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OF THE
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MATHEMATICAL
SOCIETY



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Issue 182

**SPECIAL
ISSUE**

*Assistantships and Fellowships
in the Mathematical Sciences
1978-1979*

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CONTENTS

December, 1977

COMMITTEE ON EMPLOYMENT AND EDUCATIONAL POLICY	466
ASSISTANTSHIPS and FELLOWSHIPS in the MATHEMATICAL SCIENCES in 1978-1979	
I. FOR GRADUATE STUDY AT UNIVERSITIES.	467
II. STIPENDS FOR STUDY AND TRAVEL	526
Graduate Support	526
Postdoctoral Support	529
Travel and Study Abroad	535
Study in U. S. for Foreign Nationals	540
Sources of Fellowship Information	541
INDEX OF ABSTRACTS, Volume 24	A-669
INDEX, Volume 24.	A-699

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Current and prospective graduate students in mathematics and their advisors should be aware of employment prospects in the profession. Historically, the vast majority of Ph.D. mathematicians have pursued academic careers. In recent years, new Ph.D.'s in mathematics have typically had difficulty in finding academic employment. This is particularly true for those who studied "pure" mathematics. Because many departments are close to being fully tenured, it has become increasingly common for young mathematicians to find themselves looking for jobs again a few years after receiving their degrees. These nonretained Ph.D.'s often have great difficulty trying to find a second academic position. Careful studies made under the auspices of the AMS Committee on Employment and Educational Policy indicate that for a number of years to come, the number of openings for traditional academic employment in mathematics will be considerably smaller than the rate at which Ph.D.'s in pure mathematics are currently entering the job market.

Talented young people should not be discouraged from becoming mathematicians. Some academic positions will, of course, become available every year. In addition, there are career opportunities for mathematicians outside of the traditional academic environment. However, important career decisions should be based on a realistic assessment of employment prospects. More information will be found in the following articles: "Future Job Prospects for Ph.D.'s in the Mathematical Sciences" by Wendell Fleming, these *Notices*, December, 1975; "20th Annual AMS Survey, First Report," these *Notices*, October, 1976; "20th Annual AMS Survey, Second Report," these *Notices*, February, 1977; and "21st Annual AMS Survey, First Report," these *Notices*, October, 1977.

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ASSISTANTSHIPS AND FELLOWSHIPS IN THE MATHEMATICAL SCIENCES IN 1978-1979

The nineteenth Special Issue of these *Notices* contains lists of assistantships and fellowships available in mathematics and related sciences for the academic year 1978-1979 for graduate study at universities and stipends available for travel and study.

The list of assistantships and fellowships at universities includes 425 departments of mathematics, applied mathematics, statistics, computer science, and related mathematical disciplines; these represent 315 colleges and universities. Institutions in the United States are listed alphabetically by state, followed by Canadian institutions.

Abbreviations used in the section on graduate study

Under the DEGREES AWARDED column the following terms have been used:

Bachelor's in inst.	Number of bachelor's degrees awarded by the institution
Bachelor's by dept.	Number of degrees awarded by the department
Master's by dept.	Number of master's degrees awarded by the department
Ph. D. (1974-1977 incl.)	Doctoral degrees awarded during the last three years (1974-1975, 1975-1976, and 1976-1977)
A&NT	Algebra and Number Theory
G&T	Geometry and Topology
L	Logic
A&FA	Analysis and Functional Analysis
P&S	Probability and Statistics
CS	Computer Science and Numerical Analysis
AM	Applied Mathematics

Under the SERVICE REQUIRED column, hours per week section:

c	Contact hours
-------------	---------------

I. For Graduate Study at Universities

TYPE <small>of financial assistance (with number anticipated 1978-1979)</small>	STIPEND		TUITION		SERVICE REQUIRED		DEGREES AWARDED <small>Academic year 1976-1977</small>
	<small>amount in dollars</small>	<small>9 or 12 months</small>	<small>if not included in stipend (dollars)</small>	<small>hours per week</small>	<small>type of service</small>		
ALABAMA							
Auburn University, Auburn 36830							
DEPARTMENT OF MATHEMATICS Applications due: 3/1/78							
Ben Fitzpatrick, Jr., Head Bachelor's by inst. 3103							
Teaching Assistantship (38)* Bachelor's by dept. 26							
3330-3680	9	549	5			Master's by dept. 6	
*Increase in stipend expected before September Ph.D. (1974-1977 incl.)							
A&NT 6, G&T 4, AM 1.							
Total: 11							
University of Alabama in Birmingham 35294							
DEPARTMENT OF MATHEMATICS Applications due: 5/1/78							
A.C. Segal, Chairman Bachelor's by inst. 340							
Teaching Fellowship (13) Bachelor's by dept. 20							
4,500-5,000	12	800	4 ^c			Master's by dept. 8	
University of Alabama in Huntsville 35807							
DEPARTMENT OF MATHEMATICS Applications due: 3/1/78*							
F. Lee Cook, Chairman Bachelor's by inst. 550							
Teaching Assistantship (8) Bachelor's by dept. 19							
3000-3600	9		4 ^c			Master's by dept. 9	
Scholarship (2) Tuition							
*Late applications considered if positions are still available.							
University of Alabama (Tuscaloosa), University 35486							
DEPARTMENT OF MATHEMATICS Applications due: 3/15/78							
C. Hobby, Chairman Bachelor's by inst. 2511							
Fellowship (3) Bachelor's by dept. 27							
Teaching Assistantship (22) Master's by dept. 8							
2675-4675	9	100	20			Ph.D. (1974-1977 incl.)	
Research Assistantship (1) A&NT 1, G&T 4, A&FA 1,							
AM 1. Total: 7							

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
University of South Alabama, Mobile 36688						
DEPARTMENT OF MATHEMATICS Richard G. Vinson, Chairman			Applications due: Open		Bachelor's by dept. 12 Master's by dept. 3	
Assistantship (3)	1800	9		12	Tutoring	
ALASKA						
University of Alaska, Fairbanks 99701						
DEPARTMENT OF MATHEMATICS Tom Head, Chairman			Applications due: Open		Bachelor's by inst. 203 Bachelor's by dept. 5	
Teaching Assistantship (4)	5227	9		15	Teaching	
ARIZONA						
Arizona State University, Tempe 85281						
DEPARTMENT OF MATHEMATICS Harvey A. Smith, Chairman			Applications due: 3/1/78		Bachelor's by inst. 4275 Bachelor's by dept. 32 Master's by dept. 13	
Teaching Assistantship (47)	3850-4700	9	280/sem.	6 ^C	Teaching	Ph.D. (1974-1977 incl.) A&NT 1, A&FA 1, P 1, CS 1, AM 2, Other 1, Total: 7
Northern Arizona University, Flagstaff 86011						
DEPARTMENT OF MATHEMATICS Richard D. Meyer, Chairman			Applications due: 4/1/78		Bachelor's by inst. 1500 Bachelor's by dept. 25 Master's by dept. 6	
Teaching Assistantship (4)	2200-3000	9	200	13	Teaching	
University of Arizona, Tucson 85721						
DEPARTMENT OF MATHEMATICS Hanno Rund, Head			Applications due: 3/15/78		Bachelor's by inst. 2566 Bachelor's by dept. 11 Master's by dept. 5	
Teaching Assistantship (26)	3510-4941	9	*	6	Teaching	Ph.D. (1974-1977 incl.) A&NT 2, G&T 1, A&FA 1, P 1, AM 1. Total: 6
*Resident: \$225; nonresident: \$275.						
PROGRAM IN APPLIED MATHEMATICS R. E. O'Malley, Jr., Chairman			Applications due: 3/15/78		Bachelor's by inst. 2566	
Fellowship (4)	3800-4800	9	*			
Teaching Assistantship (4)	3510-4941	9	*	6	Teaching	
Research Assistantship (6)	3800-4800	9	*	10	Research	
*Resident: \$225.						
ARKANSAS						
Arkansas State University, State University 72467						
DIVISION OF MATHEMATICS AND PHYSICS J. L. Linnstaedter, Chairman			Applications due: 4/1/78		Bachelor's by inst. 800 Bachelor's by dept. 23 Master's by dept. 5	
Teaching Assistantship (7)	2475	9	460	3 ^C	Teaching	
University of Arkansas, Fayetteville 72701						
DEPARTMENT OF MATHEMATICS James E. Scroggs, Chairman			Applications due: 3/15/78		Bachelor's by inst. 1509 Bachelor's by dept. 13 Master's by dept. 15	
Teaching Assistantship (30)	1650-3500	9		6 ^C	Teaching	Ph.D. (1974-1977 incl.) A&NT 1, G&T 5, A&FA 1, Total: 7

