.C4.10-C3.5.5
Fan, Li	CA	IAC-23.B4.7.7
Fan, Li	CA	IAC-23.B4.6A.7
Fanfani, Alessio	CA	IAC-23.B1.3.3
Fantinato, Samuele	CA	IAC-23.B2.7.2
Fantino, Elena	S	IAC-23.C1.6.1
Faoro, Vitalie	CA	IAC-23.A1.2.2
Faoro, Vitalie	CA	IAC-23.A1.2.5
Farahvashi, Esfandiar	CA	IAC-23.A6.7.3
Farahvashi, Esfandiar	S	IAC-23.B6.5.9
Faralli, Stefano	CA	IAC-23.C2.9.2
Farkas, Michael	CA	IAC-23.D2.2.2
Faroukh, Yousuf	S	IAC-23.B4.9-GTS.5.3
Faroukh, Yousuf	CA	IAC-23.A7.2.7
Farrow, Jonathan	CA	IAC-23.GTS.2-B3.9.6
Farràs Aloy, Sílvia	CA	IAC-23.GTS.2-B3.9.6
Farzullayev, Ceyhun	CA	IAC-23.D2.5.11
Fasano, Giancarmine	CA	IAC-23.A6.7.1
Fasano, Giancarmine	CA	IAC-23.A6.1.7
Fasoulas, Stefanos	CA	IAC-23.B4.6A.1
Fasoulas, Stefanos	CA	IAC-23.D2.9-D6.2.3
Fasoulas, Stefanos	CA	IAC-23.D3.3.8
Fataliyeva, Zahra	S	IAC-23.C2.1.1
Fauci, Roberto	CA	IAC-23.D2.5.6
Fausch, Rico	CA	IAC-23.B4.9-GTS.5.4
Favotto, Federico	CA	IAC-23.E2.3-GTS.4.1
Fazeli, Elnaz	CA	IAC-23.A2.5.7
Fazzoletto, Emilio	CA	IAC-23.B4.8.10
Fazzoletto, Emilio	CA	IAC-23.E10.2.2
Fazzoletto, Immacolata	A	IAC-23.B2.1.7
Fedele, Alberto	CA	IAC-23.A3.4A.6
Fedele, Alberto	CA	IAC-23.B4.7.13
Fedorova, Daria	S	IAC-23.C4.8-B4.5A.8
Fedyaev, Konstantin	CA	IAC-23.C1.6.9
Feehan, Brendan	CA	IAC-23.A3.3A.3
Feeney, Daniel	S	IAC-23.B3.4-B6.4.6
Fehrler, Sebastian	A	IAC-23.E5.2.1
Fehrler, Sebastian	A	IAC-23.E1.6.4
Felicetti, Leonard	CA	IAC-23.B4.7.6
Felicetti, Leonard	S	IAC-23.D1.4B.11
Felicetti, Leonard	CA	IAC-23.D3.2B.9
Felici, Giuseppe	CA	IAC-23.A1.5.6
Felici, Yannick	CA	IAC-23.E5.4.5
Feliciani, Francesco	CA	IAC-23.E3.1.2
Feltrin, Marcelo	CA	IAC-23.B5.2.7
Ferdinand Ferguson, Alexander Hope	CA	IAC-23.A6.6.9
Ferent, Cristian Florentin	CA	IAC-23.B2.5.6
Ferent, Cristian Florentin	CA	IAC-23.B2.6.4
Fernandes, James Nathan	CA	IAC-23.D3.2B.9

Name		Paper
Futae, Shuhei	CA	IAC-23.D2.1.3
Færgestad, Rannveig Marie	CA	IAC-23.A6.3.6
Förstner, Roger	CA	IAC-23.A6.7.10
Förstner, Roger	CA	IAC-23.D5.1.9
Förstner, Roger	CA	IAC-23.B6.2.2
Förstner, Roger	CA	IAC-23.B6.2.4

G

G, Lokesh kumar	A	IAC-23.A3.1.11
Gabellini, Piero	CA	IAC-23.B2.6.5
Gabrieli, Riccardo	CA	IAC-23.B1.3.3
Gadimov, Tahir	S	IAC-23.E1.5.1
Gadzo, Emir	CA	IAC-23.D5.1.9
Gago, Pau	CA	IAC-23.A6.7.8
Gahirmanova, Narmina	S	IAC-23.A5.2.12
Gai, Igor	CA	IAC-23.E10.2.2
Gaias, Gabriella Vittoria Maria	CA	IAC-23.C1.4.9
Gajbhiye, Apurva	S	IAC-23.A3.4B.5
Gajbhiye, Apurva	CA	IAC-23.D2.8.2
Gajeri, Marco	CA	IAC-23.B2.7.5
Gajjar, Vishal	S	IAC-23.A4.1.1
Gajjar, Vishal	CA	IAC-23.A4.1.4
Gala, Jose	CA	IAC-23.D1.6.7
Galambos, Máté	A	IAC-23.B2.8-GTS.3.5
Galante, Federica	CA	IAC-23.A1.5.6
Galarreta, Daniel	S	IAC-23.D5.2.4
Galeotti, Francesco	CA	IAC-23.B1.3.3
Galindo Jr, Charles	CA	IAC-23.B1.7.8
Gallego Sanmiguel, Pablo	S	IAC-23.D2.7.5
Gallud Cidoncha, Ximo	S	IAC-23.C4.6.1
Gamal, Hamed	CA	IAC-23.A6.6.9
Gambacciani, Giovanni	CA	IAC-23.D2.3.4
Gandia, Fernando	S	IAC-23.A3.2B.3
Gandia, Fernando	S	IAC-23.A3.3B.10
Gandini, Siddarth	CA	IAC-23.A3.1.9
Gangestad, Joseph	S	IAC-23.A6.4.8
Gangil, Namrata	CA	IAC-23.C2.9.10
Ganicheva, Anna	CA	IAC-23.A1.2.4
Gao, Ai	CA	IAC-23.B6.3.8
Gao, Feng	CA	IAC-23.A6.8-E9.1.3
Gao, Jingfei	CA	IAC-23.C4.3.4
Gao, Peng	CA	IAC-23.A3.2B.11
Gao, Peng	CA	IAC-23.B4.8.6
Gao, Tianyu	CA	IAC-23.C2.3.9
Gao, Yushan	S	IAC-23.C4.1.1
Gao, Zhigang	CA	IAC-23.B2.7.8
Garant, Alexis	CA	IAC-23.C1.3.3
Garbayo, Alberto	CA	IAC-23.C4.8-B4.5A.4
Garcia, Dann	CA	IAC-23.D3.1.7
Garcia, Gérald	CA	IAC-23.D1.4A.4
Garcia Alarcia, Ramon Maria	S	IAC-23.D1.4A.6
Garcia Jimenez, Carlos	CA	IAC-23.E2.3-GTS.4.8
García González, Sergio	CA	IAC-23.D1.6.7
Gardella, Federica Joe	A	IAC-23.E5.1.7
Gardi, Alessandro	CA	IAC-23.D1.2.12
Gardi, Roberto	CA	IAC-23.D2.3.4
Gardi, Roberto	CA	IAC-23.D2.5.6
Gardner, Tom	CA	IAC-23.B1.1.8
Garg, Shivam	S	IAC-23.E5.5.3
Garner, Peter	CA	IAC-23.B4.4.4
Garofalo, Riccardo	CA	IAC-23.A2.2.7
Garofalo, Riccardo	CA	IAC-23.B4.6B.10
Garofalo, Riccardo	CA	IAC-23.C2.8.8
Garrett, Michael	CA	IAC-23.A4.2.3
Garrett, Mike	S	IAC-23.A4.1.6
Gartner, Maximilian	S	IAC-23.E7.4.10
Garus, Alexandre	S	IAC-23.C3.2.7
Garza, Andrew	S	IAC-23.E3.4.4
Garzaniti, Nicola	CA	IAC-23.A6.9.10
Garzaniti, Nicola	CA	IAC-23.D1.4A.12
Gasbarri, Paolo	CA	IAC-23.C2.2.6
Gasbarri, Paolo	CA	IAC-23.C2.3.4
Gasbarri, Paolo	CA	IAC-23.C1.2.2
Gasimli, Elkhan	S	IAC-23.D5.4.7

Name		Paper
Gasimova, Rasmiyya	CA	IAC-23.A7.1.8
Gasimova, Zahra	S	IAC-23.D2.9-D6.2.6
Gasımzade, Gulnar	S	IAC-23.E1.8.3
Gasteiner, Léonie	CA	IAC-23.A5.1.8
Gatti, Riccardo	CA	IAC-23.B4.4.1
Gatti, Riccardo	CA	IAC-23.E10.1.2
Gatti, Sylvain	S	IAC-23.B1.3.7
Gatto, Vittorio	CA	IAC-23.D1.4B.10
Gaubert, François	CA	IAC-23.A2.5.7
Gaudan, Sylvain	CA	IAC-23.D1.2.1
Gaudenzi, Paolo	CA	IAC-23.D1.4A.7
Gautel, Gidon	CA	IAC-23.D4.2.2
Gautel, Gidon	S	IAC-23.E6.3.2
Gautel, Gidon	CA	IAC-23.E1.7.9
Gawehn, Thomas	CA	IAC-23.D2.3.4
Ge, Siqiao	S	IAC-23.C4.6.9
Gebrehiwot, Lijalem	A	IAC-23.D2.2.7
Genchi, Giada Graziana	CA	IAC-23.A1.8.6
Genco, Allison	CA	IAC-23.E6.2.4
Genevieve, Kate	S	IAC-23.A4.2.2
Genevieve, Kate	S	IAC-23.A4.2.4
Gennari, Fabrizio	CA	IAC-23.C2.2.6
Gennari, Fabrizio	S	IAC-23.C2.7.3
Genta, Giancarlo	S	IAC-23.E5.1.7
Genta, Giancarlo	CA	IAC-23.A5.2.1
Genta, Giancarlo	S	IAC-23.A5.2.3
Genta, Giancarlo	S	IAC-23.D4.4.7
George, Eric	CA	IAC-23.B6.5.1
George, Tamra	S	IAC-23.B3.8.1
George, Tamra	CA	IAC-23.B3.8.1
Geraldini, Serena	CA	IAC-23.D1.4A.7
Gerbino, Matteo	CA	IAC-23.C4.8-B4.5A.3
Gerlach, Darius	CA	IAC-23.A1.2.5
Germes, Franck	S	IAC-23.E3.6.4
Gewehr, Moritz	A	IAC-23.E1.4.4
Ghiglino, Pablo	CA	IAC-23.C1.5.5
Ghini, Carolina	CA	IAC-23.A5.1.10
Ghini, Carolina	CA	IAC-23.B4.9-GTS.5.6
Ghini, Carolina	CA	IAC-23.E1.9.7
Ghossoub, Piercarlo	CA	IAC-23.E4.3.4
Ghutla, Naitik	CA	IAC-23.D2.6.8
Giacomelli, Umberto	CA	IAC-23.B2.7.9
Giacomuzzo, Cinzia	CA	IAC-23.A6.3.6
Giacomuzzo, Cinzia	CA	IAC-23.A6.3.7
Giannini, Marco	A	IAC-23.D2.3.12
Giannini, Marco	CA	IAC-23.D2.4.10
Giannone, Niccolò	CA	IAC-23.B4.2.5
Giannopapa, Christina	S	IAC-23.B5.3.5
Giannopapa, Christina	S	IAC-23.E5.4.5
Giardino, Claudia	CA	IAC-23.D1.4A.7
Giarrusso, Giovanna	CA	IAC-23.E1.9.7
Gibbs, Joe	A	IAC-23.B4.4.13
Gibbs, Joe	CA	IAC-23.E1.7.9
Gierowski, Jakub	CA	IAC-23.A2.3.6
Gigantino, Antonio	S	IAC-23.B4.7.13
Gil, Daniel	CA	IAC-23.A6.4.9
Gil Fernandez, Jesus	CA	IAC-23.C1.4.7
Gil Natividad, Mirella	CA	IAC-23.A3.2C.3
Gil Natividad, Mirella	CA	IAC-23.GTS.2-B3.9.6
Gil-Fernandez, Jesus	CA	IAC-23.C1.6.2
Gili, Alfredo	CA	IAC-23.B4.6B.9
Gill, Eberhard	CA	IAC-23.C1.5.10
Gioia, Marina	CA	IAC-23.B2.7.9
Giordana, Gabriele	CA	IAC-23.B2.4.3
Giordana, Gabriele	CA	IAC-23.B6.2.7
Giorgio, Vincenzo	S	IAC-23.A3.3A.5
Giorgio, Vincenzo	S	IAC-23.D2.6.3
Giovannini, Cecilia	CA	IAC-23.C3.1.9
Giovara, Tommaso	CA	IAC-23.D1.4B.10
Girard, Margot	CA	IAC-23.D3.2A.8
Giri, Dipak Kumar	CA	IAC-23.E2.2.1
Giridhar, Deeptha	S	IAC-23.A3.3B.11
Giridhar, Deeptha	CA	IAC-23.B3.7.4
Giuffrè, Stefan Ario	A	IAC-23.C2.7.3
Giugliarelli, Marco	CA	IAC-23.B4.6B.11

Name		Paper
Giunti, Lorenzo	CA	IAC-23.B1.3.3
Giunti, Lorenzo	CA	IAC-23.B1.3.6
Giuseppe, Caggiano	CA	IAC-23.C4.1.5
Giza, Marcin	S	IAC-23.E1.6.8
Glavin, Daniel	CA	IAC-23.A3.3A.4
Gloder, Alessia	A	IAC-23.C2.8.4
Glukhova, Elizaveta	CA	IAC-23.E5.5.5
Godfrey, Alex	S	IAC-23.A6.6.1
Godin, Cédric	CA	IAC-23.C1.3.3
Goh, Lian Ming	S	IAC-23.B4.6A.10
Gokten, Mesut	CA	IAC-23.A3.2B.1
Goldberg, Hannah	CA	IAC-23.E10.1.2
Goldman, Bertrand	CA	IAC-23.E1.8.1
Goldman, Bertrand	CA	IAC-23.A1.8.11
Golikov, Alexander	CA	IAC-23.C4.9.7
Golkar, Alessandro	CA	IAC-23.D1.4A.6
Golkar, Alessandro	CA	IAC-23.B4.7.5
Golkar, Alessandro	CA	IAC-23.D1.4B.2
Golpa, Prapty Majumder	CA	IAC-23.A2.4.9
Golpa, Prapty Majumder	CA	IAC-23.E3.6.3
Gomes, Ricardo	CA	IAC-23.A3.2A.9
Gomi, Atsuhiro	CA	IAC-23.E2.3-GTS.4.6
Goncharova, Anna	CA	IAC-23.A1.2.6
Goncharova, Anna	CA	IAC-23.A1.2.11
Gonella, Marco	CA	IAC-23.C1.3.1
Gong, Chunlin	CA	IAC-23.C2.4.1
Gong, Shengping	CA	IAC-23.C4.10-C3.5.3
Gong, Yukun	CA	IAC-23.D2.1.1
Gong, Zizheng	S	IAC-23.A6.3.1
Gong, Zizheng	S	IAC-23.A6.3.10
Gong, Zizheng	S	IAC-23.E10.1.6
Gong, Zizheng	S	IAC-23.E10.2.6
Gontier, Camille	CA	IAC-23.A2.6.7
Gonzales Sáenz, Gaus Abdul	CA	IAC-23.A1.7.2
Gonzalez del Amo, Jose	CA	IAC-23.C4.5.4
Gonzalez Fernandez, Alberto	CA	IAC-23.D1.4A.4
Gonzalez Machado, Alejandro	CA	IAC-23.C4.8-B4.5A.4
Gonzalez-Fallas, Andres	CA	IAC-23.C2.2.7
Gonzalez-Fallas, Andres	CA	IAC-23.C2.9.7
Gonzalo, Juan Luis	CA	IAC-23.A6.7.8
Gonzalo, Juan Luis	A	IAC-23.A6.2.6
Gonzalvez Rubio, Alba	CA	IAC-23.B5.2.7
González, André	CA	IAC-23.B1.7.8
González Martínez, Óscar	S	IAC-23.A6.2.8
González-Alcázar, Abigail	CA	IAC-23.C2.2.7
González-Alcázar, Abigail	S	IAC-23.C2.9.7
Gonçalves, Luciana	A	IAC-23.D6.3.7
Gonçalves, Luís	S	IAC-23.E2.1.5
Gonçalves, Rene	S	IAC-23.C4.3.1
Gonçalves, Rene	S	IAC-23.C4.4.2
Gonçalves, Rene	S	IAC-23.D6.3.7
Goodliff, Kandyce	CA	IAC-23.A3.1.1
Goodson, Troy	CA	IAC-23.C1.6.7
Gopal, Navin	S	IAC-23.E3.3.4
Gorbacheva, Elena	S	IAC-23.A1.2.1
Gorgerino, Giacomo	CA	IAC-23.B4.6B.9
Gori, Leonella	S	IAC-23.E3.3.5
Gorina, Natalia	S	IAC-23.B1.1.8
Goruputi, Chaitanya	CA	IAC-23.B6.3.7
Gossack, Sophie	CA	IAC-23.B1.1.3
Goswami, Nandu	S	IAC-23.A1.3.2
Gottini, Daniele	CA	IAC-23.A3.4A.6
Gottzein, Eveline	A	IAC-23.E4.2.7
Gotzig, Ulrich	S	IAC-23.C4.2.1
Gou, Jian-Jun	S	IAC-23.C2.4.1
Gough, Kerry	CA	IAC-23.A3.3A.3
Governale, Giuseppe	CA	IAC-23.D2.3.4
Governale, Giuseppe	S	IAC-23.D2.9-D6.2.4
Goyal, Vidhi	S	IAC-23.C4.6.12
Gozzelino, Michele	CA	IAC-23.B2.7.9
Grabowski, Damian	S	IAC-23.C4.2.7
Gracia García-Lisbona, Juan	A	IAC-23.D5.1.6
Graczyk, Hubert	CA	IAC-23.D2.6.10
Graczyk, Hubert	CA	IAC-23.D2.7.8
Graczyk, Rafal	S	IAC-23.D1.2.8

Name		Paper
Graham, Thomas	S	IAC-23.E7.1.8
Graja, Adrianna	S	IAC-23.A2.2.3
Gramillano, Erika	CA	IAC-23.A5.1.10
Grande, Antonio	CA	IAC-23.C2.5.5
Grande, Antonio Mattia	CA	IAC-23.D3.2A.7
Grandl, Werner	S	IAC-23.B3.3.1
Grassi, Michele	CA	IAC-23.B4.4.3
Grassi, Michele	CA	IAC-23.A6.6.4
Grasso, Gerardo	CA	IAC-23.A1.7.13
Grasso, Marco	S	IAC-23.C2.5.6
Grasso, Marco	S	IAC-23.B4.6B.2
Grattagliano, Paola	CA	IAC-23.A3.5.5
Grattan, Kyran	CA	IAC-23.E6.3.2
Grauby, Jules	CA	IAC-23.A6.7.4
Grazia Maria, Fiore	S	IAC-23.E5.4.4
Graziani, Filippo	S	IAC-23.B4.5A-C4.8.5
Graziano, Maria Daniela	CA	IAC-23.B4.4.3
Graziano, Maria Daniela	A	IAC-23.B4.7.13
Graziano, Mariella	S	IAC-23.A3.4B.3
Green, James	S	IAC-23.D2.1.2
Green, James	CA	IAC-23.D4.1.5
Green, Simon	CA	IAC-23.A3.4B.1
Green, Thomas	A	IAC-23.E7.2.8
Greenhalgh, Diego	S	IAC-23.E3.1.8
Greenhalgh, Diego	CA	IAC-23.GTS.2-B3.9.6
Greiff, Marcus	CA	IAC-23.C1.5.9
Greisman Ran, Uri	S	IAC-23.B1.2.5
Greisman Ran, Uri	S	IAC-23.B1.3.8
Gres, Tania	S	IAC-23.B3.5.7
Gres, Tania	A	IAC-23.B3.9-GTS.2.4
Gribben, Joshua	S	IAC-23.C1.7.4
Griesbach, Rene	S	IAC-23.B4.4.2
Griffith, Ryan	CA	IAC-23.A2.7.1
Griffith, Tristan	CA	IAC-23.C2.7.6
Grishin, Alexey	CA	IAC-23.A1.2.4
Grishin, Alexey	CA	IAC-23.B3.8.5
Grishko, Dmitriy	CA	IAC-23.A6.4.6
Grishko, Dmitriy	S	IAC-23.A6.5.7
Grizzaffi, Lucia	CA	IAC-23.D1.4B.3
Gromadzki, Mariusz	CA	IAC-23.A7.3.3
Gromeš, Jan	CA	IAC-23.B4.2.1
Gros, Martin	S	IAC-23.C4.3.5
Gross, Hubert	CA	IAC-23.B4.4.6
Grossi, Marco	CA	IAC-23.C4.1.6
Grossi, Marco	CA	IAC-23.C4.2.10
Grossmann, Steffen	CA	IAC-23.D1.3.5
Grossmann, Steffen	CA	IAC-23.E2.3-GTS.4.5
Grott, Matthias	CA	IAC-23.A3.4A.5
Grover, Kotish	CA	IAC-23.B4.6B.11
Grundmann, Jan Thimo	CA	IAC-23.E3.2.5
Grunwald, Gerhard	CA	IAC-23.A5.3-B3.6.1
Grusin, Mike	CA	IAC-23.A2.7.1
Gryaznov, Ivan	CA	IAC-23.C3.4.1
Grzebyk, Tomasz	CA	IAC-23.A3.3B.3
Grégoire, Yohan	CA	IAC-23.A3.4B.4
Gscheidle, Christian	CA	IAC-23.D4.1.1
Gu, Lingyun	CA	IAC-23.B3.3.5
Gu, Qingbo	CA	IAC-23.A6.8-E9.1.3
Gu, Yuzhuo	CA	IAC-23.A6.5.5
Guadalupi, Marco	CA	IAC-23.B2.3.12
Guajardo, David F	CA	IAC-23.B3.9-GTS.2.3
Guarín-Zapata, Nicolás	CA	IAC-23.E2.1.1
Guerineau, Aurelie	CA	IAC-23.C1.7.8
Guerman, Anna	CA	IAC-23.B4.7.12
Guerra, Alba	CA	IAC-23.A3.2B.3
Guerra, Alba	CA	IAC-23.A3.3B.10
Guerra, Andre	S	IAC-23.B4.7.11
Guerra, Diego	S	IAC-23.A6.8-E9.1.5
Guerra Mentruit, Alejandro	CA	IAC-23.B5.2.7
Guerrero Rocha, Jorge Emiliano	CA	IAC-23.C4.6.2
Guerrieri, Pietro	CA	IAC-23.D2.2.5
Guerriero, Leila	CA	IAC-23.B4.4.4
Guglielmini, Lorenzo	CA	IAC-23.E2.4.3
Gugliermetti, Luca	CA	IAC-23.B4.3.2
Gugliermetti, Luca	CA	IAC-23.A2.2.7

Name		Paper
Gugliermetti, Luca	CA	IAC-23.A5.1.10
Gugliermetti, Luca	CA	IAC-23.C2.8.8
Gugliermetti, Luca	CA	IAC-23.E1.9.7
Guha Majumder, Chiranjib	S	IAC-23.C1.2.9
Gui, Celine Si Ying	CA	IAC-23.A3.1.2
Gui, Celine Si Ying	A	IAC-23.D3.3.6
Guida, Riccardo	CA	IAC-23.C4.4.7
Guida, Riccardo	CA	IAC-23.C4.8-B4.5A.9
Guidotti, Giuseppe	A	IAC-23.D2.3.4
Guimarae, Lamartine	CA	IAC-23.E3.2.5
Guimaraes, Marta	S	IAC-23.A6.7.5
Guimaraes, Marta	S	IAC-23.A6.4.4
GUIRAUD, Julie	S	IAC-23.B6.1.6
Gujarathi, Dhananjay Ashok	S	IAC-23.E2.4.11
Gulacsi, Eszter	CA	IAC-23.E5.1.6
Guliyev, Farid	S	IAC-23.B2.7.11
Guliyev, Farid	CA	IAC-23.C3.3.2
Guliyeva, Narmina	CA	IAC-23.C2.1.1
Guliyeva, Sona	S	IAC-23.E1.3.9
Guliyeva, Sona	CA	IAC-23.B1.5.2
Guliyeva, Sona	CA	IAC-23.B1.5.8
Guliyeva, Sona	CA	IAC-23.B1.6.9
Guliyeva, Zarifa	S	IAC-23.C3.2.8
Gumieniak, Mateusz	A	IAC-23.A2.2.3
Gunadi, Sunartoto	CA	IAC-23.B4.1.7
Gunawan, Roberto	CA	IAC-23.B4.1.7
Guo, Chengjun	S	IAC-23.B2.5.9
Guo, Junyi	CA	IAC-23.E5.3.3
Guo, MengFei	S	IAC-23.C2.4.8
Guo, Ming	CA	IAC-23.A1.3.13
Guo, Xiaoxi	CA	IAC-23.E3.2.4
Guo, Yanning	S	IAC-23.C1.1.8
Guo, Yanning	CA	IAC-23.C1.7.5
Guo, Yufei	CA	IAC-23.C1.8.4
Guo, Yufei	CA	IAC-23.A3.2A.12
Guoguang, Xu	CA	IAC-23.D2.1.1
Gupta, Arpit	S	IAC-23.E7.7.5
Gupta, Manav	CA	IAC-23.GTS.2-B3.9.6
Gupta, Mansi	S	IAC-23.C3.3.7
Gupta, Vriddhi	CA	IAC-23.B2.2.1
Guracho, Aboma Negasa	CA	IAC-23.A1.5.8
Gurbanova, Ravana	A	IAC-23.C2.1.1
Gurvits, Leonid	S	IAC-23.A7.2.2
Gushin, Vadim	CA	IAC-23.A1.4.1
Gusowski, Marek	CA	IAC-23.C2.8.7
Gut, Zbigniew	CA	IAC-23.C4.1.2
Gutierrez, Elizabeth	CA	IAC-23.D1.3.5
Gutierrez, Elizabeth	CA	IAC-23.E2.3-GTS.4.5
Gutierrez, Elizabeth	CA	IAC-23.B4.7.9
Gutierrez, Jermaine	CA	IAC-23.D3.3.7
Gutiérrez Moreno, María Fernanda	CA	IAC-23.A1.7.2
Gutowska, Magdalena	CA	IAC-23.D1.1.1
Guven, Ugur	S	IAC-23.A5.4.1
Guven, Ugur	S	IAC-23.D3.1.10
Guven, Ugur	S	IAC-23.D6.3.2
Guven, Ugur	S	IAC-23.C4.9.10
Guven, Ugur	S	IAC-23.D2.8.5
Guyon, Vincent	CA	IAC-23.C4.5.6
Guziewicz, Wojciech	CA	IAC-23.A3.2C.3
Guzzi, Salvatore	CA	IAC-23.B2.7.2
Gyu, Yoshinari	CA	IAC-23.B4.3.3
Gómez García, Abner Uriel	CA	IAC-23.A2.6.5
Gül, Emirhan Eser	CA	IAC-23.A3.5.6
Gützlaff, Joel	S	IAC-23.D1.2.11

H

H, Faheem	CA	IAC-23.C2.1.8
Ha, Jong-Sung	CA	IAC-23.B1.1.5
Habteslasie, Eden	S	IAC-23.D2.2.7
Haciyev, Qurban	CA	IAC-23.A5.3-B3.6.4
Hadda, Kada	CA	IAC-23.C2.3.3
Haghgoo, Newsha	CA	IAC-23.A3.1.2
Haghgoo, Newsha	CA	IAC-23.D3.3.6
Haile, Helen	CA	IAC-23.B3.5.7

Name		Paper
Haipeng, Chen	CA	IAC-23.D4.3.5
Haipeng, Chen	CA	IAC-23.A5.2.1
Halawa, Sultan	CA	IAC-23.B2.8-GTS.3.9
Halawa, Sultan	S	IAC-23.B5.1.5
Hale, Thomas	S	IAC-23.E2.2.9
Hale, Thomas	CA	IAC-23.A6.8-E9.1.5
Hall, Howard	CA	IAC-23.A3.2B.4
Hall, John	CA	IAC-23.A3.3A.4
Haltigin, Timothy	CA	IAC-23.A3.3A.1
Halvorson, Michael	S	IAC-23.D1.4B.5
Hameed, Hamza	S	IAC-23.E3.1.9
Hameed, Hamza	S	IAC-23.E7.3.9
Hamel, Jean-Francois	S	IAC-23.C1.3.3
Hamill, Duncan	S	IAC-23.A3.3A.6
Hamill, Duncan Robert	CA	IAC-23.A3.3B.8
Hamilton, Warren	CA	IAC-23.A3.3B.8
Hammad, May	S	IAC-23.B2.1.2
Hammad, Menatallh	CA	IAC-23.B2.1.2
Hamouch, Said	CA	IAC-23.D6.1.3
Hamurcu, Eren	CA	IAC-23.A6.9.8
Han, Guanchao	S	IAC-23.C4.3.6
Han, Na	CA	IAC-23.C3.3.5
Han, Peng	CA	IAC-23.C1.7.5
Han, Siyuan	CA	IAC-23.E7.2.1
Hanada, Toshiya	CA	IAC-23.A6.4.3
Hanada, Toshiya	CA	IAC-23.A6.2.2
Hanson, Lauren	CA	IAC-23.A6.8-E9.1.5
Hanson, Svetlana	CA	IAC-23.E9.2.10
Haque, Md. Mahbub Ul	S	IAC-23.B1.3.1
Hara, Yushin	CA	IAC-23.C2.9.1
Harada, Masanori	CA	IAC-23.C4.1.7
Harada, Masanori	CA	IAC-23.C4.7.8
Harada, Ryusuke	S	IAC-23.A6.4.3
Harada, Ryusuke	CA	IAC-23.A6.2.2
Harald, Hiesinger	CA	IAC-23.A3.2A.9
Harasymczuk, Matt	CA	IAC-23.A1.1.5
Harasymczuk, Matt	CA	IAC-23.B3.7.11
Harayama, Atsushi	CA	IAC-23.D1.5.10
Hargitai, Henrik	CA	IAC-23.A3.2A.9
Hariharan, Shravan	S	IAC-23.B6.2.3
Harmon, Kathleen	S	IAC-23.B3.4-B6.4.1
Harmon, Kathleen	CA	IAC-23.B6.1.8
Harnoufi, Bouchra	CA	IAC-23.B3.5.7
Harpur, James	S	IAC-23.B4.4.1
Harpur, James	S	IAC-23.E10.1.2
Harrington, Andrea	S	IAC-23.E9.3.3
Harris, John Patrick	S	IAC-23.C2.9.9
Harris, Toby	CA	IAC-23.D1.4B.11
Hart, Angela	CA	IAC-23.B3.2.1
Hart, Samuel	CA	IAC-23.D5.3.6
Hartono, Romy	CA	IAC-23.B4.1.7
Hasan, Md Shakil	CA	IAC-23.E5.4.8
Hasanov, Asad	S	IAC-23.D1.1.7
Hasanov, Mehman	CA	IAC-23.A3.3B.9
Hasanov, Mehman	CA	IAC-23.B2.6.7
Hasanova, Afsana	CA	IAC-23.C2.1.1
Hasanova, Narmin	CA	IAC-23.B2.2.11
Hasbi, Wahyudi	S	IAC-23.B4.1.7
Hasegawa, Mao	CA	IAC-23.E5.3.3
Hashimoto, Tatsuaki	S	IAC-23.B4.8.2
Haskett, Roman	CA	IAC-23.D3.2B.9
Haslehurst, Andrew	CA	IAC-23.B4.6A.9
Hasselmann, Pedro Henrique	CA	IAC-23.E10.2.2
Hatada, Kojiro	CA	IAC-23.D2.4.3
Hatzopoulos, Alkiviadis	CA	IAC-23.E2.4.7
Hauber, Ernst	CA	IAC-23.A3.2A.9
Hauschildt, Harald	CA	IAC-23.B2.3.1
Hauschner, Hagit	CA	IAC-23.A1.7.4
Havlicek, Vaclav	CA	IAC-23.B4.4.8
Hawkes, James	CA	IAC-23.B1.4.3
Hawkins, Lakiesha	CA	IAC-23.B3.1.7
Hawkins, Lakiesha	CA	IAC-23.E6.2.4
HAYASHI, Takuto	S	IAC-23.A1.8.3
Hayashi, Yuta	S	IAC-23.C1.2.3
Haynes, Mark	CA	IAC-23.A3.4B.4