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	

CALIFORNIA

California Institute of Technology, Pasadena 91125

DEPARTMENT OF MATHEMATICS W.A.J. Luxemburg, Executive Officer				Applications due: 2/15/78		Bachelor's by inst. 198 Bachelor's by dept. 23 Master's by dept. 3
Fellowship (4)	3900	12				
Teaching Assistantship (18)	3655-4375	9		4 ^C	Teaching	Ph.D. (1974-1977 incl.)
Research Assistantship (2)	3480	9			Research	A&NT 4, A&FA 3, Total: 7
DEPARTMENT OF APPLIED MATHEMATICS G.B. Whitham, Executive Officer				Applications due: 2/15/78		Bachelor's by inst. 198 Ph.D. (1974-1977 incl.) AM 14, Total: 14
Fellowship (3)	3900	9				
Teaching Assistantship (14)	2925-4375	9		12-15	Grading, teaching	
Research Assistantship (4)	2420-6140	9-12			Research	

California Polytechnic State University, San Luis Obispo 93407

DEPARTMENT OF MATHEMATICS Charles J. Hanks, Head				Applications due: 3/15/78		Bachelor's by inst. 2453 Bachelor's by dept. 35 Master's by dept. 10
Graduate Assistantship (4)	1692	9	*	10 ^C	Tutoring	
Part-Time Assistant Instructorship (10)	2069-2750	9	*	**	Teaching	

Registration fees \$61-\$71. In addition, nonresidents pay \$35 per quarter unit up to a maximum of \$525.

** 6 contact hours for one quarter; 3 contact hours for two quarters.

California State Polytechnic University, Pomona 91768

DEPARTMENT OF MATHEMATICS Carlos Ford-Livene, Chairman				Applications due: 5/15/78		Bachelor's by inst. 1803 Bachelor's by dept. 18 Master's by dept. 4
Teaching Assistantship (12)	2601-4336	9	*	3-6 ^C	Teaching	

¹Less than 15 units, \$35/unit or fraction thereof; 15 or more units, \$25/quarter (\$1,575 maximum for academic year.)

California State University, Chico 95929

DEPARTMENT OF COMPUTER SCIENCE Orlando S. Madrigal, Chairman				Applications due: 4/15/78		Bachelor's by inst. 4000 Bachelor's by dept. 80 Master's by dept. 18
Teaching Assistantship (17)	2000	9		10	Teaching, research	
Research Assistantship (6)	3000	9		20	Teaching, research	

California State University, Fresno 93740

DEPARTMENT OF MATHEMATICS Noal C. Harbertson, Chairman				Applications due: 8/78		Bachelor's by inst. 2347 Bachelor's by dept. 19 Master's by dept. 1
Teaching Assistantship (2)	2175-2900	9		3-4 ^C		
Graduate Assistantship (4)	2170-3600	9		12-20		

California State University, Fullerton 92634

DEPARTMENT OF MATHEMATICS Harris S. Shultz, Chairman				Applications due: 5/1/78		Bachelor's by inst. 3145 Bachelor's by dept. 22 Master's by dept. 5
Teaching Fellowship (10)	3500-7000	9	80-95	6	Teaching	

California State University, Hayward 94542

DEPARTMENT OF STATISTICS H. Park, Chairman				Applications due: 8/30/78		Bachelor's by inst. 1535 Bachelor's by dept. 12 Master's by dept. 6
Scholarship (6)	250/mo.			15		

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
California State University, Los Angeles 90032						
DEPARTMENT OF MATHEMATICS Donald I. Kiel, Chairperson			Applications due: 7/15/78		Bachelor's by inst. 2025 Bachelor's by dept. 20 Master's by dept. 5	
Teaching Assistantship (12)	3860-5280	12	66/qtr.	4-6 ^C	Teaching	
California State University, Northridge 91330						
DEPARTMENT OF MATHEMATICS Tung-Po Lin, Chairman			Applications due: 8/1/78		Bachelor's by inst. 3100 Bachelor's by dept. 20 Master's by dept. 4	
Teaching Assistantship (10)	4800-5370	10	77	6 20	Teaching Paper grading & tutoring	
California State University, Sacramento 95819						
DEPARTMENT OF MATHEMATICS AND STATISTICS Robert L. Alves, Acting Chairman					Bachelor's by inst. 2999 Bachelor's by dept. 25 Master's by dept. 4	
Teaching Assistantship (6)	2100	9	*	6		
*Six units or less: \$80 per semester, six units or over: \$95 per semester.						
Claremont Graduate School, Claremont 91711						
DEPARTMENT OF MATHEMATICS Robert C. James, Chairman			Applications due: 2/15/78		Master's by dept. 8 <u>Ph.D. (1974-1977 incl.)</u> A&NT 3, A&FA 1, AM 2, Total: 6	
Fellowship (10)	1000-2400	9				
Tuition waivers (10)*						
*Available for M.A. students. Second-year students in applied programs can expect cash stipends.						
San Diego State University, San Diego 92182						
DEPARTMENT OF MATHEMATICAL SCIENCES Edmund I. Deaton, Chairman			Applications due: 4/15/78		Bachelor's by inst. 4350 Bachelor's by dept. 105 Master's by dept. 18	
Teaching Assistantship (25)	4350-5000	9	85/sem, *	6 ^C	Teaching	
*Nonresidents pay an additional \$43 per unit.						
San Jose State University, San Jose 95192						
DEPARTMENT OF MATHEMATICS John Mitchem, Chairman			Applications due: 2/15/78		Bachelor's by inst. 3600 Bachelor's by dept. 91 Master's by dept. 10	
Teaching Fellowship (10-12)	2700-5400	9	97/sem, *	3-6 ^C	Teaching	
*Nonresidents and foreign students pay an additional \$52.50 per unit.						
Sonoma State College, Rohnert Park 94928						
DEPARTMENT OF MATHEMATICS R.H. Johnson, Head					Bachelor's by inst. 683 Bachelor's by dept. 9 Master's by dept. 3	
Teaching Assistantship (3-5)	1000-2000	4 1/2-9		3-6	Teaching	

CLAREMONT GRADUATE SCHOOL

The Ph.D. program allows specialization in applied mathematics, functional analysis, topology, and other areas. *M.A. programs* in applied mathematics, scientific computing, statistics and operations research, and two-year-college teaching are designed to provide training and experience on which one can base a career in mathematical sciences; practical experience is an important part of each program, through a 'mathematics clinic' which provides work on substantial problems from industry (and some financial support for students), or through practice teaching at a nearby two-year college. An article, "An Innovative Approach to Realism within an Academic Environment" by Jerome Spanier (*American Math. Monthly*, Dec. 1976), describes the real-world component of applied mathematics training in Claremont.

A substantial number of tuition waivers (about \$3,000) are available along with fellowship support, especially in the M.A. program. The program is small and the experienced faculty can provide close attention to the particular needs and progress of each student. Claremont has a desert climate, but is 20 miles from mountain ski slopes and 40 miles from the beach. Facilities include a very good library and computer system.

**For information write to: Mathematics Department
Claremont Graduate School, Claremont, California 91711**

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
				hours per week	type of service	
Stanford University, Stanford 94305						
DEPARTMENT OF MATHEMATICS Robert Osserman, Chairman			Applications due: 1/78		Bachelor's by inst. 1791 Bachelor's by dept. 40 Master's by dept. 9	
Fellowship (2)	2400-2600	9				
Graduate Assistantship (40)*	2985-3445	9			**	Ph. D. (1974-1977 incl.) A&NT 1, G&T 8, L 4, A&FA 15, P 6, AM 2. Total: 36
*Graduate Assistants serve for one quarter as Teaching Fellows, for one quarter as Course Assistants, and for one quarter as Research Assistants.						
**3 contact hours per week teaching for one quarter; 6 contact hours per week assisting for one quarter; one quarter research with no formal duties.						
DEPARTMENT OF OPERATIONS RESEARCH Arthur F. Veinott, Jr., Chairman			Applications due: 3/1/78		Bachelor's by inst. 1791 Bachelor's by dept. 25 Master's by dept. 54	
Fellowship (8)	2600-2800	9				
Teaching Assistantship (3)	3345	9	*	10-20	Teaching	Ph. D. (1974-1977 incl.) OR 24, Total: 24
Research Assistantship (22)	2800-3400	9	*	10-20	Research	
*9 unit tuition grant.						

University of California, Berkeley 94720

DEPARTMENT OF MATHEMATICS J.L. Kelley, Chairman			Applications due: *		Bachelor's by inst. 5283 Bachelor's by dept. 105 Master's by dept. 69	
Fellowship (26)	900-3900	9 & 12	256.50- 891.50			Ph. D. (1974-1977 incl.) A&NT 24, G&T 38, L 10, A&FA 23, P 4, OR 2, CS 1, AM 32. Total: 134
Teaching Assistantship (88)	5298-5382	9	256.50- 891.50	16	Teaching	
Research Assistantship (24)	4248	9	256.50- 891.50			
*Assistantships: 2/1/78; Fellowships: 12/1/77						
GROUP IN LOGIC AND METHODOLOGY OF SCIENCE David Blackwell, Chairperson			Applications due: *		Bachelor's by inst. 5283 Ph. D. (1974-1977 incl.) L 5, Total: 5	
*Assistantships and Fellowships should be filed with the departments of Mathematics and/or Philosophy by dates set by those departments for Assistantships. Fellowships must be filed by December 1, 1977.						

University of California, Davis 95616

DEPARTMENT OF MATHEMATICS D.G. Mead, Chairman			Applications due: 1/15/78		Bachelor's by inst. 2953 Bachelor's by dept. 51 Master's by dept. 4	
Fellowship (4)	3000	9				
Teaching Assistantship (23)	5382	9		20	Teaching	Ph. D. (1974-1977 incl.) A&NT 1, G&T 2, A&FA 1, P 2, S 1, CS 1. Total: 8
Associate In. (2)	5430	9		20	Teaching	
Community Teaching Fellowship (5)	5382	9		20	Teaching	
Remedial Teaching (3)*						
Reading Assignments (5)*						

*Stipends and hours vary with extent of duties.

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Professor E. Thomas – Vice Chairperson for Faculty Appointments
Department of Mathematics
University of California, Berkeley – Berkeley, California 94720

TYPE <small>of financial assistance (with number anticipated 1978-1979)</small>	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED <small>Academic year 1976-1977</small>
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	
University of California, Irvine 92717						
DEPARTMENT OF MATHEMATICS Howard L. Resnikoff, Chairman			Applications due: 2/1/78		Bachelor's by inst. 1438 Bachelor's by dept. 39 Master's by dept. 2	
Teaching Fellowship (3)	5380	9	735	7		Ph.D. (1974-1977 incl.) A&NT 1, L 1, A&FA 3, P 3, AM 1. Total: 9
Teaching Assistantship (23)	5380	9	735	20		

University of California, Los Angeles 90024

DEPARTMENT OF MATHEMATICS Henry A. Dye, Chairman			Applications due: 2/15/78		Bachelor's by inst. 4443 Bachelor's by dept. 170 Master's by dept. 29	
Fellowship (8)*	2700-3000	9	**			Ph.D. (1974-1977 incl.) A&NT 15, G&T 1, L 3, A&FA 8, P 3, S 2, AM 7, Other 3. Total: 42
Teaching Fellowship (9)*	5382-6300	9	**	7 ^C	Teaching	
Teaching Assistantship (53)*	5382-6300	9	**	7 ^C	Teaching	

*Most fellowships pay all fees including nonresident tuition. Some nonresident assistants may receive waivers for 1 or 2 quarters of nonresident tuition part of fees \$635 per quarter.

**Nonresident pays per academic year; \$1905 tuition and \$756 registration fee.

DEPARTMENT OF SYSTEM SCIENCE J.W. Carlyle, Chairman			Applications due: 12/15/77		Bachelor's by inst. 4443 Bachelor's by dept. 182 Master's by dept. 19	
Fellowship (2)	2700-3000	9				Ph.D. (1974-1977 incl.) OR 9, CS 2, AM 3, Other 20. Total: 34
Teaching Assistantship (2)	5382-5940*	9	2661	5 ^C	Teaching	
Research Assistantship (6)	5,43/hr. - 6/24/hr.	12	2661	20	Research	
Nonresident Tuition Waiver (2)	2661					

*50% time.

University of California, Riverside 92502

DEPARTMENT OF MATHEMATICS A.R. Strulka, Chairman			Applications due: 2/1/78		Bachelor's by inst. 1000 Bachelor's by dept. 27 Master's by dept. 2	
Teaching Fellowship (5)	5382*	9	243	20	Teaching	Ph.D. (1974-1977 incl.) A&NT 3, G&T 2, A&FA 8, AM 3. Total: 16
Teaching Assistantship (11)	5382*	9	243	20	Teaching	
Research Assistantship (1)	6136*	12	243	20	Research	

*Plus 5% anticipated range adjustment.

University of California, San Diego, La Jolla 92037

DEPARTMENT OF MATHEMATICS Burton Rodin, Chairman			Applications due: 1/15/78		Bachelor's by inst. 1200 Bachelor's by dept. 30 Master's by dept. 10	
Fellowship (3)	5400-5600	9				Ph.D. (1974-1977 incl.) A&NT 1, G&T 4, A&FA 5, P 5, CS 1, AM 4, Other 3. Total: 23
Teaching Assistantship (45)	5400-5600	9	*	3-4 ^C	Teaching	
Research Assistantship (5)	6500-6800	11	*			
Scholarship (9)	**					

*In 1977-78 all graduate students (resident and nonresident) pay per quarter: \$246.00 (Registration Fee \$120; Educational Fee \$120; Student Center Fee \$6). Nonresident graduate students pay per quarter: \$635 Tuition in addition to the above \$246.

**Fees and/or tuition.

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FINANCIAL AID: Regents Fellowships (approximately \$400 per month for 9 months plus fees)
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Teaching Assistantships (approximately \$598 per month for 9 months)
*San Diego Fellowship (approximately \$400 per month plus fees)

Department of Mathematics
UNIVERSITY OF CALIFORNIA, SAN DIEGO
La Jolla, California 92039

*For educationally disadvantaged students.

TYPE <small>of financial assistance (with number anticipated 1978-1979)</small>	STIPEND		TUITION		SERVICE REQUIRED		DEGREES AWARDED	
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1976-1977		

University of California, Santa Barbara 93106

DEPARTMENT OF MATHEMATICS						Applications due: 1/16/78		Bachelor's by inst. 2019	
Charles A. Akemann, Chairman								Bachelor's by dept. 20	
Fellowship (3)	2500-3000	9	*					Master's by dept. 14	
Teaching Assistantship (24)	5650	9		6 ^c	Teaching	Ph.D. (1974-1977 incl.)			
Research Assistantship (2)	5650	9		15	Research	A&NT 5, A&FA 2, Total: 7			
Community Teaching Fellowship (4)		9		6 ^c	Teaching				

\$1905 for all out-of-state students.