Name		Paper
He, Fengping	CA	IAC-23.C4.6.9
He, Guanwei	S	IAC-23.C4.10-C3.5.5
HE, Weiguo	S	IAC-23.C4.9.9
He, Xiaoyu	CA	IAC-23.B6.1.7
He, Yuchen	S	IAC-23.C1.7.3
He, Yunhan	CA	IAC-23.B4.7.7
He, Zhiying	CA	IAC-23.A3.3B.4
Hecht, Michael	CA	IAC-23.B6.2.3
Hedman, Niklas	CA	IAC-23.A3.1.4
Heemskerk, Marc	S	IAC-23.A5.1.9
Heemskerk, Marc	A	IAC-23.B3.4-B6.4.9
Hefele, John	CA	IAC-23.B4.4.1
Hegde, Sanat	S	IAC-23.A2.2.2
Heil, Melanie	CA	IAC-23.B4.2.1
Hein, Andreas	CA	IAC-23.C1.4.2
Hein, Andreas	CA	IAC-23.D1.4A.13
Hein, Andreas	CA	IAC-23.B4.7.2
Hein, Andreas Makoto	CA	IAC-23.D1.1.5
Hein, Andreas Makoto	CA	IAC-23.B2.3.5
Heinz, Nicolas	CA	IAC-23.D1.3.5
Heinz, Nicolas	A	IAC-23.E2.3-GTS.4.5
Heinz, Nicolas	CA	IAC-23.B4.6A.1
Heizmann, Sören	CA	IAC-23.D4.1.1
Hellweg, Christine	CA	IAC-23.A1.8.5
Hemanth, Hemanth	CA	IAC-23.B3.2.3
Henke, Martin	A	IAC-23.E5.6.7
Henriques, Ana	CA	IAC-23.E2.3-GTS.4.7
Herbst, Tobias	CA	IAC-23.E2.3-GTS.4.11
Herdies, Giulia	A	IAC-23.D1.4B.7
Herdrich, Georg	CA	IAC-23.D1.3.5
Herdrich, Georg	CA	IAC-23.E2.3-GTS.4.5
Herdrich, Georg	CA	IAC-23.D2.5.4
Herdrich, Georg	CA	IAC-23.B4.6A.1
Herique, Alain	CA	IAC-23.A3.4B.4
Hermosin, Pablo	CA	IAC-23.A6.4.9
Hernandez Gonzalez, Alejandro	CA	IAC-23.E1.9.12
Hernández, Carol Ixchel	CA	IAC-23.E1.9.12
Hernández Lorente, Guillermo	CA	IAC-23.B4.6B.11
Herraiz Alijas, Pedro	CA	IAC-23.C4.8-B4.5A.3
Herrera, Alejandro	CA	IAC-23.A1.7.9
Herrera, Cameron	A	IAC-23.E3.3.1
Herrera, Cameron	A	IAC-23.D2.7.1
Herrera-Jordan, Katherinne	CA	IAC-23.A2.3.3
Herrmann, Nicole	CA	IAC-23.B1.1.3
Hesham, Aya	S	IAC-23.A1.3.3
Hesham, Aya	A	IAC-23.E6.1.12
Hess, Kai-Uwe	CA	IAC-23.C2.2.12
Heutling, Theodor	S	IAC-23.D3.2B.1
Hewawasam, Dasuni	S	IAC-23.E3.2.6
Hewawasam, Dasuni	CA	IAC-23.B4.5.5
Hewing, Lukas	CA	IAC-23.D2.6.8
Higashigawa, Shuji	CA	IAC-23.C3.2.13
Higuchi, Ryo	S	IAC-23.C2.2.3
Hijlkema, Jouke	CA	IAC-23.D3.2B.1
Hilchenbach, Martin	S	IAC-23.A3.4A.7
Hill, Hugh	CA	IAC-23.E1.8.1
Hill, William	CA	IAC-23.B4.2.1
Hillebrandt, Martin	CA	IAC-23.D1.3.13
Hillertz, Gabriel	CA	IAC-23.E2.3-GTS.4.3
Hinkelbein, Jochen	CA	IAC-23.A2.7.6
Hinojo, Boris	CA	IAC-23.B1.5.12
Hiraiwa, Naoki	S	IAC-23.C1.9.2
Hiraiwa, Naoki	CA	IAC-23.C1.3.10
Hiraiwa, Naoki	CA	IAC-23.C1.6.6
Hiraiwa, Naoki	CA	IAC-23.C1.6.10
Hiraiwa, Naoki	CA	IAC-23.C1.7.2
Hirakoso, Nobuto	CA	IAC-23.E1.3.5
Hirasawa, Ryo	CA	IAC-23.B4.8.2
Hirayama, Ryuichi	CA	IAC-23.B2.3.7
Hirayama, Shodai	S	IAC-23.C1.7.2
Hiremath, Akshay Rajshekhar	S	IAC-23.A1.5.9
Hiremath, Akshay Rajshekhar	S	IAC-23.A3.5.6
Hiremath, Akshay Rajshekhar	S	IAC-23.C3.4.10
Hiremath, Shivayya	CA	IAC-23.A2.4.1
Hiremath, Shivayya	S	IAC-23.A2.4.2

Name		Paper
Hirohide, Ikeda	CA	IAC-23.C4.4.11
Hirose, Chikako	CA	IAC-23.B4.8.2
Hirose, Tomoyuki	CA	IAC-23.A3.2B.13
Hirsch, Mike	CA	IAC-23.A2.7.1
Hirvonen, Mika	CA	IAC-23.A2.5.7
Ho, David Lit Xian	CA	IAC-23.D4.2.5
Ho, Koki	CA	IAC-23.D1.2.2
Hobbs, Stephen	CA	IAC-23.B4.7.6
Hobbs, Stephen	CA	IAC-23.D1.4B.11
Hoehn, Alexander	CA	IAC-23.A2.7.1
Hoel, Karina Vieira	CA	IAC-23.B4.4.12
Hoffman, Jeffrey	CA	IAC-23.B6.2.3
Hoffmann, Fabian	CA	IAC-23.A1.2.5
Hofmann, Mahulena	S	IAC-23.E7.7.3
Hofmann, Sonja	CA	IAC-23.D1.3.5
Hofmann, Sonja	CA	IAC-23.E2.3-GTS.4.5
Hokamoto, Shinji	CA	IAC-23.C1.9.2
Hokamoto, Shinji	CA	IAC-23.C1.2.3
Hokamoto, Shinji	CA	IAC-23.C1.3.10
Hokamoto, Shinji	CA	IAC-23.C1.6.6
Hokamoto, Shinji	CA	IAC-23.C1.7.2
Holik, Michael	S	IAC-23.A3.2B.8
Hollingsworth, Keith	CA	IAC-23.C4.10-C3.5.9
Hollo, Csaba	CA	IAC-23.B2.8-GTS.3.5
Holm, Jeanne	S	IAC-23.B5.2.2
Holm, Jeanne	S	IAC-23.B5.3.1
Holm, Jeanne	S	IAC-23.D3.3.9
Holm, Kaitlyn	S	IAC-23.B1.1.7
Holm, Kaitlyn	S	IAC-23.D5.2.3
Holm, Kaitlyn	S	IAC-23.E6.5-GTS.1.2
Holm, Kaitlyn	S	IAC-23.E5.4.12
Holm, Kaitlyn	S	IAC-23.E6.1.9
Holmen, Jens Kristian	CA	IAC-23.A6.3.6
Holzer, Paul	CA	IAC-23.E2.3-GTS.4.11
Hong, Gang	S	IAC-23.D2.1.4
Hong, Xin	S	IAC-23.C4.1.8
Honjo, Kazuhiko	CA	IAC-23.C3.1.3
Honjo, Kazuhiko	CA	IAC-23.C3.2.2
Hopej, Kaja	CA	IAC-23.E6.3.5
Hopej, Kaja	S	IAC-23.E3.3.2
Hopej, Kaja	CA	IAC-23.E9.1-A6.8.12
Hornig, Andreas	S	IAC-23.D1.5.4
Hornig, Andreas	S	IAC-23.B6.5.2
Hornig, Andreas	S	IAC-23.B6.5.7
Hornuf, Lars	CA	IAC-23.E5.2.1
Hornuf, Lars	S	IAC-23.E1.6.4
Horstmann, Andre	CA	IAC-23.A6.4.2
Hoschlova, Eva	A	IAC-23.A1.1.7
Hoshino, Takeshi	CA	IAC-23.A3.2A.5
Hosonuma, Takayuki	CA	IAC-23.B2.3.7
Hou, Liqiang	S	IAC-23.C1.7.10
Hou, Xinbin	S	IAC-23.C3.1.6
Hou, Xinbin	CA	IAC-23.C3.4.4
Houts, Jacquelynne	CA	IAC-23.D3.2A.2
Houts, Michael	CA	IAC-23.C4.10-C3.5.9
Howell, Kathleen	CA	IAC-23.C1.6.1
Howlett, Jodie	S	IAC-23.E1.7.9
Hoying, Madelyn	S	IAC-23.A5.2.10
Hsieh, Jordan	S	IAC-23.C4.5.12
Hu, Jiaxin	CA	IAC-23.C2.4.1
Hu, Ping	CA	IAC-23.A1.3.13
Hu, Xiting	CA	IAC-23.D2.2.3
Huang, Adam	CA	IAC-23.B4.3.6
Huang, Chuying	CA	IAC-23.E7.7.12
Huang, Degang	CA	IAC-23.B1.4.7
Huang, Hai	CA	IAC-23.E2.4.4
Huang, Jinbang	CA	IAC-23.D4.3.6
Huang, Lei	CA	IAC-23.A3.2B.11
Huang, Lei	CA	IAC-23.B4.8.6
Huang, Peng	CA	IAC-23.C4.7.3
Huang, Taihe	CA	IAC-23.B3.6-A5.3.8
Huang, Xiaofeng	CA	IAC-23.B2.4.2
Hueber, Guillaume	S	IAC-23.E2.2.3
Huegens, Théo	CA	IAC-23.B4.4.6
Hugar, Vishal	S	IAC-23.A2.4.1

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Hugar, Vishal	CA	IAC-23.A2.4.2
Hugar, Vishal	CA	IAC-23.C4.7.6
Huh, Jeongmoo	CA	IAC-23.C4.8-B4.5A.14
Humeau, Olivier	CA	IAC-23.A3.5.9
Humphries, Joe	A	IAC-23.E9.1-A6.8.7
Hunstad, Ingrid	CA	IAC-23.E1.6.10
Huo, Weijie	CA	IAC-23.C4.9.9
Hurova, Anna	CA	IAC-23.E7.4.9
Hurova, Anna	S	IAC-23.E1.9.1
Hurrell, James	S	IAC-23.A3.2C.12
Husarova, Iryna	S	IAC-23.A5.1.4
Husarova, Iryna	CA	IAC-23.C2.4.2
Huschke, Alexander	S	IAC-23.A3.2C.10
Huser, Jérémie	CA	IAC-23.E2.2.3
Huseynov, Elvin	S	IAC-23.E5.2.9
Huseynov, Vali	S	IAC-23.A7.1.8
Hussain, Khaja Faisal	S	IAC-23.D1.2.12
Hussain, Musadiq	CA	IAC-23.B1.5.8
Hussain, Sabir	CA	IAC-23.B2.2.7
Hussein, Amira	CA	IAC-23.B1.2.7
Hutchison, Ava	S	IAC-23.A3.2C.3
Hutter, Marco	CA	IAC-23.A3.2B.7
Hutter, Marco	CA	IAC-23.D1.6.10
Huun, Jack	CA	IAC-23.B4.8.12
Huzain, M. Farid	CA	IAC-23.B4.1.7
Hužva, Michal	CA	IAC-23.A1.1.7
Hyodo, Shoyo	S	IAC-23.D2.1.3
Hyży, Bartosz	CA	IAC-23.C4.3.10
Hänninen, Pekka	CA	IAC-23.A2.5.7
Hönemann, Jan-Niklas	CA	IAC-23.A1.2.5
Høyland, Per	S	IAC-23.E3.1.6
Hübers, Heinz-Wilhelm	CA	IAC-23.A3.4A.5
Hülsen, Benjamin	CA	IAC-23.D1.2.11
Hülsmann, Maren	S	IAC-23.B6.2.4
Hüseynli, Kənan	CA	IAC-23.E6.3.1
I		
Iacomino, Clelia	CA	IAC-23.E3.3.5
Iacomino, Clelia	CA	IAC-23.E3.4.1
Iacomino, Clelia	S	IAC-23.A6.8-E9.1.10
Iacurto, Cristian	CA	IAC-23.B2.1.9
Iannascoli, Lorenzo	CA	IAC-23.B4.2.4
Iannascoli, Lorenzo	A	IAC-23.B4.4.3
Iannelli, Paolo	CA	IAC-23.C2.3.4
Iaquinandi, Francesco Maria	CA	IAC-23.D1.4A.7
Ibarra, Kenneth John	CA	IAC-23.B4.1.5
Ibeneme, Emeka	CA	IAC-23.E9.2.1
Ibrahimli, Gunkhan	S	IAC-23.B2.2.3
Ibrahimli, Gunkhan	CA	IAC-23.D2.7.2
Ibrahimli, Imran	CA	IAC-23.B1.4.6
Ibrahimov, Islam	CA	IAC-23.C2.6.9
Ibrahimova, Sevda R.	S	IAC-23.B5.1.1
Ichikawa, Tsutomu	CA	IAC-23.B6.1.8
Iderawumi, Mustapha	S	IAC-23.D5.2.6
Idiondo, Xabier	CA	IAC-23.D3.2B.9
Ierardo, Nicola	CA	IAC-23.C4.1.5
Ieronymaki, Maria	CA	IAC-23.B6.1.5
Ifkovics, Barnabás	S	IAC-23.B2.8-GTS.3.4
Igarashi, Shinji	CA	IAC-23.C4.4.11
Ignjatovic Stupar, Danijela	CA	IAC-23.B1.7.1
Igritsky, Vladimir	CA	IAC-23.A3.5.4
Iguchi, Kotaro	S	IAC-23.C4.7.8
Ijichi, Koichi	S	IAC-23.C3.1.3
Ijichi, Koichi	CA	IAC-23.C3.2.2
Ikari, Satoshi	CA	IAC-23.B1.2.6
Ikari, Satoshi	CA	IAC-23.C4.8-B4.5A.1
Ikari, Satoshi	CA	IAC-23.B4.8.3
Ikari, Satoshi	CA	IAC-23.A7.3.5
Ikeda, Mitsumasa	CA	IAC-23.E1.3.5
Ilagan, Lorena	CA	IAC-23.B4.1.8
Illegitim, Sabin	CA	IAC-23.C2.2.4
Ilott, Ashvi	CA	IAC-23.B4.8.4
Ilott, Ashvi	CA	IAC-23.B4.6A.2
Ilyin, Evgenii	CA	IAC-23.A6.9.5

Name		Paper
Im, HyeonJun	CA	IAC-23.C4.4.10
Im, Sung-Hyuck	CA	IAC-23.D2.7.3
Imada, Takane	S	IAC-23.A3.4A.4
Imai, Kazumasa	CA	IAC-23.E1.3.5
Imai, Masazumi	CA	IAC-23.A6.8-E9.1.5
Imaizumi, Mitsuru	CA	IAC-23.C3.3.11
Imamura, Hiroshi	S	IAC-23.A3.4A.3
Imanova, Zahra	S	IAC-23.E1.9.4
Impiccichè, Giuseppe	CA	IAC-23.B1.3.3
Impresario, Gabriele	CA	IAC-23.B4.2.4
Impresario, Gabriele	CA	IAC-23.B4.8.10
Impresario, Gabriele	A	IAC-23.E10.2.2
Imre, Sandor	CA	IAC-23.B2.8-GTS.3.5
Inada, Hitomi	CA	IAC-23.C3.1.3
Inada, Hitomi	CA	IAC-23.C3.2.2
Inamdar, Samrudhi	CA	IAC-23.A3.5.6
Inamori, Takaya	S	IAC-23.B4.7.15
Inbar, Tal	S	IAC-23.E4.2.8
Inbar, Tal	S	IAC-23.E4.2.9
Infante, Giuseppe Maria	CA	IAC-23.D2.5.6
Ingenito, Antonella	CA	IAC-23.C4.7.2
Ingenito, Antonella	CA	IAC-23.C4.8-B4.5A.12
Inoue, Fumihiro	S	IAC-23.D4.3.9
Inoue, Fumihiro	A	IAC-23.D4.3.10
Intra, Davide	CA	IAC-23.A3.5.5
Inue, Soichiro	CA	IAC-23.B2.3.7
Ioann, Kogan	S	IAC-23.A1.7.5
Ionescu, Bianca	CA	IAC-23.B4.6A.11
Ioppolo, Pietro	CA	IAC-23.A1.7.13
Iossa, Luisa	S	IAC-23.B4.6B.9
Iossa, Luisa	S	IAC-23.D1.4B.10
Ippolito, Annachiara	CA	IAC-23.C3.4.1
Iqtiad, Ajmain	A	IAC-23.E5.4.8
Iranmanesh, Mohammad	S	IAC-23.B1.6.12
Iranmanesh, Mohammad	S	IAC-23.A2.6.7
Isachenkov, Maxim	S	IAC-23.D3.2A.7
Isgenderli, Tuncay	A	IAC-23.C2.7.4
Ishido, Shimpei	S	IAC-23.E7.3.11
Ishikawa, Akihiro	CA	IAC-23.B4.3.3
Ishikawa, Akihiro	CA	IAC-23.C4.8-B4.5A.1
Ishikawa, Akihiro	CA	IAC-23.B4.8.3
Ishikawa, Keitaro	CA	IAC-23.B3.3.4
Ishikawa, Ryo	CA	IAC-23.C3.1.3
Ishikawa, Ryo	CA	IAC-23.C3.2.2
Ishikawa, Yoji	CA	IAC-23.D4.3.3
Ishikawa, Yoji	S	IAC-23.D4.3.4
Ishikawa, Yoji	S	IAC-23.D4.3.8
Ishikawa, Yoji	CA	IAC-23.D4.3.9
Ishikawa, Yoji	CA	IAC-23.D4.3.10
Ishikawa, Yoji	CA	IAC-23.D3.2B.4
Ishimura, Kosei	CA	IAC-23.C3.1.3
Ishimura, Kosei	CA	IAC-23.C3.2.2
Ishizuka, Tomohiro	S	IAC-23.C1.3.7
Ismail, Norilmi Amilia	CA	IAC-23.B2.8-GTS.3.8
Ismail, Norilmi Amilia	CA	IAC-23.E1.1.5
Ismayilov, Nariman	S	IAC-23.A7.2.4
Ismayilov, Nariman	S	IAC-23.A7.3.3
Ismayilzada, Nigar	CA	IAC-23.A3.3A.10
Isoletta, Giorgio	CA	IAC-23.A6.7.1
Isoletta, Giorgio	CA	IAC-23.A6.1.7
Issertine, Margot	CA	IAC-23.A1.2.5
Issertine, Margot	S	IAC-23.A1.2.10
Ito, Daichi	S	IAC-23.B4.8.7
Ito, Tamotsu	CA	IAC-23.E5.3.3
Ito, Yutaro	S	IAC-23.B4.3.3
Iturbe, Mikel	S	IAC-23.B1.7.3
Ivanov, Anton	S	IAC-23.D1.3.9
Ivanov, Anton	CA	IAC-23.B4.8.11
Ivanov, Anton	S	IAC-23.D1.5.6
Ivanov, Danil	CA	IAC-23.C1.4.5
Ivanov, Danil	S	IAC-23.C1.4.6
Ivanov, Sergey	S	IAC-23.A6.4.6
Ivanova, Tatyana	CA	IAC-23.B3.5.4
Ivanovski, Stavro Lambrov	CA	IAC-23.E10.2.2
Ivanyukhin, Alexey	S	IAC-23.C1.9.7

Name		Paper
Ivanyukhin, Alexey	CA	IAC-23.C1.6.8
Ivars Martinez, Josep	CA	IAC-23.B5.2.7
Ivashkin, Vyacheslav V.	CA	IAC-23.C1.9.7
Iza Zurita, Alejandro Javier	CA	IAC-23.A1.7.2
Izawa, Azumi	CA	IAC-23.E2.3-GTS.4.6

J

J, Sai Narayanan	CA	IAC-23.A3.1.11
J L, Jeevitha	S	IAC-23.C2.9.3
Jablonska, Maja	CA	IAC-23.A7.3.3
Jach, Ewelina	CA	IAC-23.C2.8.7
Jacob, Sarah	CA	IAC-23.E3.3.9
Jacob, Sarah	CA	IAC-23.E1.8.1
Jacobs, Bas	S	IAC-23.E5.4.11
Jadhav, Sumant Hemant	S	IAC-23.C2.5.7
Jaeger, Markus	S	IAC-23.D2.3.2
Jafarzade, Raul	S	IAC-23.A3.3A.2
Jaffe, Paul	A	IAC-23.C3.2.1
Jaffer, Ghulam	S	IAC-23.B2.2.7
Jagadam, Nitya	CA	IAC-23.A3.1.9
Jagirani, Aisha	S	IAC-23.E3.4.7
Jahjah, Munzer	CA	IAC-23.A2.2.7
Jahjah, Munzer	CA	IAC-23.C2.8.8
Jahn, Trevor	CA	IAC-23.B3.7.1
Jain, A. Sejal	CA	IAC-23.C3.4.5
Jain, Sankalp	CA	IAC-23.A5.4.2
Jain, Sejal	CA	IAC-23.A2.4.1
Jain, Sejal	CA	IAC-23.A2.4.2
Jain, Umang	CA	IAC-23.A2.4.8
Jakiela, Julia	CA	IAC-23.A5.1.8
Jalilova, Aytakin	CA	IAC-23.D3.1.8
Jama, Stanisław	CA	IAC-23.D2.7.8
Jang, Hongjik	CA	IAC-23.E1.2.7
Janisz, Tymon	CA	IAC-23.A2.2.3
Janisz, Tymon	CA	IAC-23.B1.3.10
Jankovic, Marko	CA	IAC-23.D1.6.8
Jannotti Pecci, Enrichetta	CA	IAC-23.E7.1.2
Janosi, Gergely	CA	IAC-23.B2.8-GTS.3.5
Jansen, Frank	S	IAC-23.E3.2.5
Jantra, Methawin	S	IAC-23.C3.3.3
Jara, Adolfo	CA	IAC-23.B1.3.9
Jasiukowicz, Marcin	S	IAC-23.A1.6.4
Jasjukevics, Arturs	S	IAC-23.D6.2-D2.9.1
Jeje, Kudakwashe	CA	IAC-23.D1.5.3
Jendryka, Jakub	CA	IAC-23.A3.3B.3
Jensen, Jesper	CA	IAC-23.B4.8.9
Jeong, Cheol Oh	CA	IAC-23.B2.8-GTS.3.2
Jeong, Junyeong	CA	IAC-23.C4.4.4
Jeong, Junyeong	S	IAC-23.C4.4.10
Jessop, Mark	CA	IAC-23.E1.4.2
Jha, Devanshu	CA	IAC-23.E9.2.1
Jha, Devanshu	CA	IAC-23.D5.4.5
Jha, Pranav	S	IAC-23.C3.4.6
Jha, Shankar	S	IAC-23.A2.5.6
JI, Sinae	CA	IAC-23.B2.8-GTS.3.2
Ji Zhang, Yi Qiang	A	IAC-23.D3.2B.9
Jiang, Lianxiang	S	IAC-23.D1.5.9
Jiang, Lianxiang	S	IAC-23.B4.6A.3
Jiang, Miaomiao	CA	IAC-23.B2.7.8
Jiang, Shuo	CA	IAC-23.C4.6.9
Jiang, Xianzhu	S	IAC-23.C4.3.4
Jianjun, Luo	CA	IAC-23.A6.5.5
Jianping, Yuan	CA	IAC-23.A6.5.5
Jie, Zhang	CA	IAC-23.D2.1.1
Jiggens, Piers	CA	IAC-23.B4.2.1
Jiménez, Rebeca	S	IAC-23.E1.2.5
Jiménez, Rebeca	S	IAC-23.E6.4.8
Jiménez Sánchez, Esteban	CA	IAC-23.A2.3.3
Jinglang, Feng	CA	IAC-23.C1.9.8
Jinglang, Feng	CA	IAC-23.E2.2.8
Jinglang, Feng	CA	IAC-23.A6.2.5
Jinglang, Feng	CA	IAC-23.C1.4.7
Jinglang, Feng	CA	IAC-23.C1.6.2
Jitklongsub, Sarinya	CA	IAC-23.B4.5.6
Jo, Jin-Ho	CA	IAC-23.B2.8-GTS.3.2
Joao, Zolana	CA	IAC-23.E1.5.10
Joao, Zolana	CA	IAC-23.B1.5.9
Joao, Zolana	CA	IAC-23.B1.5.10
Jodehl, Jan Willem	CA	IAC-23.D2.3.6
Jodehl, Jan Willem	CA	IAC-23.D2.3.7
Jodehl, Jan Willem	CA	IAC-23.D2.6.7
Johnson, Michael	S	IAC-23.E1.3.4
Johnson, Owen	S	IAC-23.A4.1.8
Johnson, Terri	CA	IAC-23.D5.4.10
Johnston, Mark	CA	IAC-23.B3.4-B6.4.1
Johnston, Mark	CA	IAC-23.B4.8.1
Johnston-Lemke, Bryan	CA	IAC-23.B6.5.6
Jokin, Ivo	S	IAC-23.E1.1.9
Jonckers, Declan	S	IAC-23.C2.5.3
Jose, Diya	CA	IAC-23.A6.6.9
Jose K A, Arun	CA	IAC-23.A6.8-E9.1.5
Joshi, Shivani	CA	IAC-23.B2.7.7
Joshi, Siddharth	CA	IAC-23.A3.2A.4
Joshi, Siddharth	S	IAC-23.E3.6.7
Joshi, Tanushri	CA	IAC-23.E7.1.12
Jotikanbukkana, Phat	CA	IAC-23.B4.4.5
Joudrier, Luc	CA	IAC-23.A3.3A.6
Jouini, Oussema	CA	IAC-23.A3.1.9
Jouini, Oussema	CA	IAC-23.A6.6.9
Joumel, Pierre-Alexis	S	IAC-23.A3.2A.10
Joy, Chironjeet Das	CA	IAC-23.A2.4.9
Joy, Chironjeet Das	A	IAC-23.E3.6.3
Joyeux, Julien	CA	IAC-23.D1.2.1
Joël, Egalgi	S	IAC-23.D2.2.1
Juarez, Astrid	S	IAC-23.A2.7.9
Judson, Vineel	CA	IAC-23.A6.6.9
Jukola, Paivi	S	IAC-23.D4.2.8
Jukola, Paivi	S	IAC-23.D3.2B.2
Jukola, Paivi	S	IAC-23.D3.3.12
Julian, Theuil	CA	IAC-23.A1.2.10
Jun, Hyunwoo	CA	IAC-23.E2.3-GTS.4.2
Junas, Milan	CA	IAC-23.B4.2.1
Jung, Ki-Wook	S	IAC-23.D2.5.3
Jung, Philippe	S	IAC-23.E4.1.5
Jung, Youngsuk	S	IAC-23.A2.5.2
Junior, Joao	CA	IAC-23.B1.5.9
Juran, Cassandra	CA	IAC-23.A1.5.7
Jusoh, Mohamad Huzaimy	S	IAC-23.B4.1.8
Jusoh, Mohamad Huzaimy	CA	IAC-23.B4.4.14
Józefowicz, Mateusz	CA	IAC-23.D3.2B.6

K

K Backer, Anwar	CA	IAC-23.A6.8-E9.1.5
Kadam, Aniket	CA	IAC-23.D1.1.8
Kaethler, Stan	CA	IAC-23.D1.2.1
Kafi, Abdulla Hil	CA	IAC-23.B4.1.6
Kafi, Abdulla Hil	CA	IAC-23.B1.3.1
Kafi, Abdulla Hil	A	IAC-23.A2.4.9
Kafi, Abdulla Hil	CA	IAC-23.B2.5.10
Kafi, Abdulla Hil	CA	IAC-23.E3.6.3
Kafi, Abdulla Hil	S	IAC-23.E5.4.8
Kahraman, Büşra	CA	IAC-23.C4.4.8
Kahraman, Mehmet	CA	IAC-23.C4.4.9
Kaieda, So	CA	IAC-23.E2.3-GTS.4.6
Kaiser, Clemens Felix	CA	IAC-23.D2.5.4
Kajimura, Yoshihiro	CA	IAC-23.E1.3.5
Kajon, Daniele	CA	IAC-23.C4.1.5
Kakiahra, Kota	CA	IAC-23.C4.8-B4.5A.1
Kakitani, Marcos	CA	IAC-23.B6.1.10
Kakudo, Hiromitsu	CA	IAC-23.C4.1.4
Kalantarli, Aftab	S	IAC-23.E1.9.6
Kaled Da Cás, João Luiz	CA	IAC-23.E1.1.3
Kaled Da Cás, Pedro Luiz	CA	IAC-23.E1.1.3
Kalemci, Emrah	CA	IAC-23.A7.2.7
Kaleri, Alexander	CA	IAC-23.B3.4-B6.4.3
Kalinichenko, Dmitriy	CA	IAC-23.A5.1.4
Kalirai, Jason	S	IAC-23.E10.1.1
Kalluri, Satya	S	IAC-23.B1.2.4