University of California, Santa Cruz 95064

DEPARTMENT OF MATHEMATICS						Applications due: 2/1/78		Bachelor's by dept. 20	
John Guckenheimer, Chairman								Master's by dept. 2	
Teaching Assistantship (13)	5400	9	750	20		Ph.D. (1974-1977 incl.)			
								A&NT 2, G&T 1, A&FA 2, Other 1, Total: 6	

COLORADO

Colorado School of Mines, Golden 80401

DEPARTMENT OF MATHEMATICS						Applications due: 3/15/78		Bachelor's by inst. 260	
R. Gatzman, Acting Head								Bachelor's by dept. 9	
Teaching Assistantship (5)	3325-5200	9		12	Teaching	Master's by dept. 1			
Research Assistantship (2)	3325-5200	9		12	Research	Ph.D. (1974-1977 incl.)		ORI, Total: 1	

Colorado State University, Fort Collins 80523

DEPARTMENT OF MATHEMATICS						Applications due: 3/15/78		Bachelor's by inst. 2653	
Robert E. Gaines, Acting Head								Bachelor's by dept. 20	
Teaching Assistantship (32)	3600-3960	9	193	15	Teaching	Master's by dept. 11			
Research Assistantship (3)	3600-3960	9-12	193	15-20	Research	Ph.D. (1974-1977 incl.)		A&NT 2, G&T 1, A&FA 2, AM 1, Other 1, Total: 7	

DEPARTMENT OF COMPUTER SCIENCE

B.W. Merschner, Chairman								Bachelor's by dept. 37	
								Master's by dept. 1	
Teaching Assistantship (5)	350/mo	9	98.25/sem.	20					
Research Assistantship (9)	350/mo.	9		20					
Scholarship (4)	100/mo.	9							

DEPARTMENT OF STATISTICS

P.J. Brockwell, Chairman						Applications due: 3/15/78		Bachelor's by inst. 2653	
								Bachelor's by dept. 14	
Teaching Assistantship (7)	3600-3780	9		20	Teaching	Master's by dept. 8			
Research Assistantship (15)	3600-3780	9		20	Research	Ph.D. (1974-1977 incl.)		S I, Total: 1	

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Graduate study in this department can lead to a Masters degree in pure or applied mathematics or the Doctor of Philosophy in mathematics. Emphasis areas in computer science and statistics are available at both the Master's and Doctoral levels.

The Mathematics faculty is actively involved in research in the areas of functional analysis, classical analysis, algebra, linear and multilinear algebra, number theory, geometry, topology, probability/statistics, computer science, applied mathematics.

Assistantships and Fellowships (to \$5700) are available for the 1978-79 year.

This beautiful seaside campus is within one of the world's largest cultural and research centers.

Write to Graduate Committee Chairman, Dept. of Mathematics, Univ. of Calif., Santa Barbara 93106

The University's nondiscrimination policy applies to admission, access and treatment in UCSE programs and activities.



TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
University of Colorado, Boulder 80309						
DEPARTMENT OF MATHEMATICS Jerrold Bebernes, Chairman			Applications due: 2/1/78		Bachelor's by inst. 3237 Bachelor's by dept. 72 Master's by dept. 19	
Fellowship (1)	3500	9				
Teaching Assistantship (60)	3776-5180	9	31/cr.	20	Teaching, office hrs.	Ph.D. (1974-1977 incl.) A&NT 6, G&T 6, L 5, A&FA 4, P 2, CS 2, AM 2, Other 1. Total: 28
University of Denver, Denver 80210						
DEPARTMENT OF MATHEMATICS William S. Dorn, Chairman			Applications due: 4/1/78		Bachelor's by inst. 877 Bachelor's by dept. 11 Master's by dept. 1	
Teaching Assistantship (10)	3000-3200	9		20	Teaching	
Research Assistantship (2)	4200-4800	12		20	Research	Ph.D. (1974-1977 incl.) A&FA 1, P 1, AM 3. Total: 5
Scholarship (4)	820-2460					
DEPARTMENT OF STATISTICS Darl Bien, Chairman			Applications due: 5/1/78		Bachelor's by inst. 877 Bachelor's by dept. 3 Master's by dept. 1	
Teaching Assistantship (5)	2750*	9		20		
Research Assistantship (1)	2750*	9		20		
*Plus ten hours tuition free per quarter.						
University of Northern Colorado, Greeley 80639						
DEPARTMENT OF MATHEMATICS Donald D. Elliott, Chairman			Applications due: 2/1/78		Bachelor's by inst. 1995 Bachelor's by dept. 21 Master's by dept. 9	
Teaching Assistantship (7)	3250-3600	9	*	6	Teaching	Ph.D. (1974-1977 incl.) L 1, A&FA 1, S 1, Other 9. Total: 12
*In-State: \$140 per quarter; out-of-state: \$280 per quarter.						
DEPARTMENT OF RESEARCH AND STATISTICAL METHODOLOGY Samuel R. Houston, Chairman			Applications due: 6/78		Bachelor's by inst. 1995 Master's by dept. 6	
Teaching Assistantship (1)	4800-5080	12	*	20	Teaching	Ph.D. (1974-1977 incl.) L 2, A&FA 2, P 2, S 4, OR 2, CS 4, AM 2, Other 3. Total: 21
*Resident: \$144; nonresident: \$573.						
CONNECTICUT						
Central Connecticut State College, New Britain 06050						
DIVISION OF MATHEMATICS George B. Miller and Stephen A. Bacon, Chairmen			Applications due: 6/1/78		Bachelor's by inst. 1653 Bachelor's by dept. 52 Master's by dept. 29	
Teaching Assistantship (1)	1200	9		6 ^c		
University of Connecticut, Storrs 06268						
DEPARTMENT OF MATHEMATICS John V. Ryff, Head			Applications due: Open		Bachelor's by inst. 3278 Bachelor's by dept. 56 Master's by dept. 7	
Fellowship (10)	400-1500	9				
Teaching Assistantship (16)	3840-4770			4-6 ^c		Ph.D. (1974-1977 incl.) A&NT 1, L 1, AM 1. Total: 3
COMPUTER SCIENCE DIVISION Y. T. Chien, Head			Applications due: 3/1/78		Bachelor's by inst. 3278 Bachelor's by dept. 25 Master's by dept. 10	
Fellowship (5)	2600	9	540			
Teaching Fellowship (5)	3200	9	540	10	Teaching	Ph.D. (1974-1977 incl.) CS 5. Total: 5
Teaching Assistantship (10-13)	3840-4770	9		20	Teaching	
Research Assistantship (5)	3840-4770	9	540	20	Research	
DEPARTMENT OF STATISTICS Gottfried E. Noether, Head			Applications due: 3/15/78		Bachelor's by inst. 3278 Bachelor's by dept. 4 Master's by dept. 4	
Fellowship (2)	2000-2500	9	750			
Teaching Fellowship (4)	3000-3400	9		5	Teaching, grading	Ph.D. (1974-1977 incl.) S 2. Total: 2
Teaching Assistantship (4)	3840-4770	9		10	Teaching, grading	

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	

Yale University, New Haven 06520

DEPARTMENT OF MATHEMATICS Applications due: 1/20/78 Bachelor's by inst. 1180
Walter Feit, Chairman Bachelor's by dept. 25
Master's by dept. 6

partial or full support available for most students.