Name		Paper
Kalmis, Serhan Enes	S	IAC-23.C4.4.8
Kaluthantrige, Aurelio	S	IAC-23.C1.4.7
Kalwala, Kiran	CA	IAC-23.C3.2.7
Kamdar, Jay	CA	IAC-23.A3.5.6
Kamitani, Kohei	CA	IAC-23.D1.5.3
Kamiya, Toshio	S	IAC-23.C1.8.7
Kamiya, Toshio	S	IAC-23.C1.1.2
Kamogawa, Masashi	CA	IAC-23.D4.3.3
Kamps, Landon	CA	IAC-23.C4.4.6
KANAI, Ryuichiro	CA	IAC-23.C4.1.4
Kanaya, Shusaku	CA	IAC-23.C3.3.11
Kanaya, Shuusaku	CA	IAC-23.D5.3.3
Kandasamy, Jayaraman	CA	IAC-23.C4.5.5
Kane, Megan	S	IAC-23.E5.1.2
Kaneko, Miki	CA	IAC-23.C3.2.13
Kang, Daeun	CA	IAC-23.C1.7.8
Kang, Hyunwoo	CA	IAC-23.E2.3-GTS.4.2
Kang, Jeyun	CA	IAC-23.E2.3-GTS.4.2
Kansal, Shweta	A	IAC-23.A2.1.6
Kansal, Shweta	CA	IAC-23.A7.2.6
Kanzow, Marlin	S	IAC-23.E1.4.4
Kanzow, Marlin	S	IAC-23.D1.4A.2
Kapadia, Mihir	CA	IAC-23.D1.4A.11
Kapadia, Mihir	S	IAC-23.B2.5.6
Kapoor, Sharry	S	IAC-23.A2.1.3
Kapoor, Sharry	CA	IAC-23.C3.4.11
Kapoor, Shubha	CA	IAC-23.C1.2.9
Kara, Ozan	A	IAC-23.B1.1.4
Kara, Ozan	CA	IAC-23.C4.3.7
Kara, Ozan	CA	IAC-23.E3.1.7
Kara, Ozan	CA	IAC-23.E1.5.9
Karabeyoglu, Arif	CA	IAC-23.C4.4.8
Karabeyoglu, Arif	CA	IAC-23.C4.4.9
Karahan, Bahar	CA	IAC-23.D1.3.5
Karahan, Bahar	S	IAC-23.E2.3-GTS.4.5
Karahan, Bahar	CA	IAC-23.B4.6A.1
Karakosta-Amarantidou, Ilektra	CA	IAC-23.E2.4.7
Karakosta-Amarantidou, Ilektra	CA	IAC-23.B2.3.4
Karathanasopoulos, George	CA	IAC-23.A3.2B.4
Karavaev, Dmitry	CA	IAC-23.B3.4-B6.4.5
Karevskiy, Andrey	CA	IAC-23.C3.5-C4.10.4
Karim, Andrew	CA	IAC-23.E1.7.2
Karimov, Nasib	S	IAC-23.E5.4.2
Karl, Alex	S	IAC-23.E10.1.8
Karl, Alex	CA	IAC-23.E8.1.2
Karnal, Manohar	CA	IAC-23.D5.1.9
Karouia, Fathi	S	IAC-23.A1.3.6
Karouia, Fathi	S	IAC-23.A1.8.4
Kasahara, Jiro	S	IAC-23.C4.9.1
Kasai, Yasuaki	CA	IAC-23.D4.3.3
Kashimura, Osamu	CA	IAC-23.C3.1.3
Kashirina, Daria	S	IAC-23.A1.2.6
Kashirina, Daria	CA	IAC-23.A1.2.11
Kasi, Rama Theertha	S	IAC-23.E6.5-GTS.1.3
Kato, Kunihiko	CA	IAC-23.D3.2B.4
Kaur, Gagandeep	A	IAC-23.D3.1.6
Kaur, Ravneet	S	IAC-23.D1.2.13
Kaur, Supreet	S	IAC-23.B5.1.4
Kawabata, Yosuke	CA	IAC-23.B4.3.3
Kawabata, Yosuke	CA	IAC-23.C4.8-B4.5A.1
Kawabata, Yosuke	CA	IAC-23.B4.8.3
Kawabata, Yosuke	CA	IAC-23.A7.3.5
Kawai, Ryura	CA	IAC-23.E5.3.3
Kawakami, Taiko	CA	IAC-23.B5.1.11
Kawakami, Taiko	CA	IAC-23.D1.1.6
Kawakami, Taiko	CA	IAC-23.D4.2.9
Kawakami, Taiko	CA	IAC-23.A2.5.9
Kawakami, Taiko	CA	IAC-23.E5.4.3
Kawakami, Taiko	S	IAC-23.E1.9.2
Kawakatsu, Yasuhiro	CA	IAC-23.C1.8.9
Kawakatsu, Yasuhiro	A	IAC-23.A3.4A.4
Kawakatsu, Yasuhiro	CA	IAC-23.B4.8.7
Kawamoto, Satomi	CA	IAC-23.A6.4.3
Kawamoto, Satomi	S	IAC-23.A6.2.2
Kawashima, Hideto	S	IAC-23.C4.1.10

Name		Paper
Kaya, Nobuyuki	S	IAC-23.B2.8-GTS.3.3
Kaya, Nobuyuki	CA	IAC-23.C3.1.8
Kayaba, Hideki	CA	IAC-23.B2.3.7
Kayal, Hakan	CA	IAC-23.D1.3.4
Kayra Gullu, Seda	CA	IAC-23.C4.6.6
Kazanjian, Garabet	CA	IAC-23.B5.2.1
Kazda, Tomáš	CA	IAC-23.D3.3.3
Kazemi, Sajjad	S	IAC-23.A6.9.3
Kazlouskaya, Miraslava	S	IAC-23.D1.5.7
Kazlouskaya, Miraslava	CA	IAC-23.E1.8.1
Kebschull, Christopher	CA	IAC-23.A6.7.3
Kebschull, Christopher	CA	IAC-23.A6.4.9
Kebschull, Christopher	CA	IAC-23.B6.5.9
Kelecy, Thomas	CA	IAC-23.A6.9.4
Kelley,, Michael S.	CA	IAC-23.A3.3A.1
Kempf, Juergen	CA	IAC-23.A1.3.7
Kereszturi, Akos	CA	IAC-23.A3.2A.9
Kerrouche, Kamel	CA	IAC-23.B4.1.2
Kershenbaum, Arik	CA	IAC-23.A4.2.4
Keskar, Pranav	S	IAC-23.D2.5.9
Keskar, Pranav	S	IAC-23.A6.5.3
Kezerashvili, Roman Ya.	S	IAC-23.C4.10-C3.5.2
Kezerashvili, Vladimir Ya.	CA	IAC-23.C4.10-C3.5.2
Khalili, Mohammad Amin	CA	IAC-23.B4.7.13
Khalilov, Isa	CA	IAC-23.A3.3B.9
Khalilov, Orxan	CA	IAC-23.A7.3.3
Khan, Amer	S	IAC-23.E4.2.5
Khan, Amer	S	IAC-23.E4.3.3
Khan, Muhammad Aqib	S	IAC-23.E1.8.2
Khan, Nadia	CA	IAC-23.D1.4B.9
Khan, Nadia	S	IAC-23.B6.2.5
Khankishiyeva, Aytaj	A	IAC-23.E2.1.11
Kharlamov, Maksim	CA	IAC-23.A1.2.4
Kharlamov, Maksim	S	IAC-23.B3.5.1
Khorshidi Benam, Ali	CA	IAC-23.A2.6.7
Kiani, Maryam	CA	IAC-23.D5.2.8
Kida, Kosuke	CA	IAC-23.C4.4.11
Kiewiet, Luca	CA	IAC-23.A3.1.2
Kiewiet, Luca	CA	IAC-23.D3.3.6
Kikas, Georgios	S	IAC-23.E2.4.7
Kikina, Anna	CA	IAC-23.B3.5.1
Kikina, Anna	S	IAC-23.B3.5.5
Kikuchi, Junji	CA	IAC-23.B4.8.2
Kikuchi, Junji	S	IAC-23.C1.7.7
Kikuchi, Koichi	CA	IAC-23.E7.7.1
Kikuchi, Yuta	CA	IAC-23.E6.1.8
Kim, Benjamin	CA	IAC-23.B1.1.3
Kim, Bosung	S	IAC-23.B2.5.4
Kim, Cheulwoong	CA	IAC-23.D2.7.3
Kim, Eunghyun	S	IAC-23.B6.1.11
Kim, Hyun-Ok	S	IAC-23.B1.1.5
Kim, Jeong P.	CA	IAC-23.C3.2.4
Kim, KangSan	CA	IAC-23.A3.1.11
Kim, KangSan	S	IAC-23.A1.3.10
Kim, KangSan	S	IAC-23.D3.1.4
Kim, KangSan	A	IAC-23.B4.5.5
Kim, KangSan	S	IAC-23.B4.5.6
Kim, KangSan	CA	IAC-23.E5.3.4
Kim, KangSan	S	IAC-23.C2.6.5
Kim, KangSan	S	IAC-23.B3.7.10
Kim, KangSan	S	IAC-23.C2.8.12
Kim, KangSan	S	IAC-23.A2.7.4
Kim, Kyeong Ja	S	IAC-23.A3.2A.1
Kim, Kyunghwan	S	IAC-23.E1.2.7
Kim, Minhyung	CA	IAC-23.E2.3-GTS.4.2
Kim, Suyeon	CA	IAC-23.A3.2A.1
Kim, Yeji	CA	IAC-23.B1.1.5
Kim, YeongSeop	CA	IAC-23.C2.6.5
Kim, YeongSeop	CA	IAC-23.C2.8.12
Kim, Yongkwon	CA	IAC-23.A3.2A.1
Kinel-Tahan, Yael	CA	IAC-23.A1.7.4
King, Glenn	S	IAC-23.B3.2.6
King, Katie	S	IAC-23.A2.5.5
Kingsnorth, James	CA	IAC-23.A3.3B.7
Kingsnorth, James	CA	IAC-23.A5.2.2

Name		Paper
Kingsnorth, James	CA	IAC-23.A1.5.3
Kingsnorth, James	CA	IAC-23.A1.6.5
Kiral, Baris Emre	CA	IAC-23.C4.4.8
Kirchner, Frank	CA	IAC-23.D1.2.11
Kireev, Kirill	CA	IAC-23.A1.2.11
Kireev, Kirill	CA	IAC-23.B3.5.1
Kirkpatrick, Molly	S	IAC-23.A5.4.4
Kis, Zsolt	CA	IAC-23.B2.8-GTS.3.5
Kiselev, Alexey	CA	IAC-23.A2.4.3
Kishimoto, Makiko	S	IAC-23.B4.2.9
Kita, Afroditi	CA	IAC-23.E2.4.7
Kitabatake, Hidetoshi	CA	IAC-23.C3.1.3
Kitabatake, Hidetoshi	CA	IAC-23.C3.2.2
Kitagawa, Yasuhiro	CA	IAC-23.A6.2.2
Kitamura, Kentaro	S	IAC-23.E1.3.5
Kitamura, Yu	CA	IAC-23.E5.3.3
Kitayama, Osamu	CA	IAC-23.D2.1.3
Kitov, Vladimir	CA	IAC-23.E5.2.2
Kitov, Vladimir	CA	IAC-23.B3.8.5
Klaschka, Zuri	CA	IAC-23.E2.3-GTS.4.11
Kliapets, Mykyta	CA	IAC-23.B3.4-B6.4.9
Klimko, Alexey	CA	IAC-23.D3.2A.8
Klingenstein, Lars	CA	IAC-23.A2.2.9
Klingenstein, Lars	S	IAC-23.A2.3.4
Klinkner, Sabine	CA	IAC-23.E1.4.4
Klinkner, Sabine	CA	IAC-23.D1.4A.2
Klug Boonstra, Sheri	CA	IAC-23.D3.1.7
Knapkiewicz, Pawel	S	IAC-23.B1.3.10
Knapkiewicz, Pawel	CA	IAC-23.A3.3B.3
Kneib, Jean-Paul	CA	IAC-23.A6.8-E9.1.4
Knox, Steven	CA	IAC-23.B4.6A.9
Knychala, Kamil	CA	IAC-23.C2.7.7
Ko, Jeonghwan	CA	IAC-23.D5.1.7
Kob, Maximilian	CA	IAC-23.D1.3.5
Kob, Maximilian	CA	IAC-23.E2.3-GTS.4.5
Kobata, Kazushi	S	IAC-23.E7.5.8
Kobayashi, Yuya	CA	IAC-23.E6.1.8
Kobiak, Dimitry	CA	IAC-23.E1.4.4
Koch, Niels	CA	IAC-23.E2.3-GTS.4.11
Kochergin, Alexey	S	IAC-23.A1.3.14
Kocic, Ilija	CA	IAC-23.E1.4.4
Koenig, Anton	S	IAC-23.D1.4A.12
Kofman, Igor	CA	IAC-23.B3.8.5
Kofman, Wlodek	CA	IAC-23.A3.4B.4
Koga, Masaru	S	IAC-23.A3.2A.11
Kohl, Stefanie	CA	IAC-23.B4.4.4
Kohout, Tomas	CA	IAC-23.A3.2A.9
Koizumi, Hiroyuki	CA	IAC-23.C4.5.11
Koizumi, Hiroyuki	CA	IAC-23.C4.8-B4.5A.1
Koizumi, Hiroyuki	CA	IAC-23.C4.8-B4.5A.6
Kojima, Hirotsugu	CA	IAC-23.C3.2.2
Kokkinos, Georgios	CA	IAC-23.C4.5.3
Kokou, Pierre	CA	IAC-23.B1.3.6
Kokueva, Maria	CA	IAC-23.A1.2.4
Kolakowski, Krzysztof	CA	IAC-23.C2.7.7
Kolb, Alexander	CA	IAC-23.A5.3-B3.6.1
Kolev, Dimitar	CA	IAC-23.B2.5.8
Kolin, Andrei	S	IAC-23.B1.4.5
Kolin, Andrei	S	IAC-23.A3.5.3
Koller, Istvan	CA	IAC-23.B2.8-GTS.3.5
Kolodziejczyk, Agata	CA	IAC-23.A1.1.5
Kolodziejczyk, Agata	CA	IAC-23.B3.7.11
Kolodziejczyk, Agata	CA	IAC-23.A3.2C.3
Koloteva, Milena	CA	IAC-23.A1.4.1
Kolvenbach, Hendrik	CA	IAC-23.A3.2B.7
Kolvenbach, Hendrik	CA	IAC-23.D1.6.10
Kolyvanova, Marina	A	IAC-23.D2.2.6
Komatsu, Ryusei	CA	IAC-23.E2.3-GTS.4.6
Komis, Ioannis-Nikolaos	CA	IAC-23.E2.4.7
Komposch, Maximilian	CA	IAC-23.E1.4.4
Komurasaki, Kimiya	CA	IAC-23.C4.5.11
Komurasaki, Kimiya	CA	IAC-23.C4.8-B4.5A.6
Kondratiev, Andrey	CA	IAC-23.B3.5.5
Konieczna, Oliwia	CA	IAC-23.B6.5.9
Konitzer, Lauren	CA	IAC-23.B2.7.2

Name		Paper
Kontis, Konstantinos	CA	IAC-23.D3.2B.1
Koops, Bram	CA	IAC-23.D2.6.7
Koppa, Pal	CA	IAC-23.B2.8-GTS.3.5
Koprucu, Sahin Ulas	CA	IAC-23.A3.2B.1
Korn, Christian	CA	IAC-23.D1.3.5
Korn, Christian	CA	IAC-23.E2.3-GTS.4.5
Korn, Christian	S	IAC-23.D2.5.4
Korneev, Kirill	CA	IAC-23.C1.5.4
Kornis, Janos	CA	IAC-23.B2.8-GTS.3.5
Koryanov, Vsevolod	A	IAC-23.C2.2.10
Kosaka, Takefumi	CA	IAC-23.C1.1.2
Koshlakov, Vladimir	A	IAC-23.C3.5-C4.10.4
Kostin, Michelle	S	IAC-23.B3.7.6
Kostrzewski, Cezary	CA	IAC-23.D2.7.8
Kosuda, Marek	S	IAC-23.D4.1.6
Kotake, Hideaki	S	IAC-23.B2.5.8
Kotichintala, Swetha	CA	IAC-23.E6.5-GTS.1.5
Kotowski, Krzysztof	CA	IAC-23.B6.3.5
Kourampa-Gottfroh, Vasiliki	CA	IAC-23.E2.4.7
Kovrigin, Sergey	CA	IAC-23.B3.5.5
Kowalewska, Anna	CA	IAC-23.A1.1.5
Kowaliński, Mirosław	CA	IAC-23.D3.2B.6
Kowalska, Dorota	CA	IAC-23.C2.8.7
Kowalski, Kelly	CA	IAC-23.D4.1.2
Kozarev, Vladislav	S	IAC-23.E9.3.7
Kozman, Ramy	CA	IAC-23.B4.8.4
Kozman, Ramy	A	IAC-23.B4.6A.2
Kraemer, Bastian	CA	IAC-23.D1.4A.2
Kraiev, Maksym	CA	IAC-23.C2.4.2
Kralkina, Elena	CA	IAC-23.C4.9.7
Krasuski, Mateusz	CA	IAC-23.D2.7.8
Krauss, Markus	CA	IAC-23.D1.3.6
Krawczuk, Szymon	S	IAC-23.A2.3.6
Krawczyk, Marek	S	IAC-23.B2.3.2
Kreisel, Leon	CA	IAC-23.B1.6.2
Kreul, Phil	CA	IAC-23.D1.3.5
Kreul, Phil	CA	IAC-23.E2.3-GTS.4.5
Krezel, Jonathan	CA	IAC-23.B3.1.7
Kringer, Michael	CA	IAC-23.D1.3.13
Kringer, Michael	S	IAC-23.C2.6.6
Krishnan, Vignesh	CA	IAC-23.D4.1.9
Krishnan, Vignesh	CA	IAC-23.A1.5.4
Krishnan, Vignesh	CA	IAC-23.E8.1.1
Krishnappa, Deepak	CA	IAC-23.B1.5.5
Kristine M Ramos, Kristine	CA	IAC-23.D2.1.2
Kristmann, Katriin	CA	IAC-23.D3.2B.6
Krivova, Victoria	S	IAC-23.D1.2.7
Kroffke, Sven	CA	IAC-23.D1.6.8
Krompholtz, Julien	S	IAC-23.E1.5.3
Krompholtz, Julien	CA	IAC-23.B4.9-GTS.5.7
Krone, Timo	S	IAC-23.C4.1.9
Kroupnik, Guennadi	S	IAC-23.B1.2.3
Kruizinga, Gerhard	CA	IAC-23.B4.8.1
Krukhmalev, Andrey	CA	IAC-23.A1.2.4
Krylov, Anatoliy	CA	IAC-23.B3.5.5
Krämer, Stefan	S	IAC-23.A2.3.2
Kshatriya, Amit	CA	IAC-23.B3.1.6
Kshatriya, Amit	CA	IAC-23.B3.1.7
Kubakurungi, Saphirah	CA	IAC-23.B5.2.7
Kudo, Raiki	CA	IAC-23.E2.3-GTS.4.6
Kudo, Takeshi	CA	IAC-23.D4.3.3
Kueppers, Michael	CA	IAC-23.A3.4B.1
Kueppers, Michael	CA	IAC-23.A3.4B.2
Kuhamba, Timothy Kudzanayi	CA	IAC-23.D1.5.3
Kuhn, Thomas	CA	IAC-23.E2.3-GTS.4.3
Kuijper, Jim	CA	IAC-23.E3.2.5
Kukharenko, Andrey	S	IAC-23.C2.2.10
Kukoba, Tatyana	CA	IAC-23.A1.2.4
Kulkarni, Harshmohan	CA	IAC-23.B2.7.7
Kulkarni, Ravindra	CA	IAC-23.A2.4.1
Kulkarni, Ravindra	CA	IAC-23.A2.4.2
Kulu, Erik	S	IAC-23.C3.1.12
Kulu, Erik	S	IAC-23.D3.3.10
Kumamoto, Atsushi	CA	IAC-23.C3.2.2
Kumar, Harshit	S	IAC-23.B4.6A.5

Name		Paper
Kumar, Krishna	S	IAC-23.D4.1.7
Kumar, Krishna	S	IAC-23.D1.3.12
Kumar, Prakash	CA	IAC-23.A2.2.2
Kumar, Prakash	S	IAC-23.D2.9-D6.2.7
Kumar, Ramesh	CA	IAC-23.D2.8.2
Kumar, Saroj	S	IAC-23.C4.9.4
Kumar, Sidhant	CA	IAC-23.A6.4.1
Kumar, Sidhant	CA	IAC-23.B4.3.2
Kumar, Sidhant	CA	IAC-23.B4.6B.10
Kumar, Sriram	S	IAC-23.C2.1.8
Kumar, Sriram	S	IAC-23.C4.2.6
Kumar, Vinod	CA	IAC-23.A6.1.8
Kumar S., Sunil	CA	IAC-23.C4.6.4
Kumar Sharma, Vinod	CA	IAC-23.E1.4.2
Kunii, Yasuharu	CA	IAC-23.A3.2B.13
Kunitskaya, Alina	CA	IAC-23.E1.3.6
Kunze, Melanie	CA	IAC-23.A2.5.6
Kuppusamy, Gowthamarajan	A	IAC-23.A2.7.3
Kupriyanova, Anna	CA	IAC-23.A2.4.6
Kurade, Tanvi	CA	IAC-23.B3.5.2
Kurahara, Naomi	S	IAC-23.E6.5-GTS.1.8
Kurita, Satoshi	CA	IAC-23.C3.2.2
Kuritsin, Andrey	A	IAC-23.B3.5.5
Kuriyama, Ikuko	S	IAC-23.E3.1.4
Kuriyama, Ikuko	S	IAC-23.E7.7.1
Kussmaul, Anna	S	IAC-23.A1.4.1
Kussmaul, Anna	S	IAC-23.E4.1.8
Kussmaul, Anna	CA	IAC-23.E5.6.2
Kutnik, Irina	CA	IAC-23.B3.5.5
Kuvshinova, Ekaterina	CA	IAC-23.C3.5-C4.10.4
Kuwabara, Hiroki	CA	IAC-23.C4.8-B4.5A.1
Kuwahara, Toshinori	CA	IAC-23.C4.4.11
Kuwayama, Yusuke	CA	IAC-23.B1.5.10
Kuznetsov, Aleksandr	S	IAC-23.A6.9.5
Kuznetsov, Aleksandr	CA	IAC-23.A6.9.6
Kuznetsova, Valeria Evgenievna	CA	IAC-23.B1.6.8
Kuzuno, Ryo	S	IAC-23.D4.3.7
Kwitek, Alicja	CA	IAC-23.C4.3.10
Kwon, Kyoung Rok	CA	IAC-23.A3.2A.1
Kwon, Sejin	CA	IAC-23.C4.2.3
Kwon, Sejin	CA	IAC-23.C4.4.4
Kwon, Sejin	CA	IAC-23.C4.4.10
Kyriakopoulos, George (Georgios) D.	S	IAC-23.E7.3.2
Kyriazis, Niklas	CA	IAC-23.C2.5.3
Kärräng, Patrik	CA	IAC-23.A6.4.9
Köhne, Alexander	S	IAC-23.A2.2.9
Köhne, Alexander	CA	IAC-23.A2.3.4
Könemann, Thorben	CA	IAC-23.A2.5.1

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L, Ravi Kumar	CA	IAC-23.B6.3.7
L, Vignesh	CA	IAC-23.C4.2.6
L. Azad, Nasser	CA	IAC-23.A6.9.3
L. Seoane, Marina	CA	IAC-23.A3.3B.10
La Bella, Emanuela	CA	IAC-23.B4.6B.9
La Luna, Simone	CA	IAC-23.C2.5.10
La Rocca, Armando	S	IAC-23.B2.4.3
Labate, Demetrio	CA	IAC-23.B4.4.9
Labate, Demetrio	CA	IAC-23.A6.5.10
LaBelle, Remi	S	IAC-23.B2.4.1
Labrador, John Leur	A	IAC-23.E1.5.8
Labò, Samuele	CA	IAC-23.B4.2.5
Lachkar, Lucie	CA	IAC-23.B1.1.8
Lacomba, Florent	CA	IAC-23.E7.7.9
Lafont, Ugo	CA	IAC-23.D1.3.13
Lafont, Ugo	CA	IAC-23.C2.6.6
Lagisetty, Sanjana	S	IAC-23.E2.1.2
Lahens, Nathan	CA	IAC-23.B3.2.3
Lahens, Nathan	CA	IAC-23.D2.4.7
Lai, James	CA	IAC-23.A2.4.8
Laino, Maria Anna	S	IAC-23.C3.4.7
Lakshmipuram Raghu, Shreyas	S	IAC-23.D1.4B.6
Lamanque, Jean-Christophe	S	IAC-23.E2.3-GTS.4.4
Lamantea, Matteo Maria	S	IAC-23.B3.8.2

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Lamarre, Daniel	CA	IAC-23.B1.2.1
Lambert, James	CA	IAC-23.C4.10-C3.5.8
Lambertini, Lucia	S	IAC-23.C2.6.7
Lambrecht, Clémence	S	IAC-23.E7.7.9
Lamera, Nadia	S	IAC-23.B2.2.6
Lamothe, Matthieu	CA	IAC-23.B6.2.10
Lampariello, Roberto	CA	IAC-23.D1.6.7
Lamping, Tobias	CA	IAC-23.D3.2B.1
Lanari, Riccardo	CA	IAC-23.D1.4A.7
Landers, Viduranga	A	IAC-23.B4.8.12
Landge, Amey	CA	IAC-23.E2.4.11
Landi, Simone	CA	IAC-23.B4.2.2
Lanfredi Alberti, Cecilia	CA	IAC-23.B4.2.5
Lang, Felix	CA	IAC-23.B4.6B.11
Lannutti, Angelo Roberto	CA	IAC-23.B4.2.5
Lannutti, Angelo Roberto	CA	IAC-23.C3.4.1
Lansard, Erick	CA	IAC-23.D1.4A.3
Lansard, Erick	S	IAC-23.C1.7.8
Lara, Martin	CA	IAC-23.C1.8.3
Lara, Martin	S	IAC-23.C1.8.5
Largent, Patrick	CA	IAC-23.E1.4.4
Larina, Irina	CA	IAC-23.A1.2.6
Larina, Irina	CA	IAC-23.A1.2.11
Larizza, Federico	S	IAC-23.B4.5A-C4.8.7
Larocca, Rocco	CA	IAC-23.D2.7.10
Larsen, Katharine	S	IAC-23.A6.2.3
Lassakeur, Abdelmadjid	S	IAC-23.B4.1.2
Latini, Beatrice	CA	IAC-23.C4.1.6
Latini, Francesco	S	IAC-23.A3.2B.9
Latini, Francesco	CA	IAC-23.A3.2C.11
Latino, Filippo	CA	IAC-23.E3.3.5
Latorre, Perla	S	IAC-23.C2.6.10
Laudadio, Francesco	CA	IAC-23.B3.2.3
Laudadio, Francesco	CA	IAC-23.D2.4.7
Lauer, Luc	CA	IAC-23.E1.4.4
Laufer, Rene	CA	IAC-23.D5.1.6
Laufer, Rene	CA	IAC-23.A6.4.10
Laufer, Rene	CA	IAC-23.D1.3.7
Laufer, Rene	CA	IAC-23.E2.3-GTS.4.3
Laufer, Rene	CA	IAC-23.E3.3.10
Laufer, Rene	CA	IAC-23.C2.6.11
Laufer, Rene	CA	IAC-23.E9.3.4
Laumain, Marine	CA	IAC-23.D3.3.6
Laurenti, Nicola	CA	IAC-23.B2.3.4
Laurenza, Monica	CA	IAC-23.B4.2.2
Laurenzi, Susanna	CA	IAC-23.C2.2.9
Laurenzi, Susanna	CA	IAC-23.C2.6.7
Laurenzi, Susanna	CA	IAC-23.C2.6.8
Laurinovics, Rodrigo	CA	IAC-23.B6.3.5
Lavacca, Francesco Giacinto	CA	IAC-23.D2.7.7
Lavagna, Michèle	CA	IAC-23.B4.2.5
Lavagna, Michèle	CA	IAC-23.C1.9.5
Lavagna, Michèle	CA	IAC-23.A3.2B.9
Lavagna, Michèle	S	IAC-23.B4.4.9
Lavagna, Michèle	CA	IAC-23.C1.2.4
Lavagna, Michèle	CA	IAC-23.C1.3.1
Lavagna, Michèle	S	IAC-23.A3.4A.6
Lavagna, Michèle	S	IAC-23.A6.5.10
Lavagna, Michèle	CA	IAC-23.B4.6B.8
Lavagna, Michèle	CA	IAC-23.C1.4.1
Lavagna, Michèle	CA	IAC-23.A3.5.5
Lavagna, Michèle	CA	IAC-23.A6.6.3
Lavagna, Michèle	CA	IAC-23.D1.4B.1
Lavagna, Michèle	CA	IAC-23.B4.8.8
Lavagna, Michèle	CA	IAC-23.C1.6.4
Lavagna, Michèle	S	IAC-23.A3.2C.11
Lavagna, Michèle	CA	IAC-23.B4.6A.12
Lavagna, Michèle	CA	IAC-23.D1.6.2
Lavagna, Michèle	CA	IAC-23.E10.2.2
Lavarini, Erica	CA	IAC-23.B2.2.6
Law, Benson Chun Pang	CA	IAC-23.C4.5.3
Law, Hamilton	A	IAC-23.B4.6A.9
Lawson, Eamon	S	IAC-23.B2.4.7
Lazaro, Alejandro	CA	IAC-23.D1.6.7
Lazzarin, Monica	CA	IAC-23.A3.4B.1

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Liu, Qing	CA	IAC-23.C4.7.9
Liu, Tao	S	IAC-23.A6.3.3
Liu, Yu	S	IAC-23.E2.4.4
Liu, Yufei	CA	IAC-23.C3.3.1
Liucci, Francesco	CA	IAC-23.A3.1.3
Liucci, Francesco	CA	IAC-23.B4.8.4
Liuzzi, Daniele	CA	IAC-23.C4.1.5
Liuzzi, Daniele	A	IAC-23.C2.5.4
Livengood, Cody	A	IAC-23.A7.1.6
Livengood, Timothy	CA	IAC-23.A7.1.6
Lizy-Destrez, Stéphanie	CA	IAC-23.C1.3.7
Loayza Pretel, Gabriel Luis Dario	CA	IAC-23.A1.7.2
Lobo, Rafael	S	IAC-23.E1.1.3
Lobo, Rafael	CA	IAC-23.D6.3.5
Locatelli, Giorgio	CA	IAC-23.D1.2.7
Locatelli, Giorgio	CA	IAC-23.E3.1.2
Locatelli, Giorgio	CA	IAC-23.E6.4.5
Locatelli, Giorgio	CA	IAC-23.E3.2.3
Locatelli, Giorgio	CA	IAC-23.E6.3.6
Locati, Emanuela	CA	IAC-23.A1.2.8
Locke, Lisa	CA	IAC-23.B2.4.1
Lofamia, Micherene Clauzette	CA	IAC-23.B4.1.5
Lofqvist, Martina	CA	IAC-23.C3.1.12
Lofqvist, Martina	CA	IAC-23.D3.3.10
Logan, Lakshmi Sheela	CA	IAC-23.B3.1.6
Loizeau, Adrien	CA	IAC-23.A6.7.6
Lomaka, Igor	CA	IAC-23.B4.2.6
Lomakin, Artem	CA	IAC-23.E9.3.7
Lombardi, Carlo	S	IAC-23.C2.3.6
Lombardi, Eleonora	CA	IAC-23.E1.4.3
Lombardi, Eleonora	CA	IAC-23.B5.2.9
Lombardi, Eleonora	CA	IAC-23.B5.3.4
Lombardi, Eleonora	S	IAC-23.E6.1.7
Loneux, Clement	S	IAC-23.D4.5.3
Long, George Anthony	S	IAC-23.E7.3.7
Long, George Anthony	S	IAC-23.E7.5.3
Long, George Anthony	S	IAC-23.E7.7.6
Long, Jiateng	CA	IAC-23.C1.1.5
Long, Jiateng	CA	IAC-23.B4.7.8
Long, Jiateng	CA	IAC-23.A3.4B.6
Long, Jiateng	CA	IAC-23.B6.5.8
Long, Jie	S	IAC-23.E7.1.9
Long, Jie	S	IAC-23.E7.7.12
Longo, Francesco	CA	IAC-23.B1.3.3
Lopes, Rui	CA	IAC-23.A3.3A.6
Lopes, Rui	CA	IAC-23.A3.3B.8
Lopez, Abigail	CA	IAC-23.E2.3-GTS.4.9
Lopez, Hugo	S	IAC-23.E7.3.5
Lopez, Ron	CA	IAC-23.E3.3.4
Lopez, Uriel	CA	IAC-23.B2.2.10
Lopez Cabrejos, Josue Airton	S	IAC-23.E1.6.11
Lopez Cabrejos, Josue Airton	CA	IAC-23.E10.1.3
Lopez Cabrejos, Josue Airton	S	IAC-23.B3.9-GTS.2.5
Lopez Espinosa, Leonardo	CA	IAC-23.B4.2.10
Lopez Guzman, Ernesto Noe	CA	IAC-23.B4.2.10
Lopez Santiago, Jose Luis	S	IAC-23.E2.1.7
Lopez Urdiales, Jose Mariano	S	IAC-23.D2.4.9
Lopresti, Stefano	CA	IAC-23.A6.3.6
Lopresti, Stefano	A	IAC-23.A6.3.7
Lorenz, Ralph	S	IAC-23.A3.5.8
Lorenzi, Gaia	S	IAC-23.B4.9-GTS.5.6
Lorenzini, Enrico C.	CA	IAC-23.C4.9.11
Lorfevre, Eric	CA	IAC-23.A3.5.9
Lorig, Yuval	S	IAC-23.B1.6.7
Lorig, Yuval	S	IAC-23.B1.7.9
Lorini, Giorgio	S	IAC-23.E1.7.4
Lorusso, Pasquale Ivano	CA	IAC-23.E3.3.5
Losiak, Anna	CA	IAC-23.A3.2A.9
Louden, Emma	S	IAC-23.E3.3.1
Louden, Emma	S	IAC-23.E3.3.7
Louden, Emma	S	IAC-23.A7.1.2
Louden, Emma	S	IAC-23.D2.7.1
Louden, Emma	S	IAC-23.E6.1.4
Louis, PhD, Dr Julien	CA	IAC-23.A1.3.3
Loureiro, Geilson	S	IAC-23.C2.7.9
Loureiro, Geilson	S	IAC-23.D1.4B.7
Loveridge, Alexandra	S	IAC-23.B1.7.5
Lovotti, Maddalena	CA	IAC-23.A1.7.10
Lowe, Christopher	CA	IAC-23.C1.7.4
Lozano, Paulo	CA	IAC-23.C4.6.1
Lu, Bingjie	S	IAC-23.C1.3.5
Lu, Catherine	CA	IAC-23.B1.5.10
Lu, Pengfei	S	IAC-23.C1.8.8
Lu, Pengfei	S	IAC-23.C1.9.3
Lu, Siyao	S	IAC-23.B6.3.8
Lu, Wei	S	IAC-23.C3.3.5
Lubieniecki, Marek	S	IAC-23.D2.6.2
Lucchetti, Alice	CA	IAC-23.E10.2.2
Lucchetti, Federico	CA	IAC-23.D1.2.8
Lucena, Nicolle	S	IAC-23.D6.3.5
Luchitskaya, Elena	CA	IAC-23.A1.2.2
Lucia, Francesco	CA	IAC-23.B4.6B.9
Luciani, Roberto	CA	IAC-23.B4.4.3
Luciani, Roberto	CA	IAC-23.B4.7.13
Luigi, Arione	CA	IAC-23.C4.1.5
Luini, Lorenzo	CA	IAC-23.B2.1.7
Luján Fernández, Irene	CA	IAC-23.B4.2.5
Luján Fernández, Irene	CA	IAC-23.E2.3-GTS.4.8
Luk, Clarissa	CA	IAC-23.E9.1-A6.8.7
Lukicheva, Nadezhda	CA	IAC-23.A1.2.1
Luna, Cristina	A	IAC-23.A3.2B.3
Luna, Cristina	CA	IAC-23.A3.3B.10
Lunding, Arvid	CA	IAC-23.A2.2.9
Lunding, Arvid	CA	IAC-23.A2.3.4
Lungeanu, Alina	A	IAC-23.A1.1.2
Luo, Jianjun	CA	IAC-23.D1.6.3
Luo, Yijie	A	IAC-23.C1.4.3
Lupedia, Luciano Costa Dembue	S	IAC-23.B1.5.9
Lusthaus, Robert P.	CA	IAC-23.D4.4.3
Lustrino, Michele	CA	IAC-23.C2.8.2
Lusvarghi, Matteo	S	IAC-23.C1.6.4
Lutze, Jean-Pascal	S	IAC-23.A5.3-B3.6.1
Lysova, Natalya	CA	IAC-23.B3.8.5
Lyu, Peng	S	IAC-23.B2.7.8
LYU, YAN	S	IAC-23.D2.7.6
LYU, Yueyong	CA	IAC-23.C1.1.8
Lázaro, Clara	CA	IAC-23.B4.7.12
López, Rosario	CA	IAC-23.C1.8.3
López Bautista, Juan	CA	IAC-23.A4.2.7
López-Contreras, Elena	CA	IAC-23.A5.1.8
López-Zapata, Samuel	CA	IAC-23.A5.3-B3.6.6
Löffler, Thorben	CA	IAC-23.D1.4A.2

M

M, Harsha	CA	IAC-23.A6.1.8
M, Kaviyan	CA	IAC-23.A3.1.11
M Ganapathy, Rohan	CA	IAC-23.C4.6.10
M Ganapathy, Rohan	CA	IAC-23.C4.6.12
M Ganapathy, Rohan	CA	IAC-23.D2.5.9
M Ganapathy, Rohan	CA	IAC-23.A6.5.3
M Ganapathy, Rohan	CA	IAC-23.B2.6.9
M. Estrada, Isaac	CA	IAC-23.C2.5.2
Ma, Clara Ziran	CA	IAC-23.B6.2.5
Ma, Guangfu	CA	IAC-23.C1.1.8
Ma, Hilda	CA	IAC-23.A2.5.6
Ma, Jifeng	CA	IAC-23.B1.4.7
Ma, Jing	S	IAC-23.C2.3.11
Ma, Ke	S	IAC-23.B3.3.2
Ma, Weihua	CA	IAC-23.A6.5.5
MA, Yuhai	A	IAC-23.C4.3.6
MA, Yuhai	CA	IAC-23.D2.3.9
Macak, Martin	S	IAC-23.D3.3.3
Maccari, Fabrizio	CA	IAC-23.C1.6.4
Maccone, Claudio	CA	IAC-23.A4.2.6
Maccone, Claudio	S	IAC-23.A4.2.11
MacDonald, Alexander	CA	IAC-23.B3.8.8
Macdonald, Malcolm	CA	IAC-23.C1.7.4
Machhi, Krush	CA	IAC-23.C4.5.2
Machhi, Krush	CA	IAC-23.C2.9.3

Name		Paper
Marr, Owen	S	IAC-23.B1.5.7
Marrucci, Elisabetta	CA	IAC-23.A1.7.10
Martens, Gregor	CA	IAC-23.D2.1.5
Martin, Anne-Sophie	S	IAC-23.E7.4.2
Martin Barrio, Andres	CA	IAC-23.C3.4.8
Martin-de-Mercado, Gonzalo	CA	IAC-23.D3.3.7
Martin-Neira, Manuel	CA	IAC-23.B4.4.4
Martinez, Alazne	CA	IAC-23.A3.2C.9
Martinez Espejo, Rebeca Guadalupe	CA	IAC-23.C4.6.2
Martinez Galisteo, Maria	CA	IAC-23.D3.2B.9
Martino, Paolo	CA	IAC-23.A3.4B.1
Martino, Paolo	A	IAC-23.A3.4B.2
Martire, Davide	CA	IAC-23.E2.3-GTS.4.8
Martire, Gianluca	CA	IAC-23.C4.1.5
Martucci, Vincenzo	CA	IAC-23.B4.7.13
Martínez, Bryan	CA	IAC-23.C2.2.7
Martínez, Bryan	CA	IAC-23.C2.9.7
Martínez Rodríguez-Osorio, Ramón	S	IAC-23.B2.6.8
Martínez Zamacola, Samuel	A	IAC-23.B2.6.8
Marzioli, Paolo	CA	IAC-23.B2.8-GTS.3.6
Marzioli, Paolo	S	IAC-23.B4.1.13
Marzioli, Paolo	S	IAC-23.A6.4.1
Marzioli, Paolo	S	IAC-23.B4.3.2
Marzioli, Paolo	CA	IAC-23.A2.2.7
Marzioli, Paolo	CA	IAC-23.A5.1.10
Marzioli, Paolo	CA	IAC-23.B2.4.8
Marzioli, Paolo	S	IAC-23.B4.6B.10
Marzioli, Paolo	CA	IAC-23.D1.4A.7
Marzioli, Paolo	CA	IAC-23.B4.5A-C4.8.7
Marzioli, Paolo	CA	IAC-23.C2.8.8
Marzioli, Paolo	CA	IAC-23.D1.5.1
Marzioli, Paolo	CA	IAC-23.E1.9.7
Mas, Andreu	CA	IAC-23.B4.4.6
Masciantonio, Giuseppe	CA	IAC-23.A7.3.6
Mascolo, Luigi	CA	IAC-23.A6.9.7
Masdemont, Josep J.	CA	IAC-23.C1.9.1
Mashor, Maren	S	IAC-23.B4.6B.4
Mashtakov, Yaroslav	S	IAC-23.B4.7.12
Masia, Rebecca	S	IAC-23.C2.2.1
Masini, Andrea	CA	IAC-23.B4.4.9
Maskey, Abhas	CA	IAC-23.B6.3.10
Maskey, Abhas	CA	IAC-23.B4.4.14
Maskey, Abhas	CA	IAC-23.E2.4.1
Maskey, Abhas	CA	IAC-23.B5.3.6
Mason, Jennifer	CA	IAC-23.B3.1.8
Mason, Lee	CA	IAC-23.D3.2A.2
Massobrio, Federico	CA	IAC-23.D1.6.7
Masson, Louis	S	IAC-23.D5.4.8
Massotti, Luca	CA	IAC-23.C4.5.4
Mastai, Yitzhak	CA	IAC-23.A1.7.4
Mastrandrea, Carmine Alessio	A	IAC-23.B1.3.3
Mastrantuono, Andrea	CA	IAC-23.A6.4.9
Masui, Hirokazu	CA	IAC-23.B4.2.9
Masui, Hirokazu	CA	IAC-23.B4.9-GTS.5.1
Masui, Hirokazu	CA	IAC-23.B4.9-GTS.5.5
Masui, Hirokazu	CA	IAC-23.D1.5.3
Mathewson, J Patrick	S	IAC-23.E9.1-A6.8.11
Mathieu, Luinaud	CA	IAC-23.E6.4.5
Mathur, Monish	A	IAC-23.C1.1.7
Matonti, Catello Leonardo	CA	IAC-23.D1.1.1
Matonti, Catello Leonardo	S	IAC-23.C1.9.4
Matonti, Catello Leonardo	CA	IAC-23.E3.4.1
Matonti, Catello Leonardo	S	IAC-23.C1.5.8
Matovic, Aleksandar	CA	IAC-23.D1.2.8
Matsui, Tasuku	CA	IAC-23.B4.9-GTS.5.5
Matsushita, Shuhei	CA	IAC-23.C4.8-B4.5A.1
Matsutomo, Tomu	CA	IAC-23.C3.2.13
Matsuura, Masayuki	S	IAC-23.C4.5.11
Matsuura, Masayuki	CA	IAC-23.C4.8-B4.5A.1
Matsuura, Yoshiki	CA	IAC-23.C4.4.11
Matsuyama, Nobuhiro	CA	IAC-23.E3.3.4
Mattiazzi, Fabio	CA	IAC-23.E2.3-GTS.4.1
Matula, Emily	CA	IAC-23.E6.1.12
Matula, Emily	CA	IAC-23.B3.9-GTS.2.4
Matunaga, Saburo	CA	IAC-23.C1.2.6

Name		Paper
Matusiewicz, Adam	CA	IAC-23.D2.6.2
Matviyenko, Sergiy	S	IAC-23.B5.1.10
Matyszewski, Jan	CA	IAC-23.D2.6.10
Matyszewski, Jan	CA	IAC-23.D2.7.8
Maurya, Rishabh	CA	IAC-23.B4.6B.4
Mauskopf, Philip	S	IAC-23.B2.4.9
Mauskopf, Philip	S	IAC-23.D4.4.1
Mautone Barros, José Eduardo	CA	IAC-23.C4.4.1
Mavropoulos, Aggelos	CA	IAC-23.E2.4.7
Maximchuk, Mikhail	CA	IAC-23.C2.2.4
Mayer, Christian	CA	IAC-23.E1.4.4
Mayer, Christian	CA	IAC-23.D1.4A.2
Mayer, Hannes	S	IAC-23.E4.1.9
Mayer, Nicolas	CA	IAC-23.D1.2.1
Mayor, Ivy	S	IAC-23.A2.4.8
Mayor, Ivy	S	IAC-23.C3.4.3
Mayorova, Vera	CA	IAC-23.A3.5.4
Mazzei, Francesco	A	IAC-23.A5.1.2
Mazzei, Francesco	CA	IAC-23.E1.4.2
Mazzetti, Lorenzo	CA	IAC-23.A5.1.10
Mazzotta Epifani, Elena	CA	IAC-23.E10.2.2
Mazzotti, Luca	CA	IAC-23.E2.3-GTS.4.8
Mccaghren, Jennifer	CA	IAC-23.E6.2.4
McCann, Brennan	CA	IAC-23.C1.3.2
McCann, Brennan	A	IAC-23.C1.3.8
McCarthy, Lacey	CA	IAC-23.B1.1.3
McCarthy, Patrick	CA	IAC-23.D6.3.1
McCollum, Lisa	CA	IAC-23.B3.2.4
McCormick, Molly	S	IAC-23.B3.2.7
McGrath, Ciara	CA	IAC-23.B6.5.10
McHugh, Jack	S	IAC-23.A6.7.8
McInnes, Colin R.	CA	IAC-23.C2.1.6
McInnes, Colin R.	CA	IAC-23.C1.1.6
McInnes, Colin R.	CA	IAC-23.C1.3.6
McInnes, Colin R.	CA	IAC-23.B4.7.3
McKemey, Quinn	S	IAC-23.E7.5.7
McKenna, Enda	CA	IAC-23.A6.5.2
McKibben, Nicholas	CA	IAC-23.C2.5.2
McNally, Keiran	CA	IAC-23.A6.2.5
McNaull, Aline	S	IAC-23.A6.8-E9.1.2
McNutt, Jr., Ralph L.	S	IAC-23.D4.4.3
Md Ridzwan, Nurafiqah Syahirah	S	IAC-23.E1.1.5
Meacham, Paul	CA	IAC-23.A3.3A.6
Means, Laura	A	IAC-23.E6.2.4
Medeiros, Claudia	CA	IAC-23.A6.8-E9.1.5
Medina Tanco, Gustavo	S	IAC-23.B4.2.10
Medova, Slavena	CA	IAC-23.A3.1.9
Medvedeva, Anastasia	A	IAC-23.E10.1.8
Mehenge, Rutvik	CA	IAC-23.A7.2.6
Mehraliyeva, Nigar	S	IAC-23.B6.3.4
Mehringer, Johanna	CA	IAC-23.E2.3-GTS.4.11
Melet, Olivier	CA	IAC-23.D1.2.1
Melis, Andrea	S	IAC-23.A4.1.9
Melo, Joaquim	CA	IAC-23.B4.7.12
Melograna, Catrina	CA	IAC-23.E9.1-A6.8.6
Memon, Saad	CA	IAC-23.D1.2.8
Mena Barranco, Pedro	CA	IAC-23.E1.8.1
Mena Morales, Raphael	CA	IAC-23.B4.8.12
Menahem, Efrat	CA	IAC-23.E1.1.1
Menahem, Efrat	CA	IAC-23.E1.2.4
Mendonca, Namishka	CA	IAC-23.C3.4.10
Meneghin, Andrea	CA	IAC-23.B4.2.4
Meneghin, Andrea	CA	IAC-23.A3.4A.6
Meneghin, Andrea	CA	IAC-23.E10.2.2
Meng, Yuanjun	CA	IAC-23.D1.3.3
Meng, Zeyue	CA	IAC-23.A3.2B.11
Meng, Zeyue	CA	IAC-23.B4.8.6
Menichetti, Paolo	CA	IAC-23.A7.3.6
Menicucci, Alessandra	CA	IAC-23.A1.5.3
Menninger, Sarah	CA	IAC-23.E2.3-GTS.4.11
Menon, Sethu Nandakumar	CA	IAC-23.E7.4.3
Menon, Sethu Nandakumar	S	IAC-23.E7.5.1
Menting, Esmée	A	IAC-23.D2.3.6
Menting, Esmée	CA	IAC-23.D2.3.7
Menting, Esmée	CA	IAC-23.D2.6.7

Name		Paper
Montanari, Brunella	A	IAC-23.C4.8-B4.5A.3
Monteiro Jr, Jorge Fernando	CA	IAC-23.C4.4.2
Montilla Gispert, Víctor	S	IAC-23.B2.3.12
Moon, Inchul	S	IAC-23.E2.3-GTS.4.2
Moore, Iain	S	IAC-23.C1.1.6
Moorkens O'Reilly, Rowan	CA	IAC-23.GTS.2-B3.9.6
Moradinasab, Sima	S	IAC-23.E7.1.13
Moraitis, Nicolas	A	IAC-23.E7.1.14
Moraitis, Nicolas	CA	IAC-23.E3.4.10
Morales, Rogelio	S	IAC-23.D3.1.5
Morales Serrano, Sara	CA	IAC-23.A6.8-E9.1.1
Morawiec, Adrian	CA	IAC-23.C2.7.7
Morbidelli, Lucia	CA	IAC-23.A1.3.7
Mordovskiy, Alexei	CA	IAC-23.C2.1.10
Morea, Albert	CA	IAC-23.D1.4A.12
Moreira, Marina	CA	IAC-23.D1.6.1
Moreland, Kimberly	CA	IAC-23.D5.3.6
Morelli, Andrea Carlo	S	IAC-23.C1.5.3
Morelli, Laura	CA	IAC-23.A3.1.2
Morelli, Laura	S	IAC-23.E9.2.2
Morelli, Laura	CA	IAC-23.E3.3.9
Morelli, Laura	CA	IAC-23.GTS.2-B3.9.6
Moreno López, Almudena	CA	IAC-23.A3.3B.10
Moreno Villa, Victor Manuel	CA	IAC-23.A3.4B.3
Moretti, William	CA	IAC-23.B2.5.6
Mori, Hazuki	S	IAC-23.B4.1.1
Mori, Hazuki	CA	IAC-23.E1.3.8
Mori, Hazuki	S	IAC-23.A2.6.3
Mori, Paolo	S	IAC-23.D2.2.5
Moriai, Hideki	CA	IAC-23.C4.1.7
Moriai, Hideki	CA	IAC-23.C4.7.8
Moriai, Isamu	S	IAC-23.C4.8-B4.5A.1
Moriai, Isamu	CA	IAC-23.C4.8-B4.5A.6
Morichetti, Giuseppe	CA	IAC-23.E1.4.7
Morin, A'laylah	CA	IAC-23.B3.9-GTS.2.4
Morishita, Naoki	CA	IAC-23.B4.8.2
Morita, Taichi	CA	IAC-23.C4.10-C3.5.12
Moronese, Veronica	CA	IAC-23.E9.1-A6.8.7
Morosino, Leticia	CA	IAC-23.D5.2.5
Morozov, Sergey	CA	IAC-23.A2.4.7
Morozova, Elina	S	IAC-23.E7.2.2
Morselli, Alessandro	CA	IAC-23.C1.5.3
Moruz, Georgiana Lorena	CA	IAC-23.B2.2.1
Morzhukhina, Alena V.	S	IAC-23.C2.7.1
Morzhukhina, Alena V.	S	IAC-23.C2.8.9
Moschetta, Marco	CA	IAC-23.B4.2.5
Mostert, J M	CA	IAC-23.B4.5A-C4.8.13
Mostert, Sias	S	IAC-23.E5.2.7
Mould, Toby	CA	IAC-23.D3.2B.7
Moumni, Fahd	CA	IAC-23.D1.5.3
Moura, Rita	CA	IAC-23.B4.9-GTS.5.10
Movahedin, Amirreza	CA	IAC-23.B2.5.6
Mozzato, Monica	CA	IAC-23.E2.4.3
Mozzini, Federica	CA	IAC-23.A1.2.8
Mridul, Parakh Chandra	CA	IAC-23.C4.2.6
MS, Shanthi	CA	IAC-23.D2.2.4
Mudd, Charles	S	IAC-23.E9.2.10
Mudd, Charles	S	IAC-23.E7.7.11
Mufti, Mariam	CA	IAC-23.B1.6.2
Mugnuolo, Raffaele	CA	IAC-23.A3.2B.9
Mugnuolo, Raffaele	CA	IAC-23.A3.3A.1
Mugnuolo, Raffaele	CA	IAC-23.A3.2C.11
Mujahid, MD. Mustaq	CA	IAC-23.E5.4.8
Mukherjee, Debarshi	S	IAC-23.A2.1.2
Mukherjee, Debarshi	S	IAC-23.D4.2.6
Mukherjee, Debarshi	S	IAC-23.A3.3A.11
Mukherjee, Debarshi	S	IAC-23.A1.5.2
Mukherjee, Swarnajyoti	CA	IAC-23.E6.2.8
Mukherjee, Swarnajyoti	CA	IAC-23.B5.3.7
Mukherjee, Victor	CA	IAC-23.E1.4.2
Mukhtarov, Vagif	CA	IAC-23.C3.2.8
Mukungunugwa, Victor	CA	IAC-23.D1.5.3
Mulekar, Omkar	S	IAC-23.C1.3.9
Mulki, Rhea	CA	IAC-23.A3.3A.8
Mullins, Carie	CA	IAC-23.E3.3.1
Mullins, Carie	CA	IAC-23.E3.3.7
Mullins, Carie	CA	IAC-23.D2.7.1
Mullins, Carie	CA	IAC-23.E6.1.4
Mulry, Katherine	CA	IAC-23.A5.1.8
Munenaga, Kotaro	S	IAC-23.C4.1.7
Munenaga, Takao	CA	IAC-23.C4.1.4
Mungiguerra, Stefano	S	IAC-23.C4.4.7
Mungiguerra, Stefano	CA	IAC-23.C4.8-B4.5A.9
Munoz, Pierre	S	IAC-23.E1.7.1
Munoz-Jaramillo, Andres	CA	IAC-23.D5.3.6
Munro-O'Brien, Thomas	CA	IAC-23.C4.10-C3.5.8
Munsami, Valanathan	CA	IAC-23.E1.5.6
Muntean, George	CA	IAC-23.A6.7.8
Muradzade, Ibrahim	S	IAC-23.C2.4.6
Murakami, Yoshiyuki	S	IAC-23.D5.3.3
Murakami, Yoshiyuki	CA	IAC-23.C3.3.11
Murakami, Yukikazu	CA	IAC-23.E1.3.5
Muramatsu, Shunta	CA	IAC-23.D4.3.4
Murayama, Chikako	S	IAC-23.D6.1.8
Murdoch, Naomi	CA	IAC-23.A3.4A.5
Murohara, Masaya	CA	IAC-23.C4.8-B4.5A.1
Murphy, Kevin	CA	IAC-23.B1.1.3
Murtazin, Rafail	CA	IAC-23.B3.4-B6.4.3
Murthi, K.R. Sridhara	CA	IAC-23.E6.4.3
Musaliar, Rahima Ansar	CA	IAC-23.E7.4.3
Musayev, Ilgar	S	IAC-23.B1.2.10
Musharraf, Mohammad	CA	IAC-23.B5.1.6
Musharraf, Mohammad	CA	IAC-23.E5.3.8
Musharraf, Mohammad	S	IAC-23.A3.5.1
Musharraf, Mohammad	S	IAC-23.A7.2.5
Musial, Alicja	CA	IAC-23.B6.3.5
Musial, Jacek	CA	IAC-23.C2.7.7
Musmeci, Mario	CA	IAC-23.B2.7.2
Musso, Fabio	CA	IAC-23.B6.2.9
Musso, Giorgio	CA	IAC-23.D1.6.7
Musso, Paolo	S	IAC-23.A4.2.6
Musso, Paolo	S	IAC-23.A4.2.7
Mustafa, Kamil	CA	IAC-23.E2.1.11
Mustich, Federico	S	IAC-23.D1.2.9
Musunuri, Sri Venkata Vathsala	S	IAC-23.E1.1.6
Musunuri, Sri Venkata Vathsala	S	IAC-23.E1.2.10
Muthanoor Radhakrishnan, Rajesh Kannan	CA	IAC-23.A5.1.2
Muthanoor Radhakrishnan, Rajesh Kannan	CA	IAC-23.E1.4.2
Muvvala, Mohan	CA	IAC-23.A3.1.2
Muvvala, Mohan	CA	IAC-23.E6.1.12
Muylle, Julia	CA	IAC-23.B3.9-GTS.2.1
Muzychenko, Evgeny	CA	IAC-23.C3.5-C4.10.4
Muzzammil, Syed	CA	IAC-23.C4.5.2
Muzzammil, Syed	CA	IAC-23.A2.2.2
Muzzammil, Syed	CA	IAC-23.C4.2.4
Muñoz Diaz, Maria Nimia	CA	IAC-23.B4.1.3
Muñoz Diaz, Maria Nimia	CA	IAC-23.A1.7.2
Muñoz Enamorado, Gabriela Nicolle	A	IAC-23.E1.7.10
Mwaniki, Charles	CA	IAC-23.A2.2.7
Mwaniki, Charles	CA	IAC-23.C2.8.8
Myśliwiec, Maciej	S	IAC-23.E1.4.6
Méndez Medina, Bryan	S	IAC-23.C2.2.7
Méndez Medina, Bryan	CA	IAC-23.C2.9.7
Möstl, Stefan	CA	IAC-23.A1.2.5
Müller, Moos	CA	IAC-23.B4.4.1
Müller-Brandes, Anja	CA	IAC-23.A2.2.9
Müller-Brandes, Anja	CA	IAC-23.A2.3.4

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N, Manoj	CA	IAC-23.A3.1.11
Nabiyev, Nabi	CA	IAC-23.B1.4.6
Nabiyev, Saleh	S	IAC-23.B1.5.4
Naccarato, Kleber	CA	IAC-23.B5.2.7
Nadtoka, Volodymyr	S	IAC-23.C2.4.2
Nagai, Yuutarou	CA	IAC-23.E2.3-GTS.4.6
Nagamoto, Kenichi	S	IAC-23.A1.8.10
Nagata, Harunori	CA	IAC-23.C4.4.6
Nagata, Taiichi	CA	IAC-23.C4.4.11
Nagaty, Amr	CA	IAC-23.C1.3.3

Name		Paper
Nagesh, Anand	S	IAC-23.A5.1.5
Nagesh, Anand	S	IAC-23.B2.6.11
Nagesh, Anand	S	IAC-23.C4.9.8
Nagesh, Anand	S	IAC-23.D3.2B.8
Naghiyev, Ilkin	CA	IAC-23.D5.1.3
Nair, Manju S.	S	IAC-23.C4.6.4
Najafli, Ulviyya	S	IAC-23.D4.5.5
Nakaegawa, Hiroki	CA	IAC-23.D1.1.6
Nakagawa, Yuichi	CA	IAC-23.C4.5.11
Nakajima, Shintaro	CA	IAC-23.C4.8-B4.5A.1
Nakajima, Shintaro	CA	IAC-23.B4.8.2
Nakajima, Shintaro	CA	IAC-23.B4.8.3
Nakajima, Yu	CA	IAC-23.A6.5.8
Nakajima, Yu	CA	IAC-23.C1.4.9
Nakamura, Kazuyuki	CA	IAC-23.C3.2.2
Nakamura, Riki	CA	IAC-23.B4.8.3
Nakamura, Ryo	CA	IAC-23.C1.1.4
Nakamura, Ryo	CA	IAC-23.A6.5.8
Nakamura, Ryo	CA	IAC-23.C1.7.7
Nakamura, Takeru	CA	IAC-23.C2.2.5
Nakamura, Tetsuya	CA	IAC-23.C3.3.11
Nakarada Pecujlic, Anja	CA	IAC-23.B4.6B.12
Nakarada Pecujlic, Anja	CA	IAC-23.A6.8-E9.1.4
Nakashima, Hideki	CA	IAC-23.C4.10-C3.5.12
Nakasuka, Shinichi	CA	IAC-23.B1.2.6
Nakasuka, Shinichi	CA	IAC-23.B4.3.3
Nakasuka, Shinichi	CA	IAC-23.B2.3.7
Nakasuka, Shinichi	CA	IAC-23.A7.3.5
Nakazawa, Satoru	CA	IAC-23.A3.4A.1
Nakazawa, Satoru	CA	IAC-23.D1.5.10
Nakrimi, Oumaima	CA	IAC-23.E9.2.1
Nalepa, Jakub	S	IAC-23.B6.3.5
Nandyala, Varun Reddy	S	IAC-23.C4.2.8
Naoufal, Souitat	S	IAC-23.D6.1.3
Napolano, Giuseppe	S	IAC-23.A6.6.4
Naqvi, Najam	S	IAC-23.E1.7.8
Nardi, Luca	CA	IAC-23.B4.3.2
Nardin, Andrea	S	IAC-23.B2.7.2
Narducci, Giuseppe	S	IAC-23.D1.4B.3
Naren Athreyas, Kashyapa	A	IAC-23.C1.7.8
Nascetti, Augusto	CA	IAC-23.B4.2.4
Nasibov, Ilyas	CA	IAC-23.A7.3.9
Nasila, Antti	CA	IAC-23.A3.2A.9
Nasser, Mona	CA	IAC-23.E1.7.4
Nassisi, Annamaria	CA	IAC-23.E1.6.10
Nasturzio, Saverio	CA	IAC-23.B4.9-GTS.5.4
Nasuti, Francesco	S	IAC-23.C4.1.6
Nasuti, Francesco	CA	IAC-23.C4.2.10
Nasuti, Francesco	CA	IAC-23.B4.5A-C4.8.7
Natalucci, Silvia	CA	IAC-23.B4.4.3
Natalucci, Silvia	CA	IAC-23.A3.4A.6
Natalucci, Silvia	CA	IAC-23.C1.4.9
Natalucci, Silvia	CA	IAC-23.B4.7.1
Natalucci, Silvia	CA	IAC-23.B4.7.13
Natarajan, Rajesh	CA	IAC-23.C4.6.12
Navakitkanok, Pornthep	CA	IAC-23.B4.4.5
Navarro, Angel	CA	IAC-23.E5.4.9
Navarro, Janina	CA	IAC-23.A4.2.7
Navas Hinostroza, Ayrton	CA	IAC-23.B4.1.3
Naveen, Yuvanesh	CA	IAC-23.A3.1.11
Nayyer, Mahhad	S	IAC-23.E9.1-A6.8.7
Nazari, Morad	CA	IAC-23.C1.3.2
Nazari, Morad	CA	IAC-23.C1.3.8
Neelakandan, Aagashram	CA	IAC-23.A2.7.10
Neelakandan, Aagashram	S	IAC-23.E8.1.3
Negodiaev, Sergei	CA	IAC-23.A6.9.5
Negodiaev, Sergei	CA	IAC-23.A6.9.6
Negre, Ben	CA	IAC-23.C4.10-C3.5.8
Negri, Andrea	CA	IAC-23.B4.7.1
Nemykin, Sergey	CA	IAC-23.D2.8.1
Nenarokomov, Aleksey V.	CA	IAC-23.C2.4.11
Nenarokomov, Aleksey V.	CA	IAC-23.C2.7.1
Nencioni, Stefano	CA	IAC-23.B1.3.6
Nerella, Sudarsan	S	IAC-23.C2.6.3
Nerella, Sudarsan	S	IAC-23.E5.4.10