Ph.D. (1974-1977 incl.)
A&NT 10, G&T 8, L 5,
A&FA 10. Total: 33

DEPARTMENT OF COMPUTER SCIENCE Applications due: 1/20/78 Bachelor's by inst. 1180
Edgar T. Irons, Acting Chairman Bachelor's by dept. 5
Master's by dept. 3

Fellowship (15)	*	9				
Teaching Fellowship (33)	770/sem.	5	**	12-15	Teaching	
Research Assistantship (20)	325/mo.	12				
IBM Fellowship (1)	325/mo.	12				

Ph.D. (1974-1977 incl.)
CS 7. Total: 7

*Minimum is tuition up to maximum of \$2500 plus tuition.

**\$5130; reduced tuition \$1800, after a three year residence requirement.

DEPARTMENT OF STATISTICS Applications due: 1/20/78 Bachelor's by inst. 1180
I. Richard Savage, Chairman Master's by dept. 1

Fellowship (12)	900-2500	9	*			
Research Assistantship (3)	2700	9	*			

Ph.D. (1974-1977 incl.)
S 8. Total: 8

*Most students receive a tuition fellowship from the University;
tuition is more than \$4500 per academic year.

Wesleyan University, Middletown 06457

DEPARTMENT OF MATHEMATICS Applications due: 3/15/78 Bachelor's by inst. 547
William L. Reddy, Chairman Bachelor's by dept. 35
Master's by dept. 2

Teaching Assistantship (13)	2950-3250	9		10	Assisting, research	
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Ph.D. (1974-1977 incl.)
A&NT 4, G&T 7, L 1.
Total: 12

Summer Support (13)	450	3		10		
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DELAWARE

University of Delaware, Newark 19711

DEPARTMENT OF MATHEMATICS Applications due: 3/1/78 Bachelor's by inst. 2639
Ivar Stakgold, Chairman Bachelor's by dept. 30
Master's by dept. 4

Fellowship (2)	3350	9		9		
Teaching Assistantship (23)	3350-3850	9		12-15		

Ph.D. (1974-1977 incl.)
A&NT 1, G&T 3, A&FA 3.
Total: 7

DEPARTMENT OF STATISTICS AND COMPUTER SCIENCE Applications due: 3/1/78 Bachelor's by inst. 2639
James F. Leathrum, Chairperson Bachelor's by dept. 25
Master's by dept. 4

Teaching Assistantship (14)	3350-3600	9		15-20	Teaching	
Research Assistantship (2)	3600	9		15-20	Research	

Ph.D. (1974-1977 incl.)
S 2, CS 2. Total: 4

DISTRICT OF COLUMBIA

American University, Washington 20016

DEPARTMENT OF MATHEMATICS, STATISTICS AND COMPUTER SCIENCE Applications due: 3/15/78 Bachelor's by inst. 800
Mary Gray, Chairman Bachelor's by dept. 15
Master's by dept. 15

Teaching Assistantship (11)	2900*	9		3 ^c		
Special Opportunities for Minority Students (2)	2900*	9		3 ^c		

Ph.D. (1974-1977 incl.)
A&NT 2, G&T 1, A&FA 1,
S 17, AM 1. Total: 22

*Plus twenty-four hours tuition.

Catholic University of America, Washington 20064

DEPARTMENT OF MATHEMATICS Applications due: 4/1/78 Bachelor's by inst. 570
John N. Welch, Chairman Bachelor's by dept. 4
Master's by dept. 7

Teaching Assistantship (4)	2400	9		3 ^c		
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Ph.D. (1974-1977 incl.)
G&T 1, L 1, A&FA 3.
Total: 5

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
George Washington University, Washington 20052						
DEPARTMENT OF MATHEMATICS T. P. G. Liverman, Chairman			Applications due: 2/1/78		Bachelor's by inst. 1368 Bachelor's by dept. 14 Master's by dept. 3	
Teaching Fellowship (9)	3000-3400	9	18hrs.	6	Teaching	Ph. D. (1974-1977 incl.) A&NT 2, A&FA 3, Other 1. Total: 6
DEPARTMENT OF OPERATIONS RESEARCH Donald Gross, Chairman			Applications due: 3/1/78		Bachelor's by inst. 1368 Master's by dept. 33	
Teaching Assistantship (1)	3126-3276	9		2 1/2 ^C	Teaching	Ph. D. (1974-1977 incl.) OR 9. Total: 9
Research Assistantship (4)	7500-9348	9-12	107/sem.hr.	20	Research	
DEPARTMENT OF STATISTICS Samuel W. Greenhouse, Chairman			Applications due: 2/17/78		Bachelor's by inst. 1368 Bachelor's by dept. 5 Master's by dept. 9	
Fellowship (5)	1200-1275	9	85.50 fees			Ph. D. (1974-1977 incl.) S 6. Total: 6
Teaching Assistantship (5)	1800-2025	9		20		
Howard University, Washington 20059						
DEPARTMENT OF MATHEMATICS James A. Donaldson, Chairman			Applications due: 3/1/78		Bachelor's by inst. 402 Bachelor's by dept. 5 Master's by dept. 2	
Fellowship (1)	3600	12				
Teaching Assistantship (9)	4493	9		20		
FLORIDA						
Florida Atlantic University, Boca Raton 33431						
DEPARTMENT OF MATHEMATICS Tomas P. Schonbek, Chairman			Applications due: 4/1/78		Bachelor's by inst. 1381 Bachelor's by dept. 13 Master's by dept. 1	
Teaching Assistantship (2)	2000-2700	9	*	4 ^C	Teaching	
*Resident: \$22 per credit; nonresident: \$62 per credit.						
Florida Institute of Technology, Melbourne 32901						
DEPARTMENT OF MATHEMATICAL SCIENCES D. R. Clutterham, Head			Applications due: 4/3/78		Bachelor's by inst. 206 Bachelor's by dept. 11 Master's by dept. 15	
Teaching Assistantship (8)	3500	15		5-7 ^C		
Florida State University, Tallahassee 32306						
DEPARTMENT OF MATHEMATICS Charles W. McArthur, Chairman			Applications due: 2/1/78		Bachelor's by inst. 3197 Bachelor's by dept. 39 Master's by dept. 3	
Fellowship (3)	5000	12	22/hr.			Ph. D. (1974-1977 incl.) A&NT 4, A&FA 4, AM 2. Total: 10
Teaching Assistantship (20)	4200	9	22/hr. *	6	Teaching	
Research Assistantship (2)	5200	9 or 12	22/hr. *	20	Research	
*Plus \$40 per hour if out-of-state, unless waived.						
DEPARTMENT OF STATISTICS Ralph A. Bradley, Head			Applications due: 2/1/78		Bachelor's by inst. 3197 Bachelor's by dept. 13 Master's by dept. 22	
Fellowship (11)	3900-11200	12				Ph. D. (1974-1977 incl.) P 1, S 13, OR 4. Total: 18
Teaching Assistantship (12)	3900-4200	12	22/cr. hr.	13	Teaching	
Research Assistantship (8)	3900-4200	12	22/cr. hr.	13	Research	
Florida Technological University, Orlando 32816						
DEPARTMENT OF MATHEMATICS AND STATISTICS Joby M. Anthony, Acting Chairman			Applications due: 4/1/78		Bachelor's by inst. 1684 Bachelor's by dept. 16 Master's by dept. 1	
Teaching Assistantship (4)	1800-3600	9	*	10-20	Teaching	
*Resident: \$22 per hour; nonresident: \$62 per hour.						
University of Florida, Gainesville 32611						
DEPARTMENT OF MATHEMATICS A. R. Bednarek, Chairman			Applications due: 2/15/78		Bachelor's by inst. 4919 Bachelor's by dept. 42	
Fellowship (3)	3120	9	*			Ph. D. (1974-1977 incl.) A&NT 1, G&T 4, A&FA 2, AM 1, Other 1. Total: 9
Teaching Assistantship (34)	3600-5100**	9	*	6	Teaching	
Research Assistantship (1)			*	6		
*\$22 per credit hour for all graduate courses except research hours.						
**1/2-time.						

TYPE <i>of financial assistance</i> <i>(with number anticipated 1978-1979)</i>	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1976-1977
DEPARTMENT OF STATISTICS R. L. Scheaffer, Head			Applications due: 3/15/78			Bachelor's by inst. 4919 Bachelor's by dept. 5 Master's by dept. 10
Fellowship (1)	3400-4300	9	22/cr. hr.			
Teaching Assistantship (12)	3120-6435	9	22/cr. hr.	13-20	Teaching	Ph.D. (1974-1977 incl.)
Research Assistantship (15)	3120-6435	9	22/cr. hr.	13-20	Research	S 9, Total: 9

University of Miami, Coral Gables 33124

DEPARTMENT OF MATHEMATICS Edwin Duda, Acting Chairman			Applications due: 3/1/78			Bachelor's by inst. 1710 Bachelor's by dept. 14 Master's by dept. 2
Fellowship (2)	2000-3500	9			Research	
Teaching Assistantship (23)	2900-3500	9		6 ^c	Teaching	Ph.D. (1974-1977 incl.) A&NT 2, G&T 1, Total: 3

University of South Florida, Tampa 33620

DEPARTMENT OF MATHEMATICS M. N. Manougian, Chairperson			Applications due: 4/15/78			Bachelor's by inst. 3732 Bachelor's by dept. 27 Master's by dept. 8
Teaching Assistantship (30)	3200-3800	9	22/qtr. hr.	15	Teaching	Ph.D. (1974-1977 incl.) A&NT 1, G&T 1, A&FA 2, S 4, AM 3, Total: 11

GEORGIA

Augusta College, Augusta 30904

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE Jerry Sue Townsend, Chairman			Applications due: 6/1/78			Bachelor's by inst. 504 Bachelor's by dept. 10 Master's by dept. 3
Teaching Assistantship (1)	2400	9		15	Teaching	

Emory University, Atlanta 30322

DEPARTMENT OF MATHEMATICS Trevor Evans, Chairman			Applications due: 2/15/78			Bachelor's by inst. 648 Bachelor's by dept. 33 Master's by dept. 8
Teaching Assistantship (14)	3500	9		10	Teaching or assisting faculty member	Ph.D. (1974-1977 incl.) A&NT 3, G&T 2, A&FA 2, Total: 7

Georgia Institute of Technology, Atlanta 30332

SCHOOL OF MATHEMATICS John D. Neff, Director			Applications due: 3/1/78			Bachelor's by inst. 1232 Bachelor's by dept. 26 Master's by dept. 6
Fellowship (1)	5000	12			Full time study	Ph.D. (1974-1977 incl.)
Teaching Assistantship (35)	3525-4050*	9	225.50/qtr.**	6 ^c		A&FA 3, AM 3, Total: 6

*Some increase is expected for 1978-79.

**Depends on credit hours taken, figure listed is the maximum.

DEPARTMENT OF INFORMATION AND COMPUTER SCIENCE

Vladimir Slamecka, Director			Applications due: 2/1/78			Bachelor's by inst. 1232 Bachelor's by dept. 41 Master's by dept. 67
Fellowship (3)*	5000	12				
Teaching Assistantship (6)	3000	12	231.50/qtr.	13	Teaching	Ph.D. (1974-1977 incl.)
Research Assistantship (8)	3000	12	231.50/qtr.	13	Research	CS 7, Total: 7
Burroughs (M.S.) (2)	3000	12				
Management Science America (M.S.) (1)	3000	12	620.50/qtr.			
Out-of-state Tuition Waiver (4)	1556	12	620.50/qtr.			
Traineeship (6)**	3900	12	231.50/qtr.			

*Georgia Institute of Technology President's Fellowship awarded to first year Ph.D. students and exceptional masters students.

**HEW Biomedical Information and Computer Science Traineeships.
Restricted to U.S. citizens and normally reserved for Ph.D. students.

Georgia State University, Atlanta 30303

DEPARTMENT OF MATHEMATICS Fred A. Massey, Interim Chairman			Applications due: 9/1/78			Bachelor's by inst. 1867 Bachelor's by dept. 25 Master's by dept. 4
Research Assistantship (4)	1800	9		13		

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1978-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
University of Georgia, Athens 30602						
DEPARTMENT OF MATHEMATICS			Applications due: 2/15/78		Bachelor's by inst. 2273	
James C. Cantrell, Head					Bachelor's by dept. 13	
Teaching Assistantship (20)	3250-3475	9	234	5 ^C	Teaching	Master's by dept. 11
Scholarship (2) (open)	2750	9	234			Ph.D. (1974-1977 incl.)
Non-teaching Assistantship (6)	3250-3475	9	234	10	Grading	A&NT 2, G&T 4, A&FA 3, AM 1, Other 2. Total: 12
DEPARTMENT OF STATISTICS			Applications due: 2/15/78		Bachelor's by inst. 2273	
Carl F. Kossack, Head					Bachelor's by dept. 9	
Teaching Assistantship (18)	9750-10425	9	15/qtr. hr.	14		Master's by dept. 6
					Ph.D. (1974-1977 incl.) S 12. Total: 12	
HAWAII						
University of Hawaii, Honolulu 96822						
DEPARTMENT OF MATHEMATICS			Applications due: 3/1/78		Bachelor's by inst. 1263	
Jack Williamson, Chairman					Bachelor's by dept. 41	
Teaching Assistantship (13)	4512-5040	9		3-4 ^C	Teaching	Master's by dept. 5
					Ph.D. (1974-1977 incl.) A&NT 1. Total: 1	
DEPARTMENT OF INFORMATION AND COMPUTER SCIENCE			Applications due: 3/1/78		Bachelor's by inst. 1263	
W. Wesley Peterson, Chairman					Bachelor's by dept. 26	
Teaching Assistantship (1)	4512-5040	9		20	Teaching, consulting	Master's by dept. 19
Research Assistantship (3)	5292-5892	11		20	Research	
IDAHO						
Idaho State University, Pocatello 83209						
DEPARTMENT OF MATHEMATICS			Applications due: 3/15/78		Bachelor's by inst. 850	
W. Lyle Cook, Chairman					Bachelor's by dept. 10	
Fellowship (4)	3000	9				Master's by dept. 4
Teaching Assistantship (4)	2880	9		4-5 ^C	Teaching	Ph.D. (1974-1977 incl.) A&NT 1, S 1, Other 2. Total: 4
University of Idaho, Moscow 83843						
DEPARTMENT OF MATHEMATICS			Applications due: 3/1/78		Bachelor's by inst. 1163	
Howard E. Campbell, Chairman					Bachelor's by dept. 10	
Teaching Assistantship (11)	3700-4200	9	530	6 ^C	Teaching	Master's by dept. 4
					Ph.D. (1974-1977 incl.) A&NT 1, G&T 2, A&FA 1. Total: 4	
ILLINOIS						
Chicago State University, Chicago 60628						
DEPARTMENT OF MATHEMATICS					Bachelor's by inst. 1222	
Richard Johnsonbaugh, Chairperson					Bachelor's by dept. 27	
Faculty Assistantship (1)	6000	10		30-35	Tutoring	Master's by dept. 7
Eastern Illinois University, Charleston 61920						
DEPARTMENT OF MATHEMATICS			Applications due: 3/1/78		Bachelor's by inst. 1100	
Alphonso J. DiPietro, Chairman					Bachelor's by dept. 25	
Teaching Assistantship (14)	3000	9		5 ^C		Master's by dept. 12
Graduate Assistantship (2)	1890	9		10	Tutoring, computer programming	
Illinois Institute of Technology, Chicago 60616						
DEPARTMENT OF MATHEMATICS					Bachelor's by inst. 447	
P. C. Deliyannis, Chairman					Bachelor's by dept. 21	
Fellowship (1)	2500	9				Master's by dept. 11
Teaching Assistantship (3)	2800-3500	9		7 ^C		Ph.D. (1974-1977 incl.) A&NT 7, L 2, A&FA 2, AM 1. Total: 12

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	

Illinois State University, Normal 61761

DEPARTMENT OF MATHEMATICS				Applications due: 4/1/78*		Bachelor's by inst.	3293
Albert D. Otto, Chairperson						Bachelor's by dept.	66
Teaching Assistantship (12)	2520	9		12	Assisting	Master's by dept.	8
Doctoral Assistantship (4)	3240	9		4 ^C	Teaching		
Half-time Instructorship (2)	5400-6700	9	**	6-7 ^C	Teaching		

*Late applications will be accepted.