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Nerkar, Saurabh	CA	IAC-23.B2.6.9
Nerurkar, Aditi	CA	IAC-23.A2.5.7
Nery, Vinícius	CA	IAC-23.B2.3.7
Nery, Vinícius	CA	IAC-23.B4.8.3
Nespoli, Adelaide	CA	IAC-23.C2.5.5
Nessel, James	CA	IAC-23.D3.2A.2
Netti, Vittorio	CA	IAC-23.C3.1.9
Netti, Vittorio	S	IAC-23.C2.8.4
Netti, Vittorio	S	IAC-23.E5.6.3
Neubauer, Erich	CA	IAC-23.C4.8-B4.5A.4
Neuenschwander, Daniel	S	IAC-23.B3.1.4
Neumann, Patrick	S	IAC-23.E7.2.8
Neumann, Patrick	S	IAC-23.B4.5A-C4.8.13
Neumeister, Nils	S	IAC-23.C2.2.4
Neverova, Daria	CA	IAC-23.C2.7.1
Neves, Guilherme	S	IAC-23.A6.7.9
Nevola, Mario Domenico	CA	IAC-23.E1.4.4
Newton, Andy	CA	IAC-23.B4.4.4
Ng, Cherry	CA	IAC-23.A4.1.5
Nguyen Le, Hanh	A	IAC-23.E6.1.4
Nguyen Xuan, Alessandra	CA	IAC-23.D1.4A.7
NI, Yanshuo	CA	IAC-23.B2.4.2
Nicholas Singh, Mark	CA	IAC-23.A3.3B.6
Nicolau-Kukliński, Janusz	CA	IAC-23.D2.6.10
Nicolau-Kukliński, Janusz	S	IAC-23.D2.7.8
Nie, Tao	CA	IAC-23.B6.3.3
Niederwieser, Tobias	S	IAC-23.A1.8.9
Niederwieser, Tobias	S	IAC-23.A2.7.1
Niemyjski, Marcin	S	IAC-23.B1.4.1
Nieto Peroy, Cristóbal	CA	IAC-23.D5.1.6
Nieto Peroy, Cristóbal	CA	IAC-23.E2.3-GTS.4.3
Nigussie, Bethelhem	CA	IAC-23.D2.2.7
Niinobe, Ryuta	S	IAC-23.D4.3.3
Nikiforov, Sergey	CA	IAC-23.A3.3B.5
Nikitin, Valeriy	CA	IAC-23.A2.2.1
Nikitin, Valeriy	CA	IAC-23.A2.2.6
Nikolaev, Petr	CA	IAC-23.B4.2.6
Nishihira, Shintaro	CA	IAC-23.D1.5.10
Nishimoto, Shingo	CA	IAC-23.C4.8-B4.5A.1
Nishio, Masanori	CA	IAC-23.E1.3.5
Nishishita, Taisei	S	IAC-23.A6.5.8
Nitti, Simone	CA	IAC-23.E6.4.5
Niu, Xiaojie	CA	IAC-23.E2.4.4
Nkula, Lídia	S	IAC-23.B4.1.9
Nocerino, Alessia	CA	IAC-23.A6.6.4
Noga, Tomasz	CA	IAC-23.D2.7.8
Noguchi, Mizuki	CA	IAC-23.C4.8-B4.5A.1
Nogué i Ansón, Clara	CA	IAC-23.A5.1.8
Nohmi, Masahiro	S	IAC-23.A6.5.4
Nomura, Shunichiro	S	IAC-23.B2.3.7
Nomura, Shunichiro	CA	IAC-23.C4.8-B4.5A.1
Nomura, Shunichiro	CA	IAC-23.B4.8.3
Nonaka, Satoshi	CA	IAC-23.D2.6.11
Noor Azmi, Nurul Huda	CA	IAC-23.E1.1.5
Noorani, Arzoo	CA	IAC-23.B5.1.6
Noorani, Arzoo	CA	IAC-23.A7.2.3
Noorani, Arzoo	A	IAC-23.A7.2.5
Nooreldeen, Hassan	S	IAC-23.B1.2.7
Norfini, Aleandro	CA	IAC-23.A1.3.7
Norheim, Johannes	S	IAC-23.D1.4B.4
Nori, Matteo	CA	IAC-23.A6.8-E9.1.10
Norman, Cameron	CA	IAC-23.B3.2.3
Nosovsky, Andrey	CA	IAC-23.A1.2.11
Nosseir, Ahmed E. S.	S	IAC-23.D1.3.10
Nosseir, Ahmed E. S.	S	IAC-23.C2.9.2
Nosyrev, Andrey	CA	IAC-23.A6.9.6
Novabos, Noniel Paul	CA	IAC-23.B4.1.5
Novak, Daniel	CA	IAC-23.D1.2.1
Novello, Luca	CA	IAC-23.A1.5.6
Novikov, Pavel	CA	IAC-23.C2.2.11
Novoselova, Elena	CA	IAC-23.A1.7.5
Nudurupati, Abhay Kaushik	S	IAC-23.A2.1.4
Nunna, Prasanthi	CA	IAC-23.C3.3.7
Nunome, Yoshio	CA	IAC-23.C4.1.4
Nuti, Leonardo	CA	IAC-23.E2.4.3

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Nutricato, Raffaele	CA	IAC-23.B4.9-GTS.5.8
Nyamukondiwa, Ramson	CA	IAC-23.D1.5.3
Nzeussi Mbouendeu, Charles-aimé	CA	IAC-23.E5.4.6

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O'Brien, Kieran	CA	IAC-23.A6.6.1
O'Grady, Rachael	S	IAC-23.E7.7.10
O. Williams, Saira	CA	IAC-23.B3.9-GTS.2.4
Ober-Blöbaum, Sina	CA	IAC-23.C1.3.4
Obilanade, Didunoluwa	S	IAC-23.C2.5.9
Ocasio-Christian, Jose	S	IAC-23.E6.5-GTS.1.7
Occena, Daryll Jessica	CA	IAC-23.B4.1.5
Ochave, Victor Joseph	CA	IAC-23.B4.1.5
Ochoa Villanueva, Cristopher Alexander	S	IAC-23.E10.1.3
Odaka, Hirokazu	CA	IAC-23.A7.3.5
Offiong, Etim	S	IAC-23.E1.5.6
Ogawa, Hideaki	CA	IAC-23.C4.7.5
Ogneva, Irina V.	CA	IAC-23.A1.2.1
Oguri, Kenshiro	CA	IAC-23.C1.3.7
Oh, Han	CA	IAC-23.B1.1.5
Ohma, Hajime	CA	IAC-23.D4.3.8
Ohnishi, Takahiro	S	IAC-23.C3.2.13
Ohr, Peter	CA	IAC-23.A2.2.9
Ohr, Peter	CA	IAC-23.A2.3.4
Ohrwall Ronnback, Anna	CA	IAC-23.A6.4.10
Ohrwall Ronnback, Anna	CA	IAC-23.E3.3.10
Ohrwall Ronnback, Anna	CA	IAC-23.E9.3.4
Ohtake, Makiko	CA	IAC-23.A3.2A.5
Oidtmann, Nicolas	CA	IAC-23.B4.4.6
Oikonomidou, Xanthi	CA	IAC-23.A6.4.2
Oiwa, Fumihiro	CA	IAC-23.A2.5.9
Ojeda, Oscar	CA	IAC-23.E2.1.1
Okada, Nobu	CA	IAC-23.A6.5.2
Okada, Nobu	CA	IAC-23.A6.6.1
Okamoto, Hiroyuki	CA	IAC-23.C1.1.4
Okamoto, Hiroyuki	CA	IAC-23.A6.5.8
Okhitina, Anna	S	IAC-23.C1.2.8
Okumura, Teppei	CA	IAC-23.D5.3.3
Okumura, Teppei	S	IAC-23.C3.3.11
Olano O'Brien, Grecia	S	IAC-23.E6.1.13
Olano O'Brien, Grecia	S	IAC-23.E4.3.2
Olano O'Brien, Grecia	S	IAC-23.E5.5.6
Olano O'Brien, Grecia	S	IAC-23.D3.3.11
Olansen, Jon	CA	IAC-23.B3.1.8
Olansen, Jon	CA	IAC-23.D3.2A.1
Olascoaga, Carlos	CA	IAC-23.C3.4.3
Olayo, Daniel	CA	IAC-23.A3.3B.10
Olenev, Valentin	S	IAC-23.B2.3.10
Oliva, Giuseppe	A	IAC-23.C4.3.9
Olivares-Mendez, Miguel	CA	IAC-23.C1.4.2
Oliveira, Hélder	CA	IAC-23.B4.7.11
Oliveira Pinho, Gonçalo	CA	IAC-23.A1.7.10
Oliver, Carol	S	IAC-23.A4.2.3
Olivieri, Lorenzo	CA	IAC-23.E2.3-GTS.4.1
Olivieri, Lorenzo	CA	IAC-23.A6.3.4
Olivieri, Lorenzo	S	IAC-23.A6.3.6
Olivieri, Lorenzo	S	IAC-23.A6.3.7
Olivieri, Lorenzo	CA	IAC-23.B1.3.5
Olivieri, Lorenzo	CA	IAC-23.E2.4.3
Olivlet, Lorrane	CA	IAC-23.E1.9.10
Ollero, Aníbal	CA	IAC-23.A3.5.7
Olson, Makaila	CA	IAC-23.A1.5.7
Oluwafemi, Funmilola Adebisi	A	IAC-23.A2.4.8
Oluwafemi, Funmilola Adebisi	CA	IAC-23.B1.6.8
Omara, Bonny	CA	IAC-23.D1.5.3
Omran, Basel	S	IAC-23.C3.2.9
Ondrej, Santolik	CA	IAC-23.B4.2.7
Onuki, Misuzu	S	IAC-23.E6.1.11
Oosawa, Rika	CA	IAC-23.E5.3.3
Opromolla, Roberto	CA	IAC-23.A6.7.1
Opromolla, Roberto	CA	IAC-23.A6.6.4
Opromolla, Roberto	CA	IAC-23.A6.1.7
Oqab, Haroon B.	S	IAC-23.C3.1.8
Ora, Johannes	CA	IAC-23.E2.3-GTS.4.3
Orger, Necmi Cihan	CA	IAC-23.B1.3.9
Orii, Ryohei	S	IAC-23.C2.2.5
Orlov, Oleg	CA	IAC-23.A1.2.1
Orlov, Oleg	CA	IAC-23.A1.2.11
Orlov, Oleg	CA	IAC-23.A1.4.1
Orlov, Oleg	A	IAC-23.E4.1.8
Orlov, Oleg	CA	IAC-23.E5.6.2
Orlov, Vladislav	A	IAC-23.C1.4.6
Ors, Tolga	CA	IAC-23.B5.2.7
Ortega, Nicolás	CA	IAC-23.B3.9-GTS.2.1
Oryan, Danielle	CA	IAC-23.E1.1.1
Oryan, Danielle	CA	IAC-23.E1.2.4
Osborn Frandsen, Hjalte	CA	IAC-23.E9.1-A6.8.6
Oshima, Hinata	S	IAC-23.E7.1.3
Oshiro, Takashi	CA	IAC-23.D1.5.3
Osman, Arun	CA	IAC-23.C2.2.4
Osoianu, Danniel	CA	IAC-23.A3.2C.3
Ossola, Enrico	CA	IAC-23.C2.1.2
Oswald, Johannes	CA	IAC-23.D2.5.4
Otake, Hisashi	CA	IAC-23.A3.4A.4
Otani, Yukihisa	S	IAC-23.D1.5.3
Oton, Claudio	CA	IAC-23.D1.3.10
Oton, Claudio	CA	IAC-23.C2.9.2
Otsuka, Hikaru	S	IAC-23.E1.2.8
Otsuka, Hikaru	S	IAC-23.E1.9.3
Otsuka, Keisuke	CA	IAC-23.D4.3.7
Otsuka, Kiyotoshi	CA	IAC-23.D4.3.3
Otsuka, Kiyotoshi	CA	IAC-23.D4.3.4
Otsuka, Kiyotoshi	CA	IAC-23.D4.3.8
Otsuki, Masatsugu	CA	IAC-23.A3.2B.13
Otsuki, Masatsugu	CA	IAC-23.B4.8.2
Ottavia, Giulia	CA	IAC-23.E5.3.5
Ottaviani, Annalisa	CA	IAC-23.E2.4.8
Ouis, Mohammed Amine	CA	IAC-23.B4.1.2
Ovando Villegas, Themis Coral	A	IAC-23.E1.2.1
Ovchinnikov, Mikhail	A	IAC-23.C1.8.2
Ovchinnikov, Mikhail	S	IAC-23.C1.2.1
Ovchinnikov, Mikhail	A	IAC-23.C1.7.9
Owen, Trevor	CA	IAC-23.E9.1-A6.8.7
Ozaki, Naoya	CA	IAC-23.C1.3.7
Ozorovich, Yuri	S	IAC-23.A7.3.4
O'Donohue, Michael	CA	IAC-23.D1.3.5
O'Donohue, Michael	CA	IAC-23.E2.3-GTS.4.5
O'Neill, William	CA	IAC-23.C4.5.3

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P, Arunkumar	CA	IAC-23.D4.1.9
P, Arunkumar	CA	IAC-23.A1.5.4
P, Arunkumar	CA	IAC-23.E8.1.1
P, Suchitra	CA	IAC-23.D2.2.4
P V, Kishan	CA	IAC-23.C4.6.10
Pace, Scott	S	IAC-23.E3.2.1
Pachiyappan, Jey Kumar	CA	IAC-23.A2.7.3
Padhi, R.	CA	IAC-23.C1.1.10
Padilla Martín, María Dolores	CA	IAC-23.C4.6.2
Padilla Medina, David	CA	IAC-23.B4.2.10
Padilla Torres, Alejandro Taiki	CA	IAC-23.C4.4.11
Paganelli Azza, Federica	CA	IAC-23.D4.1.4
Pagani, Alfonso	S	IAC-23.B5.1.2
Pagani, Alfonso	A	IAC-23.C2.2.1
Pagani, Alfonso	S	IAC-23.C2.2.2
Pagani, Alfonso	A	IAC-23.C2.3.2
Pagani, Alfonso	CA	IAC-23.C2.5.11
Page, Olly	CA	IAC-23.B4.3.10
Paglialunga, Daniele	CA	IAC-23.B4.2.4
Pairat, Paripat	CA	IAC-23.B4.4.5
Pajola, Maurizio	CA	IAC-23.E10.2.2
Pajusalu, Mihkel	CA	IAC-23.A3.2A.9
Pakosz, Mateusz	CA	IAC-23.C2.7.7
Pakosz, Michal	CA	IAC-23.D2.6.10
Pakosz, Michał	CA	IAC-23.D2.7.8
Pal, Yash	CA	IAC-23.C4.7.2
Palacios Bett, Juan Salvador	S	IAC-23.D2.2.8
Palateerdham, Sasi Kiran	S	IAC-23.C4.7.2

Name		Paper
Palateerdham, Sasi Kiran	S	IAC-23.C4.8-B4.5A.12
Palfreyman, Andrew	A	IAC-23.B4.4.4
Palialexi, Vera	S	IAC-23.E9.2.3
Palma, David	CA	IAC-23.E2.4.7
Palmer, Rebecca	S	IAC-23.D3.2A.3
Palmeri, Flavia	A	IAC-23.C2.2.9
Palmerini, Giovanni B.	CA	IAC-23.C2.3.4
Palmerini, Giovanni B.	CA	IAC-23.C1.4.10
Palomino, Ángel	CA	IAC-23.A3.4B.3
Palumbo, Andrea	CA	IAC-23.A6.7.1
Palumbo, Pasquale	CA	IAC-23.E10.2.2
Panagopoulos, Jorge	CA	IAC-23.B4.7.12
Panawennage, Sanath	CA	IAC-23.B4.2.9
PANCHAL, KOMAL	S	IAC-23.D4.1.11
Pandele, Alexandru	CA	IAC-23.B4.6A.11
Pandit, Atharva	S	IAC-23.E4.2.10
Pandya, Shawna	S	IAC-23.D6.1.4
Panicucci, Paolo	CA	IAC-23.B4.8.5
Panissi, Denio Lemos	CA	IAC-23.C2.7.9
Panitz, Corinna	CA	IAC-23.A1.8.5
Panizza, Luca	CA	IAC-23.A1.3.5
Pannico, Antonio	CA	IAC-23.B4.3.2
Pantalone, Desirée	CA	IAC-23.A1.3.7
Panza, Christian	A	IAC-23.A3.2C.7
Panzanaro, Mauro	CA	IAC-23.C4.8-B4.5A.12
Paoli, Cassandra	CA	IAC-23.D5.4.4
Papamarenghi, Filippo	CA	IAC-23.D4.2.2
Papoudos, Ioannis	CA	IAC-23.B3.9-GTS.2.1
Papp, Cristian	CA	IAC-23.B1.5.12
Papp, Zsolt	CA	IAC-23.B2.8-GTS.3.5
Pappula, Srinivasu	CA	IAC-23.B5.2.8
Paravano, Alessandro	S	IAC-23.E3.1.2
Paravano, Alessandro	CA	IAC-23.E6.4.5
Paravano, Alessandro	S	IAC-23.E3.2.3
Paravano, Alessandro	S	IAC-23.E6.3.6
Pardini, Carmen	S	IAC-23.A6.4.7
Paredes Garcia, Lourdes Yessenia	CA	IAC-23.A4.2.7
Parekh, Kandim	CA	IAC-23.A5.4.2
Parekh, Kandim	CA	IAC-23.A6.3.9
Parekh, Kandim	CA	IAC-23.B3.8.7
Parekh, Swapnil	CA	IAC-23.B3.5.7
Parisse, Maurizio	CA	IAC-23.B4.2.4
Park, Gwangkun	CA	IAC-23.A2.5.2
Park, Jaesung	CA	IAC-23.E6.2.5
Park, Jaesung	CA	IAC-23.D2.7.3
Park, Jongwon	CA	IAC-23.A3.2C.13
Park, Jung Ho	CA	IAC-23.D6.3.6
Park, Jung Ho	CA	IAC-23.E6.2.5
Park, Jung Hun	CA	IAC-23.A3.2A.1
Park, Junwoo	CA	IAC-23.E6.2.5
Park, Justin	S	IAC-23.E6.1.6
Park, Kilsoon	CA	IAC-23.A3.2A.1
Park, Shin-Mu	CA	IAC-23.D1.5.2
Park, Sumin	CA	IAC-23.B1.1.5
Park, Sumin	CA	IAC-23.B1.4.8
Parker, David	CA	IAC-23.B3.1.4
Parker, Joel	CA	IAC-23.B2.7.2
Parracino, Giovanni Pio	S	IAC-23.C3.2.5
Parvez, Erfan	CA	IAC-23.A3.3A.3
Parzybut, Adrian	S	IAC-23.C4.1.2
Pascale, Marco	CA	IAC-23.A6.8-E9.1.5
Paschero, Matteo	CA	IAC-23.B3.2.3
Paschero, Matteo	CA	IAC-23.D2.4.7
Pascual, Jara	CA	IAC-23.A3.2B.10
Pascual, Jara	CA	IAC-23.E1.5.4
Pashayeva, Arzu	CA	IAC-23.E5.2.9
Pasquale, Andrea	CA	IAC-23.D1.4B.1
Pasquale, Flavio	CA	IAC-23.E1.4.7
Pasquali, Michele	CA	IAC-23.D1.4A.7
Pasquariello, Chiara	CA	IAC-23.B4.6B.11
Pastena, Massimiliano	CA	IAC-23.B4.4.4
Pastor, Alice	S	IAC-23.D5.2.1
Pastore, Roberto	CA	IAC-23.C2.8.2
Pastorini, Guia	A	IAC-23.B1.3.6
Pastushkova, Luidmila	CA	IAC-23.A1.2.6
Pastushkova, Luidmila	S	IAC-23.A1.2.11
Pasynkova, Daria	A	IAC-23.C2.2.11
Patel, Niravkumar	S	IAC-23.A5.2.11
Patel, Palak	CA	IAC-23.A5.1.8
Paternoster, Andrea	CA	IAC-23.B3.2.3
Pathania, Sidhanshu	CA	IAC-23.B3.5.2
Patilkulkarni, Sudarshan	CA	IAC-23.C4.5.5
Patilkulkarni, Sudarshan	S	IAC-23.A2.7.3
Patrizi, Matteo	CA	IAC-23.E3.1.2
Patruno, Silvio	CA	IAC-23.E10.2.2
Pattanaro, Lorenzo	CA	IAC-23.A3.2B.5
Patton, Daniel	S	IAC-23.E3.4.9
Patzwald, Joel James	CA	IAC-23.D3.2B.1
Paul, Amber	CA	IAC-23.A1.5.7
Paul, Michael	CA	IAC-23.D4.4.3
Pavarin, Daniele	CA	IAC-23.C4.4.5
Pavarin, Daniele	CA	IAC-23.B4.5.3
Pavarin, Daniele	CA	IAC-23.C4.8-B4.5A.3
Pavarin, Daniele	CA	IAC-23.B2.6.1
Pavelec, Mike	S	IAC-23.E4.2.2
Pavia, Patrizio	CA	IAC-23.C3.2.7
Pavlas, Ondrej	CA	IAC-23.A3.2B.8
Pavliv, Taras	CA	IAC-23.B4.9-GTS.5.4
Pavlov, Aleksandr	CA	IAC-23.A1.7.7
Pavlov, Aleksei	CA	IAC-23.C4.6.3
Pavlov, Aleksei	CA	IAC-23.C4.8-B4.5A.8
Pavlyuchenko, Veronika	CA	IAC-23.A3.5.4
Pavoni, Marco	CA	IAC-23.C4.8-B4.5A.3
Pavón Luque, Daniel	CA	IAC-23.B4.4.6
Pawar, Mayur	S	IAC-23.D1.3.8
Pawelski, Joseph	CA	IAC-23.D3.2B.7
Pawlicki, Diana	S	IAC-23.A1.5.1
Pawluk, Damian	CA	IAC-23.C2.7.7
Peak, Varick	CA	IAC-23.B3.9-GTS.2.1
Pearce, Allegra	CA	IAC-23.E1.3.6
Pecci, Raffaella	CA	IAC-23.A1.3.5
Pecci, Raffaella	CA	IAC-23.A1.7.13
Pelenghi, Giulio	CA	IAC-23.C4.3.9
Pellacani, Andrea	CA	IAC-23.A3.4B.3
Pellegrini, Etienne	S	IAC-23.C1.6.7
Pelton, Joseph	S	IAC-23.E3.1.1
Peluso, Alessandro	S	IAC-23.B3.2.3
Peluso, Alessandro	CA	IAC-23.D2.4.7
Peng, Bo	S	IAC-23.D3.2B.3
Peng, Jing	CA	IAC-23.E3.2.4
Peng, Lei	A	IAC-23.A5.1.1
Peng, Shi	CA	IAC-23.A5.1.1
Peng, Shi	CA	IAC-23.C4.10-C3.5.3
Pentke, Nils	CA	IAC-23.E1.4.4
Pepellin, Maurice	CA	IAC-23.E2.3-GTS.4.8
Pepermans, Lars	CA	IAC-23.D2.3.6
Pepermans, Lars	S	IAC-23.D2.3.7
Pepermans, Lars	CA	IAC-23.D2.6.7
Peralta Cordeiro, Diogo	CA	IAC-23.D5.4.2
Perdigues Armengol, Josep Maria	CA	IAC-23.B2.3.1
Perelli, Massimo	CA	IAC-23.B4.7.1
Perepukhov, Denis	S	IAC-23.C1.5.4
Perez, Karen	S	IAC-23.A4.1.4
Perez Lissi, Franco	CA	IAC-23.C4.8-B4.5A.3
Peri, Lakshmi Narayana Phaneendra	CA	IAC-23.C4.7.2
Peri, Lakshmi Narayana Phaneendra	CA	IAC-23.C4.8-B4.5A.12
Perico, Davide	CA	IAC-23.E2.3-GTS.4.8
Perico, Davide	S	IAC-23.E2.4.8
Perico, Davide	CA	IAC-23.C1.5.3
Perino, Maria Antonietta	S	IAC-23.B6.2.9
Perna, Davide	CA	IAC-23.E10.2.2
Perna-Vella, Oli	S	IAC-23.E1.6.1
Peroni, Marco	CA	IAC-23.A5.2.3
Perozzi, Ettore	CA	IAC-23.B4.5.2
Perreault, Vincent	A	IAC-23.E2.3-GTS.4.4
Persson, Lars - Olov	CA	IAC-23.D5.1.6
Perugino, Lorenzo	S	IAC-23.A6.7.1
Perumal, Karthika Regunatha	CA	IAC-23.C4.8-B4.5A.12
Peter, Christoph	S	IAC-23.C4.8-B4.5A.2
Peter, Nicolas	CA	IAC-23.E9.2.2

Name		Paper
Peter, Nicolas	CA	IAC-23.E3.1.8
Peter, Nicolas	CA	IAC-23.E6.3.4
Peter, Nicolas	CA	IAC-23.E3.3.9
Peter, Nicolas	S	IAC-23.E9.3.5
Peter, Nicolas	CA	IAC-23.E6.1.5
Petermann, Timon	CA	IAC-23.C1.1.7
Peters, Steef	CA	IAC-23.B5.2.1
Petersen, Jannis	CA	IAC-23.D3.2B.1
Petra, Nicola	CA	IAC-23.E2.4.5
Petrukovich, Anatoli	CA	IAC-23.A3.2A.6
Petrukovich, Anatoli	A	IAC-23.D2.8.1
Pettersson, Henrik	CA	IAC-23.A2.3.2
Pettinicchio, Attilio	CA	IAC-23.D1.4B.10
Petukhov, Viacheslav	CA	IAC-23.C1.9.7
Petukhov, Viacheslav	CA	IAC-23.C1.6.8
Pevear, Kristina	CA	IAC-23.D1.5.5
Pfaff, Johannes	CA	IAC-23.E1.4.4
Phalphale, Adesh	CA	IAC-23.D1.3.8
Pham, Timothy	CA	IAC-23.B3.4-B6.4.1
Pham, Timothy	S	IAC-23.B6.1.8
Pham, Timothy	CA	IAC-23.B4.8.1
Philip George, Anewrin	CA	IAC-23.A3.3A.8
Philipp, Daniel	CA	IAC-23.D1.3.5
Philipp, Daniel	CA	IAC-23.E2.3-GTS.4.5
Piano, Samanta	CA	IAC-23.A6.5.9
Pianorsi, Mattia	CA	IAC-23.D4.2.2
Pianorsi, Mattia	CA	IAC-23.E3.3.5
Piazza, Fabio	CA	IAC-23.A1.7.10
Picado, Daniel	CA	IAC-23.C2.2.7
Picado, Daniel	CA	IAC-23.C2.9.7
Picchiani, Matteo	CA	IAC-23.B1.3.3
Picci, Niccolò	CA	IAC-23.B4.6B.10
Picciariello, Francesco	CA	IAC-23.B2.3.4
Piccinin, Margherita	CA	IAC-23.A6.6.3
Piccolo, Felice	S	IAC-23.B4.8.5
Picot, Nicolas	CA	IAC-23.B1.6.4
Piepjohn, Johanna	CA	IAC-23.A1.8.5
Pierdicca, Nazzareno	CA	IAC-23.B4.4.4
Piergentili, Fabrizio	CA	IAC-23.B2.8-GTS.3.6
Piergentili, Fabrizio	CA	IAC-23.A6.9.4
Piergentili, Fabrizio	CA	IAC-23.B4.1.13
Piergentili, Fabrizio	CA	IAC-23.A6.4.1
Piergentili, Fabrizio	CA	IAC-23.B4.3.2
Piergentili, Fabrizio	CA	IAC-23.A2.2.7
Piergentili, Fabrizio	CA	IAC-23.A5.1.10
Piergentili, Fabrizio	CA	IAC-23.B2.4.8
Piergentili, Fabrizio	CA	IAC-23.B4.6B.10
Piergentili, Fabrizio	CA	IAC-23.D1.4A.7
Piergentili, Fabrizio	CA	IAC-23.B4.5A-C4.8.7
Piergentili, Fabrizio	CA	IAC-23.B4.9-GTS.5.6
Piergentili, Fabrizio	CA	IAC-23.C2.8.2
Piergentili, Fabrizio	CA	IAC-23.C2.8.8
Piergentili, Fabrizio	CA	IAC-23.D1.5.1
Piergentili, Fabrizio	CA	IAC-23.A6.1.5
Piergentili, Fabrizio	CA	IAC-23.E1.9.7
Piersanti, Emanuele	CA	IAC-23.B4.4.3
Pieterek, Bartosz	CA	IAC-23.D3.2B.6
Pietras, Markus	S	IAC-23.D1.3.13
Pietras, Markus	CA	IAC-23.C2.6.6
Pighini, Claudio	CA	IAC-23.A1.2.8
Pignolet, Guy	CA	IAC-23.E1.7.1
Pijnacker Hordijk, Bas	CA	IAC-23.B1.1.8
Pikulić, Luka	S	IAC-23.A3.3B.7
Pikulić, Luka	CA	IAC-23.A5.2.2
Pilo, Elena	CA	IAC-23.C1.6.4
Pilz, Norbert	CA	IAC-23.C4.6.7
Pilz, Norbert	CA	IAC-23.B4.5A-C4.8.5
Pimentel Marte, Omar	S	IAC-23.E9.3.6
Pimple, Sayali	CA	IAC-23.C3.4.3
Pinelli, Andrea	CA	IAC-23.C3.4.1
Pingle, Siddhesh	CA	IAC-23.B2.2.1
Pinna, Valeria	CA	IAC-23.B5.3.5
Pinna, Valeria	A	IAC-23.E5.4.5
Pino, Paolo	A	IAC-23.D3.1.1
Pipino, Andrea	CA	IAC-23.B4.2.2
Pipino, Andrea	CA	IAC-23.A3.2B.5
Pipolo, Serena	CA	IAC-23.B3.2.3
Piras, Annamaria	S	IAC-23.C2.1.2
Pirat, Camille	CA	IAC-23.B4.4.9
Piris Cuiza, Alvaro	S	IAC-23.E6.4.7
Piris Cuiza, Alvaro	S	IAC-23.E7.5.10
Piriyev, Tamleykha	CA	IAC-23.D2.7.2
Pirrotta, Simone	CA	IAC-23.B4.2.4
Pirrotta, Simone	CA	IAC-23.A3.2B.9
Pirrotta, Simone	CA	IAC-23.A3.2C.11
Pirrotta, Simone	CA	IAC-23.E10.2.2
Pisacane, Valerio	CA	IAC-23.B4.7.13
Pisano, Francesca Maria	CA	IAC-23.D2.5.6
Pisano, Francesca Maria	CA	IAC-23.D2.6.4
Pisarik, Michael	CA	IAC-23.A3.2A.9
Pitacco, Giovanni	CA	IAC-23.A6.3.6
Pitz, Isabel	CA	IAC-23.B3.3.6
Pizzarelli, Marco	CA	IAC-23.C2.5.6
Placke, Ben	CA	IAC-23.C2.2.4
Plata, Abner	CA	IAC-23.E1.9.12
Platell, Ariane	CA	IAC-23.E1.4.2
Plesescu, Florin	CA	IAC-23.C4.5.4
Pletser, Vladimir	CA	IAC-23.B6.3.6
Plettemeier, Dirk	CA	IAC-23.A3.4B.4
Ploeg, Wim	A	IAC-23.E5.4.11
Plörer, Patrick	CA	IAC-23.A2.2.9
Plörer, Patrick	CA	IAC-23.A2.3.4
Podgorski, Mikolaj	CA	IAC-23.B1.3.10
Podladchikova, Tatiana	CA	IAC-23.B4.7.10
Podlosinskaya, Anastasia	CA	IAC-23.C4.8-B4.5A.8
Podmajersky, Marian	CA	IAC-23.D4.1.6
Podwin, Agnieszka	CA	IAC-23.A2.2.3
Poggiali, Giovanni	CA	IAC-23.E10.2.2
Poirier, Clémence	S	IAC-23.E9.2.1
Poirier, Clémence	S	IAC-23.E9.3.1
Poirier, Clémence	S	IAC-23.D5.4.1
Poirier-Boulet, Antoine	CA	IAC-23.A3.5.5
Poirier-Boulet, Antoine	CA	IAC-23.A3.2C.11
Pokładnik, Ryszard	CA	IAC-23.B3.7.11
Poli, Eleonore	S	IAC-23.A3.1.8
Poli, Eleonore	CA	IAC-23.E5.6.5
Poliacek, Matej	S	IAC-23.E1.1.4
Poliacek, Matej	S	IAC-23.B3.4-B6.4.7
Poliacek, Matej	S	IAC-23.E1.7.7
Polnarev, Alexander	CA	IAC-23.A7.2.2
Pomet, Jean-Baptiste	CA	IAC-23.A6.7.7
Ponomarev, Ivan	CA	IAC-23.A1.3.9
Ponomarev, Ivan	CA	IAC-23.E5.2.2
Ponomarev, Sergey	CA	IAC-23.A1.4.1
Pont, Gabriel	S	IAC-23.A3.5.9
Pontani, Mauro	CA	IAC-23.C1.8.1
Pontani, Mauro	CA	IAC-23.C2.2.6
Pontani, Mauro	CA	IAC-23.C1.2.2
Pontani, Mauro	S	IAC-23.C1.5.2
Pontani, Mauro	S	IAC-23.C1.7.1
Ponti, Fabrizio	CA	IAC-23.C4.5.10
Ponti, Fabrizio	CA	IAC-23.C4.6.5
Ponti, Fabrizio	CA	IAC-23.B2.6.1
Ponti, Fabrizio	CA	IAC-23.C4.9.3
Pontrias, Elaiza	CA	IAC-23.B4.1.5
Popel, Sergey	CA	IAC-23.A3.2C.14
Popov, Mikhail	S	IAC-23.A2.4.6
Popova, Elena	CA	IAC-23.B3.5.5
Poppe, Sam	CA	IAC-23.A3.2A.9
Porcelli, Francesco	CA	IAC-23.B6.2.2
Porpora, Damiano	CA	IAC-23.E1.4.7
Porta, Roberto	CA	IAC-23.B6.3.4
Porter, Rebecca	CA	IAC-23.B1.6.2
Porzi, Simone	S	IAC-23.C4.1.5
Pospisil, Stanislav	CA	IAC-23.E3.2.5
Pospisil, Timo	CA	IAC-23.B4.4.6
Potemkin, Artur	CA	IAC-23.A1.7.5
Potter, Simon	CA	IAC-23.E6.1.4
Pouget, Thibaut	S	IAC-23.B4.9-GTS.5.12
Pouwels, Charlotte	CA	IAC-23.A5.1.9

Name		Paper
Pouwels, Charlotte	CA	IAC-23.B3.4-B6.4.9
Pouwels, Charlotte	CA	IAC-23.E5.6.6
Pouwels, Charlotte	CA	IAC-23.GTS.2-B3.9.6
Pozo, Borja	S	IAC-23.A3.2C.9
Pozzato, Nicola	CA	IAC-23.E2.3-GTS.4.1
Pozzi, Chiara	A	IAC-23.C1.5.2
Prado, Antonio	CA	IAC-23.A6.7.9
Prahyang, Setra Yoman	CA	IAC-23.B4.1.7
Prakash, Aditya	S	IAC-23.D4.4.6
Prasanna, Akash	CA	IAC-23.C4.2.4
Prasanna, Sahana	CA	IAC-23.C4.6.10
Preda, Angela	CA	IAC-23.B3.8.10
Preda, Angela	CA	IAC-23.B3.9-GTS.2.7
Preetham, Aakash	CA	IAC-23.C2.6.3
Preis, Max	CA	IAC-23.E1.4.4
Prejean, Tristan	CA	IAC-23.B4.6B.4
Prendergast, Maurice	CA	IAC-23.C3.4.8
Prevereaud, Ysolde	S	IAC-23.D2.3.4
Price, Colin	CA	IAC-23.E3.2.5
Prieto Ballesteros, Olga	CA	IAC-23.A3.4A.5
Prieto Boveda, Iñigo	CA	IAC-23.D1.6.7
Primavera, Asia	CA	IAC-23.C2.7.3
Principe, Gennaro	A	IAC-23.A6.4.9
Prinetto, Jacopo	CA	IAC-23.B4.4.9
Prinetto, Jacopo	CA	IAC-23.A3.4A.6
Prinetto, Jacopo	CA	IAC-23.A6.5.10
Prinetto, Jacopo	CA	IAC-23.A3.2C.11
Pritchard, Kenneth	CA	IAC-23.A1.7.12
Pritykin, Dmitry	CA	IAC-23.B4.7.4
Proccacino, Carla	CA	IAC-23.B1.1.3
Prochnow, Florian	S	IAC-23.C4.5.3
Procházka, Ivan	CA	IAC-23.A3.2A.9
Profitiliotis, George	CA	IAC-23.A4.2.2
Propst, Martin	CA	IAC-23.D3.2B.1
Prosperi, Alessio	CA	IAC-23.E2.3-GTS.4.8
Prosperi, Alessio	S	IAC-23.B4.6B.11
Protasov, Yury Yu.	CA	IAC-23.C4.6.3
Protsan, Yulian	CA	IAC-23.C4.6.7
Protsan, Yulian	CA	IAC-23.B4.5A-C4.8.5
Provinciali, Lorenzo	S	IAC-23.B4.2.2
Provinciali, Lorenzo	S	IAC-23.A3.2B.5
Provinciali, Lorenzo	CA	IAC-23.B4.8.5
Prudenzi, Luca	CA	IAC-23.B4.6B.11
Prunariu, Dumitru-Dorin	CA	IAC-23.D4.2.4
Puchuri López, Marko Josue	CA	IAC-23.A1.7.2
Pugliatti, Mattia	S	IAC-23.A3.4A.8
Pujar, Amedh	CA	IAC-23.B3.5.2
Puleo, Ryan	CA	IAC-23.E3.3.1
Puleo, Ryan	CA	IAC-23.E6.1.4
Pullicino, Nathan	S	IAC-23.C3.4.2
Pulliero, Matteo	CA	IAC-23.B2.7.2
Puri, Rachita	CA	IAC-23.A6.8-E9.1.5
Puriene, Vilma	CA	IAC-23.A3.2B.10
Puriene, Vilma	CA	IAC-23.E1.5.4
Pushparaj, Avinash	CA	IAC-23.D2.5.9
Pushparaj, Avinash	CA	IAC-23.A6.5.3
Pushparaj, Nishanth	CA	IAC-23.A5.1.1
Pushparaj, Nishanth	CA	IAC-23.B4.8.7
Pushparaj, Nishanth	S	IAC-23.C1.6.10
Puttappa Nagalingesh, Vijay	CA	IAC-23.C1.1.7
Py, Guillaume	CA	IAC-23.A1.2.10
Pytel, Krzysztof	CA	IAC-23.A1.5.1
Pytlak, Dominka	CA	IAC-23.C2.7.7
Pérez Avendaño, Valery	CA	IAC-23.A2.6.5
Pérez Hernández, Cristina	CA	IAC-23.A6.2.8
Pérez Mora, Gerardo	CA	IAC-23.C4.6.2
Pęczek, Natalia	CA	IAC-23.A2.3.6
Płochów, Marek	CA	IAC-23.D2.7.8

Q

Qi, Xuanchi	A	IAC-23.C4.10-C3.5.5
Qianyu, Ma	CA	IAC-23.E3.3.3
Qiao, Liang	CA	IAC-23.B2.4.2
Qiao, Yishi	CA	IAC-23.E2.4.2
Qin, Limin	S	IAC-23.C1.8.6
Qin, Limin	S	IAC-23.C1.9.9
Qin, Mengze	S	IAC-23.C4.7.3
Qingchun, Yang	CA	IAC-23.C4.7.9
Qingchun, Yang	CA	IAC-23.D2.6.9
Qu, ChunMei	CA	IAC-23.B5.2.10
Qu, Zheng	CA	IAC-23.E2.4.9
Quadrelli, Marco	CA	IAC-23.B1.2.8
Quadrini, Fabrizio	CA	IAC-23.A1.7.13
Quasny, Jarrett	CA	IAC-23.B3.1.8
Qubatov, Hasil	CA	IAC-23.E6.3.1
Quesnel, Valentin	CA	IAC-23.C4.5.7
Quintana, Iban	CA	IAC-23.A3.2C.9
Quintino, Tiago	CA	IAC-23.B1.4.3
Quirino, Matteo	CA	IAC-23.A6.5.10
Quiros, Bryan	CA	IAC-23.E1.2.5
Quizzagan, Harlee	CA	IAC-23.E6.4.8
Qulizade, Medine	CA	IAC-23.A3.3A.10
Quraishi, Arsad	S	IAC-23.C4.8-B4.5A.4
Qurbanova, Medina	S	IAC-23.E6.5-GTS.1.1
Qvirist, Adam	CA	IAC-23.E2.3-GTS.4.3

R

R, Darshan	CA	IAC-23.C3.3.8
R, Sanjay	CA	IAC-23.A2.2.2
r, Saravanakumar	CA	IAC-23.C2.1.8
r, Saravanakumar	CA	IAC-23.C4.2.6
Ra, Dogeon	CA	IAC-23.E2.3-GTS.4.2
Raadik, Taavi	S	IAC-23.D3.2B.6
Rabbow, Elke	CA	IAC-23.A1.8.5
Rabin, Julien	CA	IAC-23.C4.5.6
Rabineau, Jeremy	CA	IAC-23.A1.2.2
Rabineau, Jeremy	S	IAC-23.A1.2.5
Racicot, Mathieu	CA	IAC-23.C1.3.3
Radice, Gianmarco	CA	IAC-23.D1.2.4
Radice, Gianmarco	CA	IAC-23.A1.5.5
Radtke, Jonas	CA	IAC-23.A6.7.3
Radtke, Jonas	CA	IAC-23.B6.5.9
Raghavan, Seetha	CA	IAC-23.C2.6.10
Rahimli, Nurlan	S	IAC-23.C3.1.10
Rahman, rafi musfiq	CA	IAC-23.B1.3.1
Raia, Agnese	CA	IAC-23.B4.4.6
Raj, Nidhish	CA	IAC-23.D1.3.9
Raj, Nidhish	CA	IAC-23.B4.8.11
Rajabi Kouchi, Fereshteh	A	IAC-23.C2.5.2
Rajakumari, Anumadhubala	S	IAC-23.D4.1.9
Rajakumari, Anumadhubala	CA	IAC-23.A1.5.4
Rajakumari, Anumadhubala	CA	IAC-23.C3.4.11
Rajakumari, Anumadhubala	S	IAC-23.E8.1.1
Rajasekhar, Meka	S	IAC-23.D2.2.4
Rajput, Deepanjali	A	IAC-23.C2.9.10
Rajwant Singh, Brelveenraj Kaur	S	IAC-23.B2.7.1
Rallapalli, Aditya	CA	IAC-23.B6.3.7
Ramachandra, Gautam	S	IAC-23.B2.6.9
Ramazanova, Bahar	S	IAC-23.E7.1.10
Ramesh, Rameela	S	IAC-23.B4.2.11
Ramesh, Rameela	CA	IAC-23.E1.8.1
Ramezani, Mahya	CA	IAC-23.C1.4.2
Ramezani, Mahya	CA	IAC-23.D1.4A.13
Ramezani, Mahya	A	IAC-23.B4.7.2
Ramirez, Ana Karen	CA	IAC-23.A2.7.9
Ramirez Arana, Sofia	CA	IAC-23.A2.3.3
Ramirez Arana, Sofia	CA	IAC-23.E6.5-GTS.1.4
Ramondini, Massimo	CA	IAC-23.B4.7.13
Ramos, Daniel	CA	IAC-23.A2.7.2
Ramos Cosi, Sebastian Juniors	CA	IAC-23.A2.7.2
Rampazzo, Alessandro	A	IAC-23.C4.4.5
Ramírez, Jesús	S	IAC-23.D2.3.10
Ramírez Cortés, Hasel	CA	IAC-23.C2.8.1
Ramírez Cortés, Hasel	S	IAC-23.C2.9.6
Rana, Hannah	S	IAC-23.A7.3.1
Ranachowski, Michal	CA	IAC-23.C4.1.2
Ranachowski, Michal	CA	IAC-23.C2.7.7
Rani Ramdoss, Karthika	CA	IAC-23.A2.4.8

Name		Paper
Rao, Madhusudhan	CA	IAC-23.B1.5.5
Rao, Mukund Kadursrinivas	S	IAC-23.E6.4.3
Rao, Mukund Kadursrinivas	S	IAC-23.B5.2.8
Rao, Mukund Kadursrinivas	S	IAC-23.B1.5.5
Rapach, Seonaid	S	IAC-23.B1.5.3
Rashad, Gojalar	S	IAC-23.A7.3.9
Rashed, Mohammed Irfan	S	IAC-23.B4.3.1
Rashed, Mohammed Irfan	S	IAC-23.B4.9-GTS.5.11
Rasheed, Madiha	S	IAC-23.A1.2.7
Rasskazov, Igor	CA	IAC-23.B3.5.8
Ratajczak, Milena	CA	IAC-23.A7.3.3
Rathnasabapathy, Minoo	A	IAC-23.E3.4.3
Rathod, Jateen	CA	IAC-23.E1.3.3
Rathod, Jateen	CA	IAC-23.A3.3B.11
Rathod, Jateen	S	IAC-23.B3.7.4
Rathod, Prasad	S	IAC-23.B2.2.1
Raut, Akshata	S	IAC-23.E2.3-GTS.4.3
Rautiainen, Kimmo	CA	IAC-23.B4.4.4
Ravaglia, Giacomo	CA	IAC-23.A5.2.3
Ravellino, Fabiana	CA	IAC-23.B4.7.13
Ravera, Franco	CA	IAC-23.A3.3A.5
Ravin, Rahul	CA	IAC-23.A2.5.6
Rawlins, Samantha	S	IAC-23.C4.10-C3.5.7
Rawlinson, Jonathon	CA	IAC-23.B4.4.4
Raymond, Carol A.	CA	IAC-23.A3.4B.4
Razzano, Elena	CA	IAC-23.E3.1.2
Rea, Erika	CA	IAC-23.A4.1.4
Reali, Marco	CA	IAC-23.A6.7.2
Rebelo, Miguel	S	IAC-23.C1.7.6
Rebelo, Tiago	CA	IAC-23.B4.7.11
Rebelo, Tiago	S	IAC-23.D5.4.2
Redelbach, Joshua	CA	IAC-23.C1.1.1
Redford, Glen	CA	IAC-23.A1.8.9
Redigonda, Gabriele	S	IAC-23.E3.1.10
Reed, Nathaniel	CA	IAC-23.C4.10-C3.5.8
Regnerij, Kim	S	IAC-23.E1.1.7
Regnerij, Kim	CA	IAC-23.A6.8-E9.1.5
Rehimov, Mehemmed	S	IAC-23.B3.7.9
Reibaldi, Giuseppe	S	IAC-23.D4.2.4
Reid, David	A	IAC-23.B1.1.8
Reid, David	CA	IAC-23.A1.5.3
Reijneveld, Jon	S	IAC-23.D2.6.8
Reina Castro, Andres David	CA	IAC-23.A1.7.2
Reiss, Philipp	CA	IAC-23.D4.1.1
Reiss, Philipp	CA	IAC-23.C2.6.6
Remane, Yolantha	CA	IAC-23.D1.3.5
Remane, Yolantha	CA	IAC-23.E2.3-GTS.4.5
Ren, Siyuan	A	IAC-23.A6.3.10
Ren, Siyuan	CA	IAC-23.E10.1.6
Ren, Siyuan	CA	IAC-23.E10.2.6
Renake, Pranav	CA	IAC-23.E5.4.10
Renga, Alfredo	CA	IAC-23.B4.7.13
Rengelink, Robert	CA	IAC-23.B4.4.1
Renoldner, Markus	S	IAC-23.D1.4A.11
Reschke, Millard	CA	IAC-23.B3.8.5
Resende, Daniel	CA	IAC-23.D5.4.2
Restivo Alessi, Riccardo	CA	IAC-23.A2.2.7
Restivo Alessi, Riccardo	CA	IAC-23.C2.8.8
Rettberg, Petra	S	IAC-23.A1.8.5
Reverberi, Gianmarco	CA	IAC-23.E10.2.2
Reviznikov, Dmitry	CA	IAC-23.C2.7.1
Reyes Mantilla, Camilo Andres	S	IAC-23.E3.1.7
Reyes Mantilla, Camilo Andres	S	IAC-23.B1.5.6
Reyes Mantilla, Camilo Andres	S	IAC-23.A2.5.8
Reyes Mantilla, Camilo Andres	S	IAC-23.A1.7.2
Reymen, Brent	CA	IAC-23.A1.1.3
Reymen, Brent	CA	IAC-23.A3.2C.3
Reynolds, Jennifer	CA	IAC-23.A3.2B.3
Ri, Kaii	S	IAC-23.C4.4.6
Ribechini, Lisa	CA	IAC-23.B1.3.3
Riccardi, Annalisa	CA	IAC-23.B1.5.3
Riccardi, Annalisa	CA	IAC-23.D1.4A.4
Ricciarini, Sergio Bruno	CA	IAC-23.A7.3.6
Riccobono, Dario	CA	IAC-23.B2.1.7
Richter, Ludwig	CA	IAC-23.E2.3-GTS.4.11

Name		Paper
Rico, Lina	CA	IAC-23.A2.4.8
Riegler, Clemens	S	IAC-23.D1.3.4
Riegler, Clemens	S	IAC-23.E2.3-GTS.4.11
Riehle, Martin	CA	IAC-23.C4.1.9
Rigas, Efstratios	CA	IAC-23.B3.9-GTS.2.1
Rihan, Mohammad	A	IAC-23.A3.5.1
Rimani, Jasmine	CA	IAC-23.D1.4B.3
Rinaldi, Antonio	CA	IAC-23.A1.5.6
Rinaldi, Marianna	CA	IAC-23.B4.4.3
Rinaldi, Marianna	S	IAC-23.A7.3.6
Rincón, David	CA	IAC-23.B2.2.10
Riquelme, Aline	CA	IAC-23.B5.2.7
Ris, Dmitry	CA	IAC-23.B4.7.10
Risaliti, Chiara	CA	IAC-23.A1.3.7
Ritter, Scott	S	IAC-23.A1.3.4
Ritter, Scott	S	IAC-23.A1.4.5
Rizo Churape, Julio Abraham	CA	IAC-23.C4.6.2
Rizza, Antonio	A	IAC-23.B4.8.5
Rizzi, Francesca	CA	IAC-23.A5.1.10
Rizzi, Francesca	CA	IAC-23.E1.9.7
Rizzo, Luca	CA	IAC-23.B6.2.8
Roa, Maximo A.	CA	IAC-23.A5.3-B3.6.1
Robert, Arnaud	S	IAC-23.B6.1.1
Roberts, Quentin	S	IAC-23.E2.2.12
Robinson, Peter	S	IAC-23.D4.3.11
Rocco, Bruno	CA	IAC-23.C4.3.1
Rocco, Bruno	CA	IAC-23.C4.4.2
Rocco, José	CA	IAC-23.C4.3.1
Rocco, José	CA	IAC-23.C4.4.2
Rocco, Leopoldo	CA	IAC-23.C4.3.1
Rocco, Leopoldo	CA	IAC-23.C4.4.2
Rochblatt, David	CA	IAC-23.B2.4.1
Rodchenko, Vladimir	CA	IAC-23.A5.1.3
Rodrigues, Júlia	CA	IAC-23.E2.3-GTS.4.7
Rodrigues, Miguel	CA	IAC-23.B4.8.12
Rodriguez, Eva	CA	IAC-23.A3.2C.9
Rodriguez, Mauricio	S	IAC-23.A2.3.3
Rodriguez, Mauricio	CA	IAC-23.E6.5-GTS.1.4
Rodriguez Bautista, Kiara Micaela	CA	IAC-23.A1.7.2
Rodriguez Brena, Ismael	CA	IAC-23.A5.3-B3.6.1
Rodriguez Gomez, Pablo Javier	CA	IAC-23.D3.2B.9
Rodriguez Pirateque, German Wedge	CA	IAC-23.E2.1.9
Rodriguez-Villamizar, Julian	S	IAC-23.A6.1.4
Rodríguez, Carlos	CA	IAC-23.A2.3.3
Rodríguez, Carlos	CA	IAC-23.E6.5-GTS.1.4
Rogers, Henk	CA	IAC-23.A1.1.3
Rogez, Yves	CA	IAC-23.A3.4B.4
Rohrwild, Karlheinz	S	IAC-23.E4.1.3
Rojas Ramirez, Marcos Eduardo	S	IAC-23.B3.9-GTS.2.1
Rojas Vales, Nilton Cesar	CA	IAC-23.A1.7.2
Rokade, Dnyanesh	CA	IAC-23.E2.4.11
Roldugin, Dmitry	CA	IAC-23.C1.2.8
Rollinde de Beaumont, Maelys	CA	IAC-23.D5.4.5
Roman, Monsi	CA	IAC-23.B3.2.1
Roman Molinas, Alejandro J.	CA	IAC-23.E1.6.7
Roman-Gonzalez, Avid	S	IAC-23.B4.1.10
Roman-Gonzalez, Avid	S	IAC-23.B1.5.1
Roman-Gonzalez, Avid	A	IAC-23.E1.6.11
Roman-Gonzalez, Avid	S	IAC-23.E5.4.9
Roman-Gonzalez, Avid	CA	IAC-23.E10.1.3
Roman-Gonzalez, Avid	S	IAC-23.A2.7.2
Roman-Gonzalez, Avid	A	IAC-23.B3.9-GTS.2.5
Romanelli, Luca	CA	IAC-23.D4.1.4
Romano, Marcello	CA	IAC-23.D1.1.1
Romano, Marcello	CA	IAC-23.C1.9.4
Romano, Marcello	CA	IAC-23.B1.2.8
Romano, Marcello	CA	IAC-23.E3.4.1
Romano, Marcello	CA	IAC-23.C1.5.8
Romanov, Pavel	CA	IAC-23.A1.2.4
Romeo Manrique, Pablo	CA	IAC-23.A3.3B.10
Romero Zamora, Nahum	S	IAC-23.E5.3.5
Romero-Alva, Victor	CA	IAC-23.B4.1.10
Romero-Alva, Victor	CA	IAC-23.B1.5.13
Romero-Alva, Victor	CA	IAC-23.E1.6.11
Romero-Alva, Victor	CA	IAC-23.E5.4.9

Name		Paper
Sakaki, Kazuki	CA	IAC-23.C4.1.4
Sakalauskaite, Evelina	CA	IAC-23.B4.4.6
Sala, Giuseppe	CA	IAC-23.C2.5.5
Sala, Giuseppe	CA	IAC-23.D3.2A.7
Sala Baltazar, Sebastián	S	IAC-23.E4.1.7
Salameh, Malik	CA	IAC-23.B4.1.11
Salas Natera, Miguel Alejandro	CA	IAC-23.B2.6.8
Salazar, Mariana	CA	IAC-23.C2.2.7
Salazar, Mariana	CA	IAC-23.C2.9.7
Salazar, Martin	CA	IAC-23.B4.1.3
Salazar Calderón, Guadalupe Estrella	CA	IAC-23.A2.7.9
Salazar Macalupu, Martín Santos	CA	IAC-23.A1.7.2
Salinas, Maximilien	CA	IAC-23.B3.2.3
Salinas, Maximilien	CA	IAC-23.D2.4.7
Sallam, Montaser	CA	IAC-23.B4.1.11
Salmeri, Antonino	S	IAC-23.D3.1.1
Salmeri, Antonino	S	IAC-23.E3.4.10
Salnikov, Alexey	CA	IAC-23.A1.4.1
Salnikov, Nikolay	S	IAC-23.A1.7.7
Salosina, Margarita	S	IAC-23.C2.4.11
Salotti, Jean-Marc	S	IAC-23.A5.2.6
Salvaterra, Francesco	CA	IAC-23.C3.2.5
Salvato, Maria	CA	IAC-23.B5.2.7
Salvatore, Giulia	CA	IAC-23.A1.5.6
Samadov, Adalat	A	IAC-23.C2.4.6
Samadzade, Javad	S	IAC-23.A3.2A.7
Sampath, Shabadini	S	IAC-23.E2.2.8
Sampson, Margarita	CA	IAC-23.B3.7.1
San Miguel, Elemer	S	IAC-23.B2.7.12
San-Juan, Juan Félix	S	IAC-23.C1.8.3
Sanathanamurthy, Siddartha	CA	IAC-23.B2.7.2
Sanchez, Juan Carlos	CA	IAC-23.B4.2.10
Sanchez Cuartielles, Joan-Pau	CA	IAC-23.C1.7.6
Sanchez Ibanez, Ricardo	CA	IAC-23.A3.3B.8
Sanchez-Camilo, Edwin A.	CA	IAC-23.B4.1.13
Sanders, Yoel	CA	IAC-23.B1.4.5
Sandlin, Trevor	CA	IAC-23.E7.2.8
Sandoval Murillo, José Luis	CA	IAC-23.A6.3.5
Sandoval Pinto, Manuel Orlando	CA	IAC-23.A5.3-B3.6.6
Sandrieser, Michael	CA	IAC-23.C2.2.4
Sandrieser, Michael	CA	IAC-23.C2.7.5
Sands, Cassie	CA	IAC-23.B4.3.6
Sanghvi, Nishita	CA	IAC-23.B4.6B.4
Sanghvi, Nishita	CA	IAC-23.B4.8.12
Sangiovanni, Guido	CA	IAC-23.A3.2C.7
Sanin, Anton	CA	IAC-23.A3.3B.5
Sanjines, Bernarda Loretto	S	IAC-23.A1.7.9
Sanjurjo-Rivo, Manuel	S	IAC-23.C1.5.5
Sano, Michiyo	CA	IAC-23.B3.3.4
Santacesaria, Matteo	CA	IAC-23.D2.2.10
Santagiustina, Marco	CA	IAC-23.B2.6.1
Santeramo, Luigia	CA	IAC-23.E1.9.7
Santhosh, Anusha	CA	IAC-23.GTS.2-B3.9.6
Santi, Emanuele	CA	IAC-23.B4.4.4
Santilli, Francesco	CA	IAC-23.C2.7.3
Santin, Oscar	CA	IAC-23.D3.2B.9
Santoni, Fabio	CA	IAC-23.B2.8-GTS.3.6
Santoni, Fabio	CA	IAC-23.B4.1.13
Santoni, Fabio	CA	IAC-23.A6.4.1
Santoni, Fabio	CA	IAC-23.B4.3.2
Santoni, Fabio	CA	IAC-23.A2.2.7
Santoni, Fabio	CA	IAC-23.B4.6B.10
Santoni, Fabio	CA	IAC-23.C2.8.8
Santonicola, M. Gabriella	CA	IAC-23.C2.6.7
Santonicola, M. Gabriella	CA	IAC-23.C2.6.8
Santoro, Francesco	CA	IAC-23.A6.7.2
Santoro, Luisa	S	IAC-23.E4.3.4
Santoro, Riccardo	S	IAC-23.D2.4.4
Santos, Ana	CA	IAC-23.E1.9.10
Santos, Denilson Paulo Souza dos	CA	IAC-23.A6.7.9
Santos, Jamie	CA	IAC-23.D1.6.1
Santos, Júlio	A	IAC-23.D5.4.2
Santos, Luísa	CA	IAC-23.B3.9-GTS.2.4
Santos, Luísa	CA	IAC-23.E1.9.10
Sapia, Adalberto	CA	IAC-23.B2.7.9

Name		Paper
Sapir, Itsik	CA	IAC-23.A1.7.4
Sapkota, Eliza	CA	IAC-23.B6.3.10
Sapkota, Eliza	S	IAC-23.E2.4.1
Sapkota, Eliza	S	IAC-23.B5.3.6
Saputo, Aristea	CA	IAC-23.A6.8-E9.1.10
Saraceno, Luca	CA	IAC-23.A2.2.7
Saraceno, Luca	CA	IAC-23.C2.8.8
Sarafin, Michael	S	IAC-23.B3.1.6
Sarcevic, Lejla	CA	IAC-23.E5.5.5
Sarkadi, Tamas	CA	IAC-23.B2.8-GTS.3.5
Sarli, Bruno	S	IAC-23.A3.3A.3
Sarli, Bruno	CA	IAC-23.A3.3A.4
Saroj, Garima	S	IAC-23.A7.1.5
Saroj, Garima	CA	IAC-23.E5.5.3
Sarwar, Uruj	CA	IAC-23.A2.5.7
Sasaki, Hiroshi	S	IAC-23.B3.1.2
Sasaki, Kenichi	CA	IAC-23.B1.7.7
Sasaki, Takahiro	S	IAC-23.C1.1.4
Sasaki, Takahiro	CA	IAC-23.A6.5.8
Sashida, Sayaka	S	IAC-23.E6.1.8
Satayev, Sapar	S	IAC-23.B1.6.3
Sateesh, Dhanisha	CA	IAC-23.D4.2.5
Sateesh, Dhanisha	S	IAC-23.E5.3.4
Sathe, Aditi	A	IAC-23.A5.1.9
Sathe, Aditi	S	IAC-23.B3.4-B6.4.9
Sato, Akihiro	CA	IAC-23.D2.1.3
Sato, Masahiko	A	IAC-23.E7.3.11
Sato, Masaru	CA	IAC-23.E6.1.8
Saungweme, Beverley Chelsea	S	IAC-23.B1.6.8
Saungweme, Gift	CA	IAC-23.B1.6.8
Sauvage, Mathieu	CA	IAC-23.D2.6.8
Sauzay, Emmanuel	CA	IAC-23.B4.4.7
Saveko, Alina	S	IAC-23.A1.3.9
Saveko, Alina	CA	IAC-23.E5.2.2
Savino, Raffaele	CA	IAC-23.C4.4.7
Savino, Raffaele	CA	IAC-23.C4.8-B4.5A.9
Sawant, Suryakant	CA	IAC-23.B5.2.8
Saxena, Shikhar	CA	IAC-23.A2.4.5
Sayanju, Sirash	CA	IAC-23.B6.3.10
Sayanju, Sirash	CA	IAC-23.E2.4.1
Sayanju, Sirash	A	IAC-23.B5.3.6
Saydam, Serkan	CA	IAC-23.D4.5.1
Sayef Ullah, Ziya Mohammad	CA	IAC-23.E5.4.8
Sazonov, Vasiliy	CA	IAC-23.C4.9.7
Scalettari, Davide	CA	IAC-23.E2.3-GTS.4.8
Scalettari, Davide	CA	IAC-23.B4.4.6
Scalettari, Davide	S	IAC-23.A1.7.10
Scalia, Tanya	CA	IAC-23.C2.5.5
Scalia, Tanya	CA	IAC-23.C2.5.6
Scalia, Tanya	A	IAC-23.C2.8.6
Scandelli, Hermes	CA	IAC-23.D2.6.8
Scantamburlo, Erica	CA	IAC-23.C1.9.4
Scatena, Elisa	CA	IAC-23.A1.3.5
Scatena, Elisa	CA	IAC-23.A1.5.6
Scatena, Elisa	CA	IAC-23.A1.7.13
Scatena, Lorenzo	CA	IAC-23.E1.4.3
Scatena, Lorenzo	CA	IAC-23.B5.2.9
Scatena, Lorenzo	CA	IAC-23.B5.3.4
Scatena, Lorenzo	CA	IAC-23.E6.1.7
Schakel, Jan Kees	CA	IAC-23.B1.5.12
Schandeler, Baptiste	S	IAC-23.D1.2.1
Schandeler, Baptiste	S	IAC-23.B6.2.10
Scharmann, Frank	S	IAC-23.E5.6.7
Scharnagl, Julian	S	IAC-23.B4.6B.12
Schenato, Luca	CA	IAC-23.B2.6.1
Schiavon, Emma	CA	IAC-23.D1.4A.7
Schiechel, Adrian	CA	IAC-23.B4.6B.7
Schilde, Carsten	CA	IAC-23.D3.2B.1
Schildknecht, Thomas	CA	IAC-23.A6.1.4
Schilling, Klaus	CA	IAC-23.C1.1.1
Schilling, Klaus	CA	IAC-23.C1.1.7
Schilling, Klaus	S	IAC-23.D1.3.6
Schilling, Klaus	S	IAC-23.E1.4.1
Schilling, Klaus	S	IAC-23.E4.2.7
Schilling, Klaus	CA	IAC-23.B4.7.14