**Over 6 hours payable by student.

Loyola University, Chicago 60626

DEPARTMENT OF MATHEMATICAL SCIENCES				Applications due: Open		Bachelor's by inst.	600
Richard J. Maher, Chairman						Bachelor's by dept.	30
Teaching Assistantship (2)	2500	9		4-8		Master's by dept.	3

Northern Illinois University, DeKalb 60115

DEPARTMENT OF MATHEMATICS				Applications due: 7/1/78		Bachelor's by inst.	1838
D.B. McAlister, Chairman						Bachelor's by dept.	59
Fellowship (1)	2700-3200	9				Master's by dept.	25
Teaching Assistantship (54)	2790-3420	9		20	Teaching		

Northwestern University, Evanston 60201

DEPARTMENT OF MATHEMATICS				Applications due: 2/1/78		Bachelor's by inst.	1752
Daniel Zelinsky, Head						Bachelor's by dept.	27
Teaching Fellowship (34)	3000-3400	9		12		Master's by dept.	9
						Ph.D. (1974-1977 incl.)	
						A&NT 2, G&T 5, L 1,	
						A&FA 9, P 1, S 2, AM 6.	
						Total: 26	

DEPARTMENT OF ENGINEERING SCIENCE AND APPLIED MATHEMATICS				Applications due: 1/15/78		Bachelor's by dept.	8
E. Cinlar, Chairman						Master's by dept.	4
Fellowship (3)	2700-3400	9				Ph.D. (1974-1977 incl.)	
Teaching Fellowship (3)	2700-3200	9				S 1, CS 1, AM 4. Total: 6	
Teaching Assistantship (5)	2700-3200	9		20			
Research Assistantship (9)	3900-4800	12		20			
Scholarship (1)	Tuition only	9					

Roosevelt University, Chicago 60605

DEPARTMENT OF MATHEMATICAL SCIENCES				Applications due: 3/1/78		Bachelor's by inst.	900
Jack Silber, Chairman						Bachelor's by dept.	25
Teaching Assistantship (1)	2000	9		8-10	Tutorials	Master's by dept.	3
Scholarship (2)		9					
Assistant To Staff (1)	900	9	1100-1600	6-8			

MATHEMATICS AT NORTHWESTERN UNIVERSITY

The Mathematics Department of Northwestern University invites applications for graduate study from qualified applicants interested in the Ph.D. degree.

The Mathematics Faculty is strongly research oriented. A Ph.D. program may be pursued in the areas of algebra, algebraic geometry and topology, classical and modern analysis, global analysis, ordinary and partial differential equations, probability and statistics. In addition a number of faculty have strong interests in applied work.

The department is of medium size so that the students enjoy a great deal of contact with the faculty. Further inquiries should be addressed to

Professor Allen Devinatz
Department of Mathematics, Lunt Hall
Northwestern University
Evanston, Illinois 60201

TYPE (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
Southern Illinois University, Carbondale 62901						
DEPARTMENT OF MATHEMATICS			Applications due: 2/1/78*		Bachelor's by inst. 3344	
Alphonse Baartmans, Chairman					Bachelor's by dept. 29	
Fellowship (2)	3355-3630	11	**			Master's by dept. 4
Teaching Assistantship (15)	3258-3555	9	**	6 ^C	Teaching	Ph.D. (1974-1977 incl.) A&NT 2, A&FA 2, AM 2, Other 2. Total: 8
Graduate Assistantship (7)	3982-4345	11	**	6 ^C	Teaching	
*Late applications will be accepted. **\$52-80 for fees per semester.						
Southern Illinois University-Edwardsville 62025						
DEPARTMENT OF MATHEMATICAL STUDIES			Applications due: 2/15/78		Bachelor's by inst. 1223	
H.K. Wilson, Chairman					Bachelor's by dept. 36	
Teaching Assistantship (17)	346-426/mo.	9		20	Teaching	Master's by dept. 7
University of Chicago, Chicago 60637						
DEPARTMENT OF MATHEMATICS			Applications due: *		Bachelor's by inst. 489	
Paul J. Sally, Jr., Chairman					Bachelor's by dept. 33	
Fellowship (15)	7380	9				Master's by dept. 20
Teaching Fellowship (15)	7380	9		5		Ph.D. (1974-1977 incl.) A&NT 18, G&T 12, L 1, A&FA 5, AM 1. Total: 37
Research Assistantship (10)	7380	9			Research	
Scholarship (5)	2930	9				
Lecturer (20)	5310	9		5-8		
*Foreign: 1/1/78; domestic: 2/1/78.						
DEPARTMENT OF STATISTICS			Applications due: 2/1/78		Bachelor's by inst. 489	
David L. Wallace, Chairman					Bachelor's by dept. 3	
Fellowship (2)	3500-4125	9		10		Master's by dept. 3
Research Assistantship (12)	3000-4000	9		10		Ph.D. (1974-1977 incl.) S 5. Total: 5
Scholarship (6)		9	up to 1800	10		
University of Illinois at Chicago Circle, Chicago 60680						
DEPARTMENT OF MATHEMATICS			Applications due: *		Bachelor's by inst. 2931	
Philip Dwinger, Chairman					Bachelor's by dept. 80	
Fellowship (2)	2500	9				Master's by dept. 35
Teaching Assistantship (85)	3790-4000	9		20	Teaching	Ph.D. (1974-1977 incl.) A&NT 7, G&T 1, L 1, A&FA 4, P 2, S 3, AM 4. Total: 22
Scholarship (7)		9				
*Assistantship: 8/15/78; Fellowship: 2/1/78.						
University of Illinois at Urbana-Champaign, Urbana 61801						
DEPARTMENT OF MATHEMATICS			Applications due: 2/15/78*		Bachelor's by inst. 6182	
P. T. Bateman, Head					Bachelor's by dept. 64	
Fellowship (12)	3000-5300	12		0-10	Teaching	Master's by dept. 61
Teaching Assistantship (155)	2300-4600	9	**	10-20	Teaching	Ph.D. (1974-1977 incl.) A&NT 17, G&T 11, L 4, A&FA 11, P 2, S 2, AM 5, Other 3. Total: 55
Tuition Waiver (5)						
*Late applications will be accepted. **\$50 hospitalization fee per semester.						
DEPARTMENT OF COMPUTER SCIENCE			Applications due: 2/15/78		Bachelor's by inst. 6182	
J.N. Snyder, Head					Bachelor's by dept. 77	
Fellowship (3)	2500	9 or 12				Master's by dept. 58
Teaching Assistantship (31)	3790-4080	9		20	Teaching	Ph.D. (1974-1977 incl.) CS 54. Total: 54
Research Assistantship (39)	3790-5000	11		20	Research	
Tuition Waiver (5)	950-2500	9				
Fellowship (Minority) (2)	2500	9 or 12				

INDIANA

Ball State University, Muncie 47306

DEPARTMENT OF MATHEMATICAL SCIENCES			Applications due: 3/1/78*		Bachelor's by inst. 2437	
Duane E. Deal, Chairman					Bachelor's by dept. 68	
Teaching Assistantship (25)	2800	9	**	4 ^C	Teaching	Master's by dept. 60
*Late applications may be considered. **\$117 for 8 hours; \$173 for 12 hours.						