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Schilling, Nathan	S	IAC-23.C4.10-C3.5.12
Schirone, Luigi	CA	IAC-23.B4.2.4
Schlegelmilch, Barret	CA	IAC-23.B3.4-B6.4.10
Schlosser, Karoly	S	IAC-23.A1.1.1
Schlutz, Juergen	CA	IAC-23.B3.1.4
Schmidt, Alexander	S	IAC-23.D5.1.9
Schmidt, Benedikt	CA	IAC-23.B4.4.6
Schmidt, Marco	S	IAC-23.E2.4.10
Schmidt-Tedd, Bernhard	CA	IAC-23.E3.2.5
Schneider, Maximilian	CA	IAC-23.B3.3.6
Schneider, Maximilian	CA	IAC-23.D1.3.5
Schneider, Maximilian	CA	IAC-23.E2.3-GTS.4.5
Schneider, Maximilian	CA	IAC-23.E1.4.4
Schneider, Scott	S	IAC-23.E6.4.2
Schneider, Scott	S	IAC-23.E7.4.4
Schoenholz, Bryan	CA	IAC-23.D3.2A.2
Schorfmann, Martin	CA	IAC-23.D3.3.8
Schroeder, Jan Walter	CA	IAC-23.B1.1.8
Schroeder, Jan Walter	S	IAC-23.D3.2B.7
Schroeder, Susanne	CA	IAC-23.A3.4A.5
Schrogl, Kai-Uwe	CA	IAC-23.E3.2.2
Schroll, Mitchell	S	IAC-23.C4.10-C3.5.10
Schroth, Julian	S	IAC-23.D3.3.7
Schuch, Nelson Jorge	CA	IAC-23.D1.4B.7
Schuller, Robert	CA	IAC-23.A5.3-B3.6.1
Schulte, Peter	S	IAC-23.D4.2.5
Schwarz, Benjamin	CA	IAC-23.B4.8.4
Schäfer, Felix	CA	IAC-23.D1.3.5
Schäfer, Felix	CA	IAC-23.E2.3-GTS.4.5
Schäfer, Felix	CA	IAC-23.B4.6A.1
Scialanga, Luigi	CA	IAC-23.C2.7.3
Sciarra, Marcello	CA	IAC-23.A6.4.9
Sciarra, Matteo	CA	IAC-23.C4.1.5
Sciortino, Giacomo Primo	S	IAC-23.E1.6.10
Sciti, Diletta	CA	IAC-23.C2.4.3
Sciti, Diletta	S	IAC-23.C2.4.5
Scotini, Antonio	CA	IAC-23.A2.2.7
Scotini, Antonio	CA	IAC-23.C2.8.8
Scoubeau, Mehdi	CA	IAC-23.A2.6.7
Sdoga, Gianluca	CA	IAC-23.C4.1.5
Seifert, Bernhard	CA	IAC-23.C4.5.4
Seifert, Bernhard	S	IAC-23.B4.6B.6
Seitzer, Patrick	CA	IAC-23.A6.4.1
Seker, Pervin	CA	IAC-23.E7.1.14
Sekiguchi, Mariko	S	IAC-23.B2.2.5
Sekine, Hirotaka	CA	IAC-23.C4.8-B4.5A.1
Sekine, Hirotaka	S	IAC-23.B4.8.3
Sekine, Hirotaka	CA	IAC-23.A7.3.5
Sekine, Hokuto	CA	IAC-23.C4.5.11
Sekine, Hokuto	CA	IAC-23.C4.8-B4.5A.1
Sekine, Hokuto	CA	IAC-23.C4.8-B4.5A.6
Sekine, Tatsuyuki	S	IAC-23.B1.7.7
Sellers, Jerry	S	IAC-23.E1.5.10
Sellers, Jerry	CA	IAC-23.D5.4.10
Semenkin, Alexander	CA	IAC-23.C3.5-C4.10.4
Semionov, Semion	CA	IAC-23.B4.3.8
Sena Pereira, Frederico	CA	IAC-23.E5.3.1
Senatorova, Natalya	CA	IAC-23.A1.2.4
Senent, Juan	A	IAC-23.C1.6.7
Seneret, Evan	CA	IAC-23.B3.2.3
Seneret, Evan	CA	IAC-23.D2.4.7
Seo, Daeban	S	IAC-23.D2.7.3
Seo, Seongil	CA	IAC-23.E2.3-GTS.4.2
Serafini, Jacopo	CA	IAC-23.C2.7.3
Sereno, Alessio	CA	IAC-23.C4.1.6
Sergeeva, Ekaterina	CA	IAC-23.A2.4.6
Sergeeva, Ekaterina	CA	IAC-23.A2.4.7
Serra, Emanuele	CA	IAC-23.A2.2.7
Serra, Emanuele	CA	IAC-23.C2.8.8
Serra, Paul	S	IAC-23.B2.3.8
Serradilla Gil, Carlos	S	IAC-23.C2.8.13
Serrano, Alfredo	CA	IAC-23.B1.7.3
Serrano, David	S	IAC-23.B1.7.1
Serrano, David	CA	IAC-23.E1.8.1
Servadei, Francesca	CA	IAC-23.C2.4.3

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Servidia, Pablo	CA	IAC-23.D1.2.12
Setdikova, Galiya	CA	IAC-23.A2.4.6
Sethu, Sagee Geetha	S	IAC-23.E7.4.3
Seto, Shoichi	CA	IAC-23.B4.3.3
Seyfullayeva, Aysel	S	IAC-23.D3.1.8
Sfarni, Samir	S	IAC-23.B1.1.4
Shafran, Stepan	CA	IAC-23.B4.2.6
Shah, Khushi	CA	IAC-23.A3.1.2
Shah, Khushi	CA	IAC-23.E1.1.4
Shah, Khushi	S	IAC-23.E5.1.8
Shahady, Kristin	CA	IAC-23.A7.1.7
Shahid, Mustafa	CA	IAC-23.GTS.2-B3.9.6
Shahriar, Rehnuma Binta	CA	IAC-23.B1.3.1
Shahsavani, Sadaf	CA	IAC-23.C4.9.11
Shaikh, Muhammad Mubasshir	A	IAC-23.B2.8-GTS.3.9
Shaikh, Muhammad Mubasshir	CA	IAC-23.B5.1.5
Shamina, Anastasia	S	IAC-23.A2.2.10
Shanbhag, Abhimanyu	CA	IAC-23.A3.3B.7
Shanbhag, Abhimanyu	CA	IAC-23.A5.2.2
Shanbhag, Abhimanyu	S	IAC-23.A1.5.3
Shanbhag, Abhimanyu	S	IAC-23.A1.6.5
Shankhwar, Vishwajeet	A	IAC-23.A1.3.2
Shaobing, Fan	S	IAC-23.D2.1.1
Shapiro, Benjamin	CA	IAC-23.D4.1.2
Shapiro, Benjamin	CA	IAC-23.GTS.2-B3.9.6
Sharanya, D	CA	IAC-23.A3.3B.11
Sharanya, D	CA	IAC-23.B3.7.4
Sharif, Maryam	CA	IAC-23.D4.1.10
Sharif, Maryam	S	IAC-23.A6.1.6
Sharifzade, Pervin	S	IAC-23.A2.7.8
Sharma, Aaditya Vikram	CA	IAC-23.A5.1.2
Sharma, Ishita	S	IAC-23.B4.3.10
Sharma, Ishita	S	IAC-23.B4.5.7
Sharma, Meenakshee	CA	IAC-23.C4.6.12
Sharma, Roushan	CA	IAC-23.D1.1.8
Sharma, Saurabh	CA	IAC-23.B6.3.7
Sharma, Tanmay	S	IAC-23.A1.7.6
Sharma, Vageesha	CA	IAC-23.C4.5.2
Sharma, Vageesha	CA	IAC-23.C2.9.3
Sharma, Vishal	S	IAC-23.C3.4.11
Sharma Kattel, Oshan	S	IAC-23.E1.2.6
Sharp, Tiffany	CA	IAC-23.E1.4.2
Shasteen, KC	CA	IAC-23.E5.1.2
Shastri, Bhardwaj	CA	IAC-23.C1.1.7
Shastry, Sahana	S	IAC-23.C3.1.9
Shastry, Sahana	S	IAC-23.A3.2B.4
Shastry H R, Akshay	CA	IAC-23.D2.5.9
Shastry H R, Akshay	CA	IAC-23.A6.5.3
Shave, Nick	CA	IAC-23.E3.3.4
Shave, Nick	CA	IAC-23.A6.5.2
Shave, Nick	CA	IAC-23.A6.6.1
Shcheglov, Georgy	S	IAC-23.C2.1.10
Shchepanuk, Tadeush	CA	IAC-23.C4.6.3
Shen, Zili	CA	IAC-23.D2.1.4
Sheng, Beifei	A	IAC-23.C4.6.9
Sheppard, Anja	S	IAC-23.E3.2.7
Sheppard, Anja	CA	IAC-23.E3.2.8
Shestakov, Sergey	S	IAC-23.C1.4.4
Shetti, Nikita	CA	IAC-23.E1.9.11
Shetty, Pratyaksha	CA	IAC-23.A2.1.6
Shetty, Pratyaksha	CA	IAC-23.A5.2.5
Shetty, Pratyaksha	CA	IAC-23.A7.2.6
Shetty, Pratyaksha	S	IAC-23.B2.6.10
Shetty, Pratyaksha	S	IAC-23.C4.9.2
Shi, Baolu	CA	IAC-23.C4.7.7
Shi, Feng	CA	IAC-23.D2.6.9
Shi, Min	CA	IAC-23.C1.8.4
Shibukawa, Toshihiro	CA	IAC-23.C4.8-B4.5A.1
Shimane, Yuri	S	IAC-23.D1.2.2
Shimane, Yuri	S	IAC-23.C1.5.9
Shimazaki, Takuto	CA	IAC-23.C1.8.9
Shimizu, Kensuke	CA	IAC-23.B2.3.7
Shimmura, Akira	CA	IAC-23.D3.2B.4
Shimpi, Akash	CA	IAC-23.A3.3A.8
Shin, Hocheol	CA	IAC-23.A3.2C.13

Name		Paper
Shinde, Shaivali	CA	IAC-23.B3.2.3
Shinde, Shaivali	CA	IAC-23.D2.4.7
Shino, Kizaki	CA	IAC-23.A3.2C.12
Shinohara, Iku	CA	IAC-23.D1.5.3
Shirai, Takashi	CA	IAC-23.D3.2B.4
Shirane, Atsushi	CA	IAC-23.D1.2.2
Shirasu, Kento	CA	IAC-23.C4.5.11
Shirasu, Kento	CA	IAC-23.C4.8-B4.5A.1
Shirin-zade, Alchin	S	IAC-23.B5.1.9
Shirinli, Tayyar	S	IAC-23.A6.3.2
Shirobokov, Maksim	CA	IAC-23.C1.8.2
Shirobokov, Maksim	CA	IAC-23.C1.5.4
Shirobokov, Maksim	CA	IAC-23.C1.7.9
Shirshakov, Aleksandr	CA	IAC-23.A3.2A.6
Shockley, Liberty	S	IAC-23.E9.3.2
Shoval, Irit	CA	IAC-23.A1.7.4
Shoyama, Tadayoshi	S	IAC-23.D2.4.3
Shrestha, Anuja	S	IAC-23.B6.3.10
Shrestha, Anuja	CA	IAC-23.E2.4.1
Shrestha, Anuja	CA	IAC-23.B5.3.6
Shrestha, Trishna	CA	IAC-23.B6.3.10
Shrestha, Trishna	CA	IAC-23.E2.4.1
Shrestha, Trishna	CA	IAC-23.B5.3.6
Shrivastava, Kanupriya	CA	IAC-23.A2.1.4
Shtern, Polina	CA	IAC-23.E1.8.1
Shtofenmakher, Allan	S	IAC-23.A6.1.3
Shuai, Huang	CA	IAC-23.D2.1.1
Shumeiko, Andrei	S	IAC-23.C4.5.8
Shumilina, Irina	S	IAC-23.A1.7.1
Shwageraus, Eugene	CA	IAC-23.C4.10-C3.5.8
Siddiqi, Afreen	S	IAC-23.D1.4B.9
Siddiquee, Arshad Noor	CA	IAC-23.C2.9.10
Siedler, Jan	CA	IAC-23.E1.4.4
Siemer, Reinke	CA	IAC-23.E1.4.4
Siemion, Andrew	CA	IAC-23.A4.1.5
Sifan, Wu	CA	IAC-23.B3.6-A5.3.8
Siggel, Robert	CA	IAC-23.A1.4.5
Sikorski, Rafal	CA	IAC-23.C2.7.7
Silva, Aida	CA	IAC-23.A6.8-E9.1.5
Silva, Jaime	CA	IAC-23.A6.8-E9.1.5
Silva Melo, Michele Cristina	S	IAC-23.E6.3.3
Silva Melo, Michele Cristina	S	IAC-23.E6.2.8
Silveira, Joaquim	CA	IAC-23.B4.9-GTS.5.4
Silvestre Gutierrez, Xochitl Veronica	CA	IAC-23.B5.2.6
Silvestre Gutierrez, Xochitl Veronica	CA	IAC-23.E1.9.12
Silvestre Gutiérrez, Claudia Saraí	CA	IAC-23.E1.9.12
Silvestri, Simona	CA	IAC-23.A6.2.1
Silvestrini, Stefano	CA	IAC-23.B4.4.9
Silvestrini, Stefano	CA	IAC-23.C1.2.4
Silvestrini, Stefano	CA	IAC-23.A6.5.10
Silvestrini, Stefano	S	IAC-23.B4.6B.8
Silwal, Janardhan	A	IAC-23.B6.3.10
Silwal, Janardhan	CA	IAC-23.E2.4.1
Silwal, Janardhan	CA	IAC-23.B5.3.6
Simik, Martin	CA	IAC-23.B2.4.4
Simioni, Emanuele	CA	IAC-23.E10.2.2
Simoncelli, Carlo	CA	IAC-23.B1.3.3
Simoncelli, Carlo	CA	IAC-23.B1.3.6
Simone, Ieva	CA	IAC-23.E10.2.2
Simonov, Alexey	CA	IAC-23.D1.3.9
Sindagi, Sourabh	CA	IAC-23.A1.6.3
Sindagi, Sourabh	CA	IAC-23.D1.6.9
Sindermann, Jaspar	S	IAC-23.D1.4B.2
Sindoni, Elia	CA	IAC-23.D1.4B.3
Singh, Abhishek	S	IAC-23.D4.4.2
Singh, Devdeep	CA	IAC-23.E5.4.10
Singh, Gurpreet	A	IAC-23.A6.1.8
Singh, Pranav Prakash	S	IAC-23.E7.5.5
Singh, Ronit	CA	IAC-23.C4.2.4
Singh, Sukhjit	CA	IAC-23.A3.1.9
Singh, Sukhjit	CA	IAC-23.A1.5.9
Singh, Sukhjit	CA	IAC-23.A3.5.6
Singh, Sukhjit	CA	IAC-23.C3.4.10
Singh, Sukhjit	S	IAC-23.C3.4.12
Singh, Sunayna	A	IAC-23.D2.5.5

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Singh, Swapnil	CA	IAC-23.C3.4.3
Singhal, Anant	CA	IAC-23.B5.2.7
Singhal, Devansh	S	IAC-23.E2.1.8
Sinitsin, Alexey	CA	IAC-23.C3.5-C4.10.4
Sinitsin, Leonid	CA	IAC-23.B4.2.6
Sinn, Thomas	CA	IAC-23.D1.3.13
Sinn, Thomas	CA	IAC-23.C2.6.6
Sippel, Martin	S	IAC-23.D2.4.2
Sippel, Martin	S	IAC-23.D2.5.5
Siraj, Aimal	S	IAC-23.B2.6.12
Sirbi Paragina, Adriana	CA	IAC-23.C4.1.5
Sirorattanakul, Krittanon	CA	IAC-23.B5.3.7
Sisante, Jason-Flor	S	IAC-23.E1.6.9
Sisneros@faa.gov, Emily	CA	IAC-23.D6.1.1
Sithipreedanant, Chanud	CA	IAC-23.B3.4-B6.4.9
Sitnikova, Anna	S	IAC-23.E5.5.5
Siva, Mohan Sundara	CA	IAC-23.C1.2.9
Sizov, Dmitry A.	S	IAC-23.C1.1.9
Skinner, Mark A.	CA	IAC-23.E9.1-A6.8.6
Skinner, Mark A.	S	IAC-23.B6.5.1
Skornyakov, Vladimir	CA	IAC-23.C4.8-B4.5A.8
Skriabin, Andrei	CA	IAC-23.C2.2.11
Skryleva, Eugenia	CA	IAC-23.A2.2.10
Skryleva, Evgeniya	S	IAC-23.A2.2.1
Skryleva, Evgeniya	CA	IAC-23.A2.2.4
Slejko, Emanuele Alberto	CA	IAC-23.C2.9.2
Sloan, John	CA	IAC-23.D6.1.1
Slomiany, Michal	S	IAC-23.E4.2.3
Smas, Scott	CA	IAC-23.D3.1.7
Smirnov, Nickolay N.	CA	IAC-23.A2.2.1
Smirnov, Nickolay N.	S	IAC-23.A2.2.6
Smirnov, Nickolay N.	S	IAC-23.A2.4.3
Smirnova, Maria	CA	IAC-23.A2.2.4
Smith, Charles	CA	IAC-23.B4.3.6
Smith, Jackie	CA	IAC-23.E3.4.3
Smith, Jeffrey	CA	IAC-23.C1.3.8
Smith, Katharine	CA	IAC-23.B6.5.10
Smith, Phil	CA	IAC-23.E3.3.1
Smith, Trey	CA	IAC-23.D1.6.1
Smolka, Alexander	CA	IAC-23.D4.1.1
Smye-Rumsby, Martin	CA	IAC-23.E3.3.9
Soares, Claudia	CA	IAC-23.A6.7.5
Soares, Claudia	CA	IAC-23.A6.9.2
Soares, Claudia	CA	IAC-23.A6.4.4
Soares, Tiago	S	IAC-23.A6.8-E9.1.1
Sobków, Jan	CA	IAC-23.A3.3B.3
Sokolovskaya, Alisa	A	IAC-23.A2.4.6
Sokolovskaya, Alisa	S	IAC-23.A2.4.7
Solanki, Avishi	CA	IAC-23.A5.4.2
Solano-López, Pablo	CA	IAC-23.C2.2.8
Solbiati, Sarah	S	IAC-23.A1.2.8
Solfaroli, Marco	CA	IAC-23.A5.1.10
Solimini, Chiara	CA	IAC-23.E5.4.5
Soliz, Jorge	S	IAC-23.E1.2.1
Soliz, Jorge	CA	IAC-23.A1.7.9
Solntsev, Alexander	S	IAC-23.E7.7.7
Solodukhin, Alexander	S	IAC-23.C3.5-C4.10.4
Solomon, Gedlu	CA	IAC-23.D2.2.7
Soloviev, Vladimir	CA	IAC-23.B3.4-B6.4.3
Soltani, Yacine	CA	IAC-23.D3.2B.9
Som, Sayandev	CA	IAC-23.A7.3.8
Sommariva, Ester	CA	IAC-23.B4.2.5
Sommariva, Ester	CA	IAC-23.C3.2.5
Sommerfeldt, Jonas	CA	IAC-23.A2.2.9
Sommerfeldt, Jonas	CA	IAC-23.A2.3.4
Son, Taejun	CA	IAC-23.C4.4.6
Song, Bok-Sub	CA	IAC-23.D1.5.2
Song, Guangming	CA	IAC-23.A6.3.1
Song, Guangming	CA	IAC-23.A6.3.10
Song, Guangming	A	IAC-23.E10.1.6
Song, Guangming	A	IAC-23.E10.2.6
Song, Hongjiang	CA	IAC-23.B6.1.7
Song, Inhae	CA	IAC-23.E2.3-GTS.4.2
Song, Youngdoo	CA	IAC-23.E2.3-GTS.4.2
Song, Zhengji	CA	IAC-23.A6.8-E9.1.3

Name		Paper
Songjakkaew, Punnathone	A	IAC-23.C2.1.5
Soni, Aishashwini	A	IAC-23.E2.2.1
Soni, Anuj	CA	IAC-23.A1.6.3
Soni, Harshita	CA	IAC-23.A5.4.2
Soni, Harshita	CA	IAC-23.A6.3.9
Soni, Harshita	CA	IAC-23.B3.8.7
Sonsalla, Roland U.	CA	IAC-23.D1.6.8
Sonty, Sreelakshmi Sita (Sita)	CA	IAC-23.D1.1.1
Soori, Umair	CA	IAC-23.D1.4B.11
Sorek Abramovich, Reut	CA	IAC-23.A1.6.5
Sorek Abramovich, Reut	CA	IAC-23.A3.5.3
Sorek Abramovich, Reut	S	IAC-23.A1.7.4
Soriano Guerrero, Clàudia	CA	IAC-23.A3.1.2
Soroka, Larysa	S	IAC-23.E7.4.9
Soto, Isabel	CA	IAC-23.D1.6.7
Souhair, Nabil	CA	IAC-23.C4.5.10
Souhair, Nabil	CA	IAC-23.C4.6.5
Souhair, Nabil	CA	IAC-23.B2.6.1
Souhair, Nabil	CA	IAC-23.C4.9.3
Sousa, José	S	IAC-23.B4.9-GTS.5.10
Souto, Sofia	A	IAC-23.A1.4.4
Souza, Leonardo	CA	IAC-23.E1.1.3
Space Exploration Project Group, SGAC	CA	IAC-23.A3.1.9
Sparkes, Martin	CA	IAC-23.C4.5.3
SPEL, MARTIN	S	IAC-23.A6.2.4
Spena, Paola	CA	IAC-23.D2.5.6
Sperber, Alessa	CA	IAC-23.D2.5.4
Speretta, Stefano	CA	IAC-23.E1.1.7
Speretta, Stefano	CA	IAC-23.C1.5.10
Spiero, François	CA	IAC-23.B1.6.2
Spies, Leon	CA	IAC-23.D1.2.11
Spitzer, Arnon	S	IAC-23.B4.3.8
Sportelli, Luca	CA	IAC-23.A1.7.10
Sportillo, Andrea	CA	IAC-23.A1.7.10
Sprengel, Holger	CA	IAC-23.D1.6.8
Sridharan, Dharshun	CA	IAC-23.E3.2.6
Srinivas S, Bharath	CA	IAC-23.C2.1.8
Srinivas S, Bharath	CA	IAC-23.C4.2.6
Srivastava, Abhinav	S	IAC-23.E9.1-A6.8.9
Srivastava, Pratibha	S	IAC-23.B6.3.7
St-Pierre, Luc	CA	IAC-23.B4.1.1
St-Pierre, Luc	CA	IAC-23.E1.3.8
St-Pierre, Luc	CA	IAC-23.E1.7.6
St-Pierre, Luc	CA	IAC-23.A2.6.3
St. Germain, Karen	S	IAC-23.B1.1.3
Stagnaro, Luca	S	IAC-23.B3.1.9
Stamov, Lyuben	S	IAC-23.A2.2.4
Stamov, Lyuben	S	IAC-23.A2.2.12
Stanco, Andrea	CA	IAC-23.E2.4.3
Stanco, Andrea	CA	IAC-23.B2.3.4
Stapperfend, Simon	S	IAC-23.C2.2.12
Starinova, Olga	S	IAC-23.D2.8.4
Stark, Antonio	S	IAC-23.A3.1.9
Stark, Antonio	A	IAC-23.C2.6.5
Stark, Antonio	A	IAC-23.C2.8.12
Starke, Mario	S	IAC-23.B4.3.4
Starkov, Alexander	CA	IAC-23.A5.1.3
Stasiak, Krzysztof	CA	IAC-23.A1.5.1
Steen, Parker	CA	IAC-23.B6.2.3
Steere, Sandra	S	IAC-23.B6.3.1
Stefoudi, Dimitra	S	IAC-23.E3.6.6
Steinert, Michael	CA	IAC-23.D1.3.5
Steinert, Michael	CA	IAC-23.E2.3-GTS.4.5
Steinke, Lee	CA	IAC-23.D3.2B.7
Stekl, Ivan	CA	IAC-23.E3.2.5
Stella, Fulvio	CA	IAC-23.C3.2.7
Stenuit, Hilde	CA	IAC-23.B1.5.6
Stenuit, Hilde	CA	IAC-23.A2.5.8
Stenzel, Samuel	CA	IAC-23.B3.5.4
Stepanova, Daria	S	IAC-23.B1.7.2
Stern, Claudia	CA	IAC-23.A1.3.4
Stern, Claudia	CA	IAC-23.A1.4.5
Stern, Jennifer	CA	IAC-23.A3.5.9
Stesina, Fabrizio	CA	IAC-23.D1.2.9
Stesina, Fabrizio	CA	IAC-23.E2.4.12
Stesina, Fabrizio	CA	IAC-23.B4.6B.9
Stesina, Fabrizio	CA	IAC-23.D1.4A.9
Stesina, Fabrizio	CA	IAC-23.D1.4B.10
Stevens, Joe	CA	IAC-23.A3.5.9
Steyaert, Pieter	CA	IAC-23.E5.3.1
Stidham, James	CA	IAC-23.B5.2.7
Stief, Maximilian	CA	IAC-23.E1.4.4
Stihler, Veronika	S	IAC-23.A5.1.2
Stindt, Tristan	CA	IAC-23.D6.1.5
Stober, Javier	CA	IAC-23.A3.2C.8
Stocco, Giulia	CA	IAC-23.E2.4.3
Stodieck, Louis	CA	IAC-23.A2.7.1
Stoisa, Matteo	S	IAC-23.D4.1.4
Stoll, Enrico	CA	IAC-23.C2.2.12
Stoll, Enrico	CA	IAC-23.D3.2B.1
Stone, Dennis	CA	IAC-23.E1.5.11
Stoupis, Dimitrios	CA	IAC-23.E2.4.7
Strah, Maruska	CA	IAC-23.E1.5.11
Strah, Maruska	S	IAC-23.E9.1-A6.8.6
Strigari, Lidia	CA	IAC-23.A1.5.8
Strollo, Antonio Giuseppe Maria	CA	IAC-23.E2.4.5
Stronati, Nicolo'	S	IAC-23.E10.2.4
Stroup, Tom	CA	IAC-23.E3.3.1
Studer, Jesica Kehala	S	IAC-23.A1.4.6
Stutman, Daniel	CA	IAC-23.D2.6.8
Stęślicki, Marek	CA	IAC-23.D3.2B.6
Su, Dandan	CA	IAC-23.B3.3.5
Su, Jianbin	S	IAC-23.D2.1.8
Subbaraman, Harish	CA	IAC-23.C2.5.2
Subhi, Salma	CA	IAC-23.A6.1.6
Sucharitpwatskul, Sedthawatt	CA	IAC-23.C2.1.5
Suda, Hiroshi	CA	IAC-23.D2.4.3
Sudo, Jumpei	CA	IAC-23.B2.3.7
Suepa, Tanita	S	IAC-23.B1.1.1
Suetta, Enrico	S	IAC-23.B2.7.9
Suetta, Enrico	S	IAC-23.B1.3.6
Sugimoto, Yoshihide	CA	IAC-23.B6.1.8
Sugita, Seiji	CA	IAC-23.A3.4B.1
Suhandinata, Suhandinata	A	IAC-23.B4.1.7
Sui, Zhihui	S	IAC-23.A3.4B.6
Suk, Byong-Suk	CA	IAC-23.D1.5.2
Sulbhewar, Litesh	S	IAC-23.C2.1.6
Sulbhewar, Litesh	CA	IAC-23.C1.1.6
Suleymanova, Milana	S	IAC-23.C2.8.5
Sulima, Julia	CA	IAC-23.A2.3.6
Sulistya, Afiq H	CA	IAC-23.B4.1.7
Sultan, Rihab	CA	IAC-23.A3.5.1
Sumana, Chilla	CA	IAC-23.A3.5.6
Sumita, Taishi	CA	IAC-23.C3.3.11
Sun, Gongling	CA	IAC-23.GTS.2-B3.9.6
Sun, Liang	CA	IAC-23.E2.4.2
Sun, Liang	CA	IAC-23.E2.4.4
Sun, Qian	CA	IAC-23.E7.2.1
Sun, Ruotong	CA	IAC-23.B3.3.2
Sun, Wei	CA	IAC-23.B4.3.5
Sun, Wei	CA	IAC-23.B6.3.9
Sun, Wei	S	IAC-23.B5.2.10
Sun, Wei	CA	IAC-23.B1.6.3
Sun, Wei	CA	IAC-23.B2.5.1
Sun, Xiucong	CA	IAC-23.C1.9.6
Sundaram, Vinodini	CA	IAC-23.B3.7.1
Surace, Leonardo	CA	IAC-23.C3.2.7
Surma, Mateusz	CA	IAC-23.C4.2.7
Surmacz, Paweł	CA	IAC-23.C4.1.2
Suslov, Kirill	S	IAC-23.C1.7.9
Suzuki, Kenichiro	CA	IAC-23.D3.2B.4
Suzuki, Nantel	S	IAC-23.E6.2.4
Suzuki, Sho	CA	IAC-23.C4.4.6
Suzuki, Toshihiro	CA	IAC-23.C4.8-B4.5A.1
Suzuki, Toshihiro	CA	IAC-23.B4.8.3
Suzuki, Yurie	S	IAC-23.E5.3.7
Suzumoto, Ryo	S	IAC-23.B1.2.6
Suzumoto, Ryo	CA	IAC-23.B4.3.3
Swainston, Ollie	CA	IAC-23.B3.4-B6.4.9
Swan, Cathy	CA	IAC-23.D4.3.1

Name		Paper
Swan, Peter	S	IAC-23.D4.3.1
Swan, Peter	S	IAC-23.D4.3.2
Sweeting, Martin	CA	IAC-23.B4.4.4
Sweeting, Martin	CA	IAC-23.B4.8.4
Sweeting, Martin	CA	IAC-23.B4.6A.2
Sweeting, Martin	CA	IAC-23.B4.6A.9
Swei, Sean Shan Min	CA	IAC-23.E2.1.12
Syamala, Sarath Raj Nadarajan	S	IAC-23.A3.3A.8
Syamala, Sarath Raj Nadarajan	S	IAC-23.A3.3B.6
Syed, Tauseef	CA	IAC-23.C4.10-C3.5.8
Symul, Milica	CA	IAC-23.E1.4.2
Szadkowski, Zbigniew	CA	IAC-23.A1.5.1
Szaforz, Żaneta	CA	IAC-23.D3.2B.6
Szalai, Christine	CA	IAC-23.A3.3A.4
Szczepinski, Piotr	CA	IAC-23.D2.6.2
Szczerska, Małgorzata	CA	IAC-23.A2.3.6
Szilágyi-Sándor, András	CA	IAC-23.B4.4.6
Sznitman, Raphael	CA	IAC-23.A1.3.4
Sznitman, Raphael	CA	IAC-23.A1.4.5
Szwaba, Adrian	CA	IAC-23.D2.6.2
Szwajewski, Michał	CA	IAC-23.D4.2.3
Szwajewski, Michał	CA	IAC-23.E6.4.6
Szwajewski, Michał	CA	IAC-23.E6.3.5
Szyszka, Piotr	S	IAC-23.A3.3B.3
Sánchez-Arriaga, Gonzalo	CA	IAC-23.C4.9.11
Säntti, Tero	CA	IAC-23.A2.5.7
Sönmez, Alev	CA	IAC-23.E6.5-GTS.1.5
Sütterlin, Saskia	CA	IAC-23.D1.3.5
Sütterlin, Saskia	CA	IAC-23.E2.3-GTS.4.5

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Tabi Ndip, Harry Ayuk-Ngojo	CA	IAC-23.B4.6B.4
Tadini, Pietro	CA	IAC-23.C2.5.4
Tahk, Min-jea	CA	IAC-23.D2.5.3
Tahmasebipour, Pouyan	S	IAC-23.B6.5.6
Taiatu, Claudiu Mihai	CA	IAC-23.E9.3.5
Tajima, Takatoshi	CA	IAC-23.D3.2B.4
Tajmar, Martin	CA	IAC-23.C4.5.3
Tajmar, Martin	CA	IAC-23.C4.8-B4.5A.2
Tajmar, Martin	CA	IAC-23.D3.2B.1
Takada, Taku	CA	IAC-23.E1.3.5
Takahashi, Akisato	CA	IAC-23.D2.4.3
Takahashi, Ryohei	CA	IAC-23.B4.8.3
Takahashi, Yuya	CA	IAC-23.D4.3.7
Takamoto, Makoto	CA	IAC-23.C1.8.7
Takasaki, Daigo	CA	IAC-23.C4.8-B4.5A.1
Takashi, Yamauchi	CA	IAC-23.B4.9-GTS.5.1
Takashima, Kazuki	CA	IAC-23.B2.3.7
Takehana, Keisuke	CA	IAC-23.A3.2C.12
Takehara, Masahiko	S	IAC-23.E1.9.8
Takei, Yuto	S	IAC-23.D1.5.10
Takeuchi, Hiroshi	CA	IAC-23.B6.1.8
Takeuchi, Hiroshi	CA	IAC-23.B4.8.2
Takeuchi, Yu	A	IAC-23.E9.1-A6.8.6
Talafha, Mohmmad	S	IAC-23.E10.2.1
Talampas, Marc Caesar	CA	IAC-23.B4.1.5
Talampas, Marc Caesar	CA	IAC-23.E1.5.8
Taleb, Imène	CA	IAC-23.B4.1.2
Taleb, Imène	S	IAC-23.B1.3.2
Talele, Utkarsh	CA	IAC-23.B2.2.1
Tamai, Carla	S	IAC-23.A1.3.1
Tamai, Carla	CA	IAC-23.GTS.2-B3.9.6
Tamai, Ryota	S	IAC-23.D2.6.11
Tanaka, Koji	CA	IAC-23.C3.1.3
Tanaka, Koji	S	IAC-23.C3.2.2
Tanaka, Satoshi	CA	IAC-23.A3.4A.1
Tanaka, Yuri	S	IAC-23.E5.3.3
Tang, Hao	CA	IAC-23.B2.1.6
Tang, Shuo	CA	IAC-23.D2.3.5
Tang, Zhiqiang	CA	IAC-23.B2.7.10
Tanguy, Sébastien	CA	IAC-23.A2.2.8
Taniguchi, Fuki	A	IAC-23.B3.1.2
Taniguchi, Kentaro	S	IAC-23.E2.3-GTS.4.6
Tank, Jens	CA	IAC-23.A1.2.2
Tank, Jens	CA	IAC-23.A1.2.5
Tantucci, Andrea	CA	IAC-23.B2.1.9
Tao, Haochen	S	IAC-23.B6.5.8
Tao, Ran	S	IAC-23.D2.5.10
Tao, Wenjian	CA	IAC-23.B3.6-A5.3.9
Tapia Gallardo, Jesus Antonio	CA	IAC-23.D2.2.8
Taponier, Vincent	CA	IAC-23.D2.5.1
Taramelli, Andrea	CA	IAC-23.D1.4A.7
Tardif, Lyne	CA	IAC-23.E1.7.2
Tardivel, Simon	CA	IAC-23.A3.4A.5
Tataranni, Francesco	CA	IAC-23.B4.7.13
Tatiana, Shigueva	CA	IAC-23.E5.2.2
Tatiana, Shigueva	CA	IAC-23.A1.4.1
Tatyana, Agaptseva	CA	IAC-23.E4.1.8
Tatyana, Agaptseva	S	IAC-23.E5.6.2
Tcarenkova, Elena	CA	IAC-23.A2.5.7
Teale, Christopher	S	IAC-23.B4.7.3
Tebusweke, Derrick	CA	IAC-23.D1.5.3
Tedesco, Simone	CA	IAC-23.B2.7.2
Teferra, Brooke	S	IAC-23.D6.1.1
Tegegne, Emebet Mehabaw	CA	IAC-23.A1.5.9
Teichröb, Leon	CA	IAC-23.E1.4.4
Teinturier, Samuel	CA	IAC-23.A3.5.9
Tejumola, Taiwo Raphael	CA	IAC-23.B1.5.9
Tejumola, Taiwo Raphael	CA	IAC-23.GTS.2-B3.9.6
Telekh, Victor	S	IAC-23.C2.2.11
Telekh, Victor	CA	IAC-23.C4.5.8
Telekh, Victor	S	IAC-23.C4.6.3
Telekh, Victor	CA	IAC-23.C4.8-B4.5A.8
Telitschkin, Dimitri	A	IAC-23.C4.1.9
Telles, Madison	A	IAC-23.B3.9-GTS.2.1
Temartsev, Dmitriy	CA	IAC-23.B3.5.5
Temperli, Raphaël	CA	IAC-23.B4.9-GTS.5.4
Tennen, Les	CA	IAC-23.A4.2.3
Teofilatto, Paolo	CA	IAC-23.C1.8.1
Terata, Momoe	CA	IAC-23.D4.3.9
Terata, Momoe	S	IAC-23.D4.3.10
Terlizzi, Irene	CA	IAC-23.B1.3.5
Terracciano, Andrea	CA	IAC-23.B4.7.1
Terranova, Franco	CA	IAC-23.A1.3.4
Terranova, Franco	CA	IAC-23.A1.4.5
Terranova, Maria Letizia	CA	IAC-23.C2.8.6
Terrisson, Julien	CA	IAC-23.B3.2.3
Terrisson, Julien	CA	IAC-23.D2.4.7
Terzi, Berkay	CA	IAC-23.C4.4.9
Terzo, Sergio	CA	IAC-23.B4.2.1
Thach, Alex	S	IAC-23.D5.4.4
Thakur, Aditya	CA	IAC-23.A2.2.9
Thakur, Aditya	CA	IAC-23.A2.3.4
Thakur, Aditya	CA	IAC-23.C2.5.3
Thangavel, Kathiravan	CA	IAC-23.E7.1.8
Thangavel, Kathiravan	CA	IAC-23.D1.2.12
Thangavel, Sanjeeviraja	S	IAC-23.D1.2.4
Thangavel, Sanjeeviraja	S	IAC-23.A1.5.5
Thannasi, Prabu	CA	IAC-23.D3.2B.3
Tharunikaa, R	CA	IAC-23.C4.2.4
Thauvin, Emmanuelle	CA	IAC-23.E7.7.9
Theodosiou, Evandros	CA	IAC-23.A5.1.8
Thepdawala, Salman Ali	S	IAC-23.A6.7.10
Thirumoorthy, Soundharya	CA	IAC-23.D4.1.9
Thirumoorthy, Soundharya	CA	IAC-23.A1.5.4
Thirumoorthy, Soundharya	CA	IAC-23.E8.1.1
Thoemel, Jan	CA	IAC-23.C1.4.2
Thoeny, Laurent	CA	IAC-23.D5.4.8
Thomas, Dale	S	IAC-23.C4.10-C3.5.1
Thomas, Dale	S	IAC-23.C4.10-C3.5.9
Thomas, David	S	IAC-23.D3.1.7
Thomas, L. Dale	CA	IAC-23.D1.4B.6
Thomassin, Jerome	S	IAC-23.A6.7.4
Thompson, Benjamin	S	IAC-23.D2.2.2
Tian, Hui	CA	IAC-23.C4.3.4
Tian, Jia	S	IAC-23.A3.2B.11
Tian, Jia	S	IAC-23.A3.3B.4
Tian, Jia	S	IAC-23.B4.8.6
Tian, Ruobing	S	IAC-23.E2.2.7

Name		Paper
Underwood, Craig	CA	IAC-23.B4.1.2
Unger, Christina	CA	IAC-23.B6.5.9
Uno, Kentaro	CA	IAC-23.A3.2C.12
Unwin, Martin J.	CA	IAC-23.B4.4.4
Upadhyay, Saurabh	CA	IAC-23.D3.2B.9
Urban, Ondrej	CA	IAC-23.A3.2B.8
Urbano, Annafederica	CA	IAC-23.A2.2.8
Urbańska, Weronika	CA	IAC-23.E5.2.10
Urbina, Diego A.	S	IAC-23.C3.4.8
Urbinati, Silvia	S	IAC-23.B2.8-GTS.3.6
Uriol Balbin, Ines	CA	IAC-23.C2.2.8
Urrutia, Eugenio	CA	IAC-23.B1.7.8
Usami, Naoto	CA	IAC-23.A3.2B.13
Usubaliyev, Tural	CA	IAC-23.C2.4.6
Usui, Tomohiro	CA	IAC-23.A3.3A.1
Uvarov, Valentin	S	IAC-23.E7.7.8
Uwarowa, Inna	S	IAC-23.B4.2.7
Uwarowa, Inna	S	IAC-23.A2.3.1
Uçar, Mehmet Can	CA	IAC-23.C4.4.8
V		
V, Narayanan	Ca	Iac-23.C4.6.4
V, Priyanka	CA	IAC-23.B4.6B.4
V Periasamey, Sathesh Raj	CA	IAC-23.A1.6.3
V Periasamey, Sathesh Raj	CA	IAC-23.D1.6.9
Vacchetto, Edoardo	CA	IAC-23.D1.4B.10
Vaccino, Luca	S	IAC-23.A1.7.12
Valant, Elena	CA	IAC-23.A5.1.10
Valant, Elena	CA	IAC-23.E1.4.7
Valant, Elena	CA	IAC-23.E1.9.7
Valayil Varghese, Tony	CA	IAC-23.C2.5.2
Valda, Jose	CA	IAC-23.E2.3-GTS.4.9
Valencia, Lisa M.	CA	IAC-23.B2.7.2
Valente, Francesco	CA	IAC-23.D2.7.7
Valente, Marianna	A	IAC-23.B5.1.2
Valente, Marianna	S	IAC-23.C2.3.2
Valle, Massimiliano	CA	IAC-23.D2.5.6
Vallone, Giuseppe	CA	IAC-23.B2.3.4
Valluri, Sagarika Rao	S	IAC-23.B5.3.7
Valmorbida, Andrea	CA	IAC-23.C4.9.11
Valsecchi, Giorgio	CA	IAC-23.A3.2B.7
Valzano, Luca Saverio	CA	IAC-23.E5.1.7
van de Borne, Philippe	CA	IAC-23.A1.2.2
van de Borne, Philippe	CA	IAC-23.A1.2.5
Van den Eynde, Jeroen	CA	IAC-23.D3.2B.1
Van Den Nieuwenhof, Daan	S	IAC-23.A2.7.6
van der Wielen, Nathan	CA	IAC-23.B4.4.1
van der Wielen, Nathan	CA	IAC-23.E10.1.2
van Dijk, Chris	CA	IAC-23.B4.4.1
van Dijk, Chris	CA	IAC-23.E10.1.2
Van Doninck, Karine	CA	IAC-23.E5.3.1
van Duivenbode, Linda	CA	IAC-23.B1.5.12
van Ellen, Layla A.	S	IAC-23.D1.1.3
Van Heijningen, Maurits	CA	IAC-23.D2.6.7
van Linden Tol, Aoife	CA	IAC-23.GTS.2-B3.9.6
van Loon, Jack	CA	IAC-23.A2.5.7
van Lynden, Willem	S	IAC-23.C4.6.5
van Marion, Francesca	CA	IAC-23.B1.6.2
Van Roy, Tigo	CA	IAC-23.C3.4.8
Vaník, Peter	CA	IAC-23.E1.7.7
Varacalli, Giancarlo	CA	IAC-23.B2.7.2
Varanese, Simone	S	IAC-23.A6.9.4
Varanese, Simone	S	IAC-23.A6.1.5
Vargas, Teófilo	A	IAC-23.A4.2.6
Vargas Martinez, Hector Simon	S	IAC-23.B1.7.8
Vargas-Cuentas, Natalia Indira	CA	IAC-23.B4.1.10
Vargas-Cuentas, Natalia Indira	CA	IAC-23.B1.5.1
Vargas-Cuentas, Natalia Indira	CA	IAC-23.E1.6.11
Vargas-Cuentas, Natalia Indira	CA	IAC-23.E5.4.9
Vargas-Cuentas, Natalia Indira	CA	IAC-23.E10.1.3
Vargas-Cuentas, Natalia Indira	CA	IAC-23.A2.7.2
Vargas-Cuentas, Natalia Indira	CA	IAC-23.B3.9-GTS.2.5
Vargas-Villegas, Giancarlo	S	IAC-23.B4.6B.1
Varghese, Jeena	CA	IAC-23.C4.6.4

Name		Paper
Varile, Mattia	CA	IAC-23.D4.1.4
Vasaikar, Nidhi	CA	IAC-23.B4.5.6
Vasile, Massimiliano	CA	IAC-23.A6.2.5
Vasile, Massimiliano	CA	IAC-23.E10.1.4
Vasile, Massimiliano	CA	IAC-23.C1.6.2
Vasile, Massimiliano	CA	IAC-23.C3.4.2
Vasile, Massimiliano	CA	IAC-23.C3.4.7
Vasko, Christopher	S	IAC-23.B2.3.1
Vasquez Balarezo, Jovita	CA	IAC-23.A4.2.7
Vasu, Subith	S	IAC-23.C4.7.10
Vasudevan, Nijanthan	A	IAC-23.D5.4.4
Vavilin, Konstantin	CA	IAC-23.C4.9.7
Vaze, Parag	S	IAC-23.B1.2.2
Vedovato, Francesco	CA	IAC-23.B2.3.4
Veer, Kautilya	CA	IAC-23.A2.7.7
Vela, Claudio	CA	IAC-23.A6.6.4
Velasco, Tirso	CA	IAC-23.B1.6.2
Velho, Rochelle	CA	IAC-23.A1.5.9
Velidi, Gurunadh	CA	IAC-23.A5.4.1
Velidi, Gurunadh	CA	IAC-23.C4.9.10
Velidi, Gurunadh	CA	IAC-23.D2.8.5
Venkatesan, Jayakumar	S	IAC-23.C4.5.5
Venkatesan, Jayakumar	S	IAC-23.D2.4.5
Venkatesan, Jayakumar	S	IAC-23.E1.6.7
Venkatesan, Jayakumar	CA	IAC-23.A2.7.3
Venkateshaiah, Karthik Kumar	S	IAC-23.C4.6.10
Venn, Rachel	CA	IAC-23.E3.3.7
Venn, Rachel	S	IAC-23.E1.9.11
Vennekens, Johan	CA	IAC-23.B4.4.6
Ventre, Francesco	CA	IAC-23.A6.8-E9.1.10
Vera Cervantes, Victor Daniel	CA	IAC-23.A4.2.6
Vera Martinez, Carlos Manuel	CA	IAC-23.A3.1.2
Verbeek, Benjamin	S	IAC-23.B4.4.6
Vercruyssen, Nathan	CA	IAC-23.B4.4.1
Vercruyssen, Nathan	CA	IAC-23.E10.1.2
Verma, Maneesh Kumar	CA	IAC-23.A5.1.9
Verma, Maneesh Kumar	CA	IAC-23.A1.7.10
Verma, Mrityunjai	CA	IAC-23.A5.4.2
Verma, Mrityunjai	CA	IAC-23.A6.3.9
Vermette, Joseph	CA	IAC-23.B3.1.10
Vermeulen, Angelo C.J.	CA	IAC-23.E5.3.1
Vernazza, Pierre	CA	IAC-23.A3.4A.5
Vernile, Alessandra	S	IAC-23.E1.2.3
Vernillo, Paolo	CA	IAC-23.D2.6.4
Vernon, Steven	CA	IAC-23.D4.4.3
Veronig, Astrid	CA	IAC-23.B4.7.10
Versbraegen, Nassim	CA	IAC-23.E5.3.1
Verschuren, Jeroen	CA	IAC-23.E5.3.1
Vertadier, Héloïse	S	IAC-23.E3.2.10
Vial, Vanessa	CA	IAC-23.C4.5.7
VIANA, TATIANA	CA	IAC-23.B4.1.13
Vicinanza, Salvatore	CA	IAC-23.B5.2.7
Vickers, John	S	IAC-23.B6.3.6
Vicovan, Darius	CA	IAC-23.D1.4A.11
Vidadi, Zumrud	CA	IAC-23.A7.2.4
Vidal, Clément	S	IAC-23.A4.1.13
Vidal Castro, Edir Sebastian	CA	IAC-23.A1.7.2
Vidano, Simone	CA	IAC-23.B2.7.5
Vidaurre, Karen	CA	IAC-23.E2.3-GTS.4.9
Viglione, Alessandro Simone	CA	IAC-23.B1.3.6
Vilasescusa, Gustavo	CA	IAC-23.B2.5.6
Villa Stopelli, David Alejandro	S	IAC-23.E5.2.8
Villalobos, Felipe	CA	IAC-23.D3.3.7
Villanueva, David	S	IAC-23.E4.1.6
Villanueva, David	S	IAC-23.E5.5.1
Villoresi, Paolo	CA	IAC-23.B2.3.4
Vinai, Bruno	CA	IAC-23.A3.3A.5
Vinals, Javier	CA	IAC-23.D1.6.7
Vincent, Guillaume	CA	IAC-23.C4.8-B4.5A.4
Viola, Nicole	CA	IAC-23.D2.3.4
Viola, Nicole	CA	IAC-23.D1.4B.3
Viola, Nicole	CA	IAC-23.D2.9-D6.2.4
Viotti, Michelle	CA	IAC-23.A3.3A.1
Vioujard, Laure-Marine	A	IAC-23.B5.3.5
Vioujard, Laure-Marine	CA	IAC-23.E5.4.5

Name		Paper
Wittig, Alex	CA	IAC-23.C4.10-C3.5.8
Wiśniewska, Urszula	S	IAC-23.C2.8.7
Wohl, Christopher	CA	IAC-23.C2.6.10
Wojciechowski, Konrad	A	IAC-23.D2.6.10
Wojciechowski, Konrad	CA	IAC-23.D2.7.8
Wokes, Stephen	CA	IAC-23.A6.5.2
Wokes, Stephen	CA	IAC-23.A6.6.1
Wolf, Jan Markus	CA	IAC-23.E2.3-GTS.4.11
Wolfson, Nancy C.	CA	IAC-23.E6.2.1
Wolfson, Nancy C.	S	IAC-23.E6.2.7
Wolfson, Nancy C.	CA	IAC-23.E6.2.8
Womersley, Freya	CA	IAC-23.B1.7.5
Wong, Kinston	CA	IAC-23.A2.5.6
Wong, Lisa	CA	IAC-23.B3.2.3
Wood, Danielle	S	IAC-23.E1.2.2
Wood, Danielle	CA	IAC-23.E6.3.7
Wood, Danielle	CA	IAC-23.B4.4.5
Wood, Danielle	S	IAC-23.E3.4.3
Wood, Danielle	CA	IAC-23.B1.5.10
Wood, Danielle	CA	IAC-23.A3.2C.8
Wood, Scott	CA	IAC-23.B3.8.5
Woods, Arthur	CA	IAC-23.D3.2B.6
Woods, Daryl	CA	IAC-23.E6.2.4
Woodward, Nicolo	S	IAC-23.C1.2.7
Wotring, Virginia	CA	IAC-23.A1.3.1
Wotring, Virginia	CA	IAC-23.GTS.2-B3.9.6
Wozhele, Beauler	S	IAC-23.E7.4.7
Wright, Jim	CA	IAC-23.A2.7.1
Wright, Rachel	S	IAC-23.D3.2B.9
Wu, Di	CA	IAC-23.A6.8-E9.1.3
Wu, Haoming	CA	IAC-23.C4.7.4
Wu, Jianing	CA	IAC-23.B3.3.2
WU, Jiawei	S	IAC-23.B2.1.8
Wu, Jun	CA	IAC-23.A3.4A.9
Wu, Ke	CA	IAC-23.E3.2.4
Wu, Qiang	CA	IAC-23.A6.3.1
Wu, Qiang	CA	IAC-23.A6.3.10
Wu, Qiang	CA	IAC-23.E10.1.6
Wu, Qiang	CA	IAC-23.E10.2.6
Wu, Ruilin	S	IAC-23.A1.1.8
Wu, Shengbao	CA	IAC-23.C2.7.11
Wu, Shufan	CA	IAC-23.C1.7.10
Wu, Weiping	CA	IAC-23.D2.3.9
Wu, Zhiwen	CA	IAC-23.C4.7.7
Wulff, Christopher	CA	IAC-23.E2.3-GTS.4.3
Wulfkühler, Jan-Philipp	CA	IAC-23.C4.5.3
Wurtz Pra, Solene	CA	IAC-23.E1.8.1
Wurtz Pra, Solene	CA	IAC-23.A1.8.11
Wurtz Pra, Solene	CA	IAC-23.A3.2C.3
Wuyts, Floris	S	IAC-23.A1.1.4
Wylie, Mark	CA	IAC-23.A6.3.4
Wyrzykowski, Lukasz	CA	IAC-23.A7.3.3
Wysocki, Wojciech	CA	IAC-23.A1.6.6
Wąsowski, Witold	CA	IAC-23.C2.7.7
Wąsowski, Witold	CA	IAC-23.D2.7.8

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Xia, Guangqing	CA	IAC-23.E2.4.9
Xia, Yuying	CA	IAC-23.B4.3.10
Xiangwei, Bu	CA	IAC-23.D2.1.1
Xiao, Litian	A	IAC-23.D2.1.8
Xie, Chunlei	CA	IAC-23.D1.3.3
Xie, Gengxin	S	IAC-23.A1.7.11
Xie, James	S	IAC-23.E1.3.6
Xie, James	CA	IAC-23.E3.3.9
Xie, James	CA	IAC-23.E1.8.1
Xie, Ruida	S	IAC-23.D4.5.1
Xie, Yong Chun	S	IAC-23.B6.2.12
Xing, Siyuan	CA	IAC-23.D1.3.3
Xiong, Tao	CA	IAC-23.B1.6.2
XU, Baobi	CA	IAC-23.B2.4.2
Xu, Kun	S	IAC-23.B4.7.8
Xu, Ming	CA	IAC-23.C1.9.6
Xu, Rui	CA	IAC-23.B6.3.3
Xu, Rui	CA	IAC-23.B6.3.8
Xu, Rui	CA	IAC-23.C1.1.5
Xu, Wang	S	IAC-23.C4.7.4
Xu, Wang	S	IAC-23.C4.7.9
Xu, Wang	S	IAC-23.D2.6.9
Xu, Weijie	S	IAC-23.D2.3.5
Xu, Xiaoran	S	IAC-23.B4.4.10
Xu, Xu	CA	IAC-23.C4.7.4
Xu, Xu	CA	IAC-23.C4.7.9
Xu, Xu	CA	IAC-23.D2.6.9
XU, Yu	CA	IAC-23.D4.2.4
Xu, Yun	S	IAC-23.B4.7.7
Xue, Wen	S	IAC-23.D2.9-D6.2.5

Y

Yadav, Ira	CA	IAC-23.A3.4B.5
Yadav, Ira	CA	IAC-23.D2.8.2
Yadav, Shashwat	S	IAC-23.C2.9.10
Yadav, Shreya	CA	IAC-23.B4.8.12
Yadav, Sonu	S	IAC-23.A2.1.5
Yadav, Sonu	S	IAC-23.A2.2.11
Yaghi, Ahmad	S	IAC-23.B5.1.7
Yaglioglu, Burak	S	IAC-23.A3.2B.1
Yakovenko, Ivan	S	IAC-23.C2.8.11
Yakubets, Danila	S	IAC-23.A1.8.1
Yalcin, Baris	CA	IAC-23.C1.4.2
Yamagata, Masaki	CA	IAC-23.C2.7.8
Yamagiwa, Yoshiki	A	IAC-23.D4.3.4
Yamagiwa, Yoshiki	A	IAC-23.D4.3.8
Yamaguchi, Koji	CA	IAC-23.C3.2.2
Yamaguchi, Soi	S	IAC-23.C1.6.6
Yamamoto, Naoji	CA	IAC-23.C4.10-C3.5.12
Yamamoto, Takayuki	S	IAC-23.C1.6.3
Yamasaki, Joh	CA	IAC-23.E5.3.3
Yamashiro, Ryoma	S	IAC-23.C4.1.4
Yamauchi, Takashi	CA	IAC-23.B4.2.9
Yamauchi, Takashi	CA	IAC-23.B4.9-GTS.5.5
Yamauchi, Takashi	CA	IAC-23.D1.5.3
Yamazaki, Taichi	S	IAC-23.B5.1.11
Yamazaki, Taichi	S	IAC-23.D1.1.6
Yamazaki, Taichi	S	IAC-23.D4.2.9
Yamazaki, Taichi	CA	IAC-23.E1.2.8
Yamazaki, Taichi	S	IAC-23.A2.5.9
Yamazaki, Taichi	S	IAC-23.E5.4.3
Yamazaki, Taichi	CA	IAC-23.E1.9.2
Yamazaki, Taichi	CA	IAC-23.E1.9.3
Yamazaki, Taichi	CA	IAC-23.E1.9.8
Yan, Libo	CA	IAC-23.C2.5.3
Yan, Yongliang	S	IAC-23.E3.3.3
Yana, Charles	S	IAC-23.A3.3B.1
Yanagawa, Hiroki	CA	IAC-23.C3.1.3
Yang, HongFan	CA	IAC-23.A3.5.7
Yang, Hongwei	CA	IAC-23.C1.8.6
Yang, Hongwei	CA	IAC-23.C1.9.9
Yang, Huxiao	A	IAC-23.E7.2.5
Yang, Jooyong	CA	IAC-23.E2.3-GTS.4.2
Yang, Jungho	S	IAC-23.D6.3.6
Yang, Jungho	CA	IAC-23.E6.2.5
Yang, Keying	CA	IAC-23.A6.6.5
Yang, Qingchun	CA	IAC-23.C4.7.4
Yang, Wei	CA	IAC-23.A5.2.1
Yang, Wei	CA	IAC-23.C2.7.11
Yang, Wenyi	CA	IAC-23.A6.8-E9.1.3
Yang, Zhongguang	CA	IAC-23.A1.3.13
Yao, Jerry	CA	IAC-23.B5.2.1
Yao, Na	S	IAC-23.C3.3.1
Yao, Zhuoqing	A	IAC-23.C4.10-C3.5.3
Yaoxian, Jiang	S	IAC-23.C3.3.6
Yarmammadli, Sakit	S	IAC-23.C3.2.6
Yarr, Neil	CA	IAC-23.A6.5.2
Yarr, Neil	CA	IAC-23.A6.6.1
Yasaka, Tetsuo	S	IAC-23.C2.3.7
Yaseen, Hadya	CA	IAC-23.B4.7.10
Yasunaga, Naoki	S	IAC-23.E2.2.2

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Zhang, Xiao	S	IAC-23.D3.2A.10
Zhang, Xiaohua	CA	IAC-23.C1.7.8
Zhang, Xuan	CA	IAC-23.C4.6.9
Zhang, Yanan	S	IAC-23.A1.2.12
Zhang, Yinan	CA	IAC-23.E3.2.4
Zhang, Yiqiao	S	IAC-23.C4.7.7
Zhang, Yiyun	CA	IAC-23.E1.2.2
Zhang, Yonghe	CA	IAC-23.A1.3.13
Zhang, Yujia	CA	IAC-23.C1.5.7
Zhang, Yulin	CA	IAC-23.B4.7.7
Zhang, Yulin	CA	IAC-23.B4.6A.7
Zhang, Yumei	CA	IAC-23.C1.7.3
Zhang, Zhigang	A	IAC-23.D2.3.9
Zhang, Zhihao	S	IAC-23.B4.6A.6
Zhang, Zhihui	CA	IAC-23.C4.7.7
Zhang, Zhijing	S	IAC-23.D2.3.9
Zhao, Chunyang	CA	IAC-23.C3.3.5
Zhao, Dayong	CA	IAC-23.B2.7.8
Zhao, Hang	CA	IAC-23.C2.4.1
Zhao, JinHui	S	IAC-23.B2.5.1
Zhao, Qing	CA	IAC-23.B2.5.9
Zhao, Xiaoning	CA	IAC-23.B1.4.7
Zhao, Xurui	CA	IAC-23.E2.4.4
Zhao, Zelin	A	IAC-23.E2.4.2
Zheleznyakov, Alexandr	CA	IAC-23.A1.7.5
Zheng, Jia'ni	CA	IAC-23.E7.1.9
Zheng, Jiawei	CA	IAC-23.C2.3.10
Zheng, Mingyue	S	IAC-23.A3.4A.9
Zheng, Mingyue	S	IAC-23.B4.6A.7
Zheng, Riheng	CA	IAC-23.C4.7.3
Zheng, Zixuan	CA	IAC-23.A3.2A.12
Zhong, Xing	A	IAC-23.B4.4.10
Zhong, Xing	CA	IAC-23.E2.4.9
Zhou, Lu	CA	IAC-23.C3.4.4
Zhou, Yang	CA	IAC-23.E7.1.9
Zhou, YuanXiu	S	IAC-23.B4.3.5
Zhou, Zuoxin	A	IAC-23.A6.8-E9.1.3
Zhu, An	S	IAC-23.A6.5.6
Zhu, An	S	IAC-23.D3.2B.10
Zhu, An	S	IAC-23.D1.6.6
Zhu, Chao	S	IAC-23.B3.7.7
Zhu, Guangyao	S	IAC-23.D1.3.3
Zhu, Ruifei	CA	IAC-23.B4.3.5
Zhu, Ruifei	CA	IAC-23.B5.2.10
Zhu, Shengying	CA	IAC-23.B6.3.3
Zhu, Shengying	CA	IAC-23.C1.3.5
Zhu, Shengying	CA	IAC-23.A3.4B.6
Zhu, Zhanxia	CA	IAC-23.C1.9.1
Zhu, Zhanxia	CA	IAC-23.B4.6A.6
Zhu, Zhanxia	CA	IAC-23.D1.6.3
Zhu, Zhe	S	IAC-23.C1.1.5
Zhuang, Fengyuan	CA	IAC-23.A1.2.7
Zhuang, Zilong	CA	IAC-23.C1.7.10
Zhupanov, Valery	CA	IAC-23.C2.2.11
Ziegenhagen, Stefan	CA	IAC-23.C4.1.9
Zielinski, Pawel	CA	IAC-23.A7.3.3
Zieliński, Błażej	CA	IAC-23.D2.6.2

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Zieliński, Kacper	CA	IAC-23.D2.6.2
Ziglar, Matthew	S	IAC-23.A7.1.6
Ziglar, Matthew	S	IAC-23.A3.5.2
Ziglar, Matthew	S	IAC-23.B3.8.8
Zimbardo, Gaetano	CA	IAC-23.B4.2.2
Zinzi, Angelo	CA	IAC-23.E10.2.2
Ziolkowski, Kamil	CA	IAC-23.E4.2.3
Zoli, Luca	S	IAC-23.C2.4.3
Zolla, Paolo Maria	CA	IAC-23.C4.1.6
Zolla, Paolo Maria	A	IAC-23.C4.3.8
Zolo, Yvan	S	IAC-23.E5.4.6
Zorto Aguilera, Fernando José	CA	IAC-23.E1.7.10
Zou, Yiwei	S	IAC-23.B6.5.5
Zubko, Vladislav	S	IAC-23.C1.6.9
Zuboraz, Md. Zubayet Hossain	CA	IAC-23.E5.4.8
Zuin, Davide	S	IAC-23.C2.5.10
Zulkiffli, Puteri Nor Ilya Nadia	A	IAC-23.E1.1.5
Zumaeta, Esaú	CA	IAC-23.A4.2.7
Zummo, Giuseppe	CA	IAC-23.A2.2.7
Zummo, Giuseppe	CA	IAC-23.C2.8.8
Zurria, Ariele	CA	IAC-23.E1.4.7
Zychla, Michał	CA	IAC-23.A3.3B.3
Zíka, Jakub	S	IAC-23.B4.4.8
Ç		
Çelik, Onur	CA	IAC-23.C1.1.6
Ö		
Öhrwall Rönnbäck, Anna	CA	IAC-23.D1.3.7
Örger, Necmi Cihan	CA	IAC-23.B4.2.9
Özkan, Sevde	CA	IAC-23.D1.1.4
İ		
İsmayılzadə, Azər	S	IAC-23.E6.3.1
Ł		
Łubiński, Jacek	CA	IAC-23.A2.3.6
Łubiński, Jan Ignacy	CA	IAC-23.A2.3.6
Łyziński, Karol	CA	IAC-23.B3.7.11
Ś		
Śniadkowski, Adam	CA	IAC-23.D3.2B.6
Ş		
Şimşek, Büşra	S	IAC-23.D1.1.4
Z		
Żak, Edyta	CA	IAC-23.D2.6.10
Żak, Edyta	CA	IAC-23.D2.7.8

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