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
Indiana University, Bloomington 47401						
DEPARTMENT OF MATHEMATICS Morton Lowengrub, Chairman			Applications due: 3/1/78		Bachelor's by inst. 6538 Bachelor's by dept. 44 Master's by dept. 12	
Fellowship (1)	3800	9	*			
Teaching Fellowship (5)	4350-4750	9	**	15-20	Teaching, assisting, grading	Ph.D. (1974-1977 incl.) A&NT 5, G&T 4, A&FA 14, P 2, S 6. Total: 31
Teaching Assistantship (95)	3600-4260	9	***	15-20	Teaching, assisting, grading	
Research Assistantship (1)	3600	9	**	15-20	Research	
Scholarship (64)	500-950	2	#	7-15	Teaching, assisting, grading	
Summer Teaching Fellowship (15)	500	2	#			
*In-state fees of \$372 per semester. **Usually accompanied by a full fee remission which exempts the student from paying all but \$85 a semester for general expenses (Health Center, etc.). ***\$85 a semester for general costs (Health Center, etc.) only. #Usually accompanied by a full fee remission which exempts the student from paying all but \$35 for general expenses (Health Center, etc.).						
Indiana University-Purdue University at Indianapolis 46205						
DEPARTMENT OF MATHEMATICAL SCIENCES Michael Gemignani, Chairman			Applications due: 5/1/78		Bachelor's by inst. 1500 Bachelor's by dept. 9 Master's by dept. 10	
Research Assistantship (5)	4000-5000	9-12		20		
Purdue University, West Lafayette 47907						
DEPARTMENT OF MATHEMATICS L.D. Berkovitz, Chairman			Applications due: *		Bachelor's by inst. 4365 Bachelor's by dept. 103 Master's by dept. 42	
Fellowship (3)	3600-4200	12	70/sem.			
Teaching Assistantship (120)	3700-4300	9	70/sem.	6 ^c		Ph.D. (1974-1977 incl.) A&NT 5, G&T 2, L 1, A&FA 8, AM 10. Total: 26
Research Assistantship (4)	3600	12	70/sem.			
Black Fellowship (3)	3600-4200	12	70/sem.			
*Assistantship: 3/15/78; Fellowship: 2/1/78.						
DEPARTMENT OF COMPUTER SCIENCES S.D. Conte, Head			Applications due: *		Bachelor's by inst. 4365 Bachelor's by dept. 75 Master's by dept. 37	
Fellowship (2)	3600-4200	12	70/sem.**			
Teaching Assistantship (15)	3700-4300	10	70/sem.	20		Ph.D. (1974-1977 incl.) CS 21. Total: 21
Research Assistantship (5)	varies	9 and 12	70/sem.	varies		
*Assistantship: 3/1/78 (2/1/78 recommended); Fellowship: 2/1/78. **\$0 for Black and Minority Fellowships.						
DEPARTMENT OF INDUSTRIAL ENGINEERING Wilbur L. Meier, Jr., Head			Applications due: 3/15/78		Bachelor's by inst. 4365 Bachelor's by dept. 64 Master's by dept. 34	
Fellowship (2)	3700-4300	9	70/sem.			
Teaching Fellowship (2)	3700-4300	9	70/sem.	20		Ph.D. (1974-1977 incl.) OR 8. Total: 8
Teaching Assistantship (10)	3700-4300	9	70/sem.	20		
Research Assistantship (10)	3700-4300	9	70/sem.	20		
DEPARTMENT OF STATISTICS Shanti S. Gupta, Head			Applications due: 2/15/78		Bachelor's by inst. 4365 Bachelor's by dept. 3 Master's by dept. 8	
Fellowship (3)	3600-4200	12	70/sem.			
Teaching Assistantship (14)	3700-4300	10	70/sem.	20	Teaching	Ph.D. (1974-1977 incl.) P 4, S 12. Total: 16
Research Assistantship (5)	3700-4300	10	70/sem.	30	Research	
University of Notre Dame, Notre Dame 46556						
DEPARTMENT OF MATHEMATICS John E. Derwent, Chairman			Applications due: 2/15/78		Bachelor's by inst. 1696 Bachelor's by dept. 31 Master's by dept. 4	
Fellowship (12)	3400-4400	9				
Teaching Assistantship (23)	3400-3800	9		4	Teaching	Ph.D. (1974-1977 incl.) A&NT 13, G&T 6, L 4, A&FA 5. Total: 28

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED	
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1976-1977	

IOWA

Drake University, Des Moines 50311

DEPARTMENT OF MATHEMATICS				Applications due: 3/1/78*		Bachelor's by inst.	907
Wayne Woodworth, Chairman						Bachelor's by dept.	7
Teaching Assistantship (0-5)	2200-2500	9		20		Master's by dept.	4

*Late applications accepted.

Iowa State University, Ames 50011

DEPARTMENT OF MATHEMATICS				Applications due: 3/1/78		Bachelor's by inst.	3340
Wilfred E. Barnes, Head						Bachelor's by dept.	26
Teaching Assistantship (36)	3780-4257*	9	143	5-6 ^C	Teaching	Master's by dept.	7

*Current rates. Some increase is expected

Ph.D. (1974-1977 incl.)
A&FA 3, AM 1, Other 2,
Total: 6

DEPARTMENT OF AEROSPACE ENGINEERING				Applications due: 4/1/78		Bachelor's by inst.	3340
R. F. Brodsky, Head						Bachelor's by dept.	25
Teaching Assistantship (2)	3420-4320	9	143/qtr.	20	Teaching	Master's by dept.	5
Research Assistantship (2)	4200-5280	12	143/qtr.	20	Research	Ph.D. (1974-1977 incl.) AM 5, Total: 5	

DEPARTMENT OF COMPUTER SCIENCE				Applications due: 3/15/78		Bachelor's by inst.	3340
Robert M. Stewart, Chairman						Bachelor's by dept.	52
Teaching Assistantship (18)	390-555/mo.	9	143/qtr.	3-6 ^C		Master's by dept.	16
Research Assistantship (18)	340-515/mo.	9-12	143/qtr.	20		Ph.D. (1974-1977 incl.) CS 15, Total: 15	

DEPARTMENT OF STATISTICS				Applications due: 3/31/78		Bachelor's by inst.	3340
H. A. David, Head						Bachelor's by dept.	11
Teaching Assistantship (9)	3420-4995	9	143/qtr.	20	Teaching & service	Master's by dept.	21
Research Assistantship (8)	4080-6180	12	143/qtr.	20	Research & S 24.	Ph.D. (1974-1977 incl.) S 24, Total: 24	
Premium for Academic Excellence (PACE) (10)*	143/qtr.	12					

*Estimate. The number varies depending on the qualifications of current graduate students in department. It is offered by the Graduate College based primarily on scholastic achievement.

University of Iowa, Iowa City 52242

DEPARTMENT OF MATHEMATICS				Applications due: 3/1/78		Bachelor's by inst.	4648
Eugene W. Johnson, Chairman						Bachelor's by dept.	34*
Teaching Assistantship (30)	4500-5100	9	429 (9 or more hours)	20	Teaching	Master's by dept.	4

*In the mathematical sciences.

Ph.D. (1974-1977 incl.)
A&NT 2, G&T 3, L 1,
A&FA 6, AM 2. Total: 14

DEPARTMENT OF STATISTICS				Applications due: 3/1/78		Bachelor's by inst.	4648
Robert V. Hogg, Chairman						Bachelor's by dept.	34*
Fellowship (1)	5000-6000	12			**	Master's by dept.	20
Teaching Assistantship (12)	4600-5300	9	900	6 ^C	Teaching	Ph.D. (1974-1977 incl.)	
Research Assistantship (2)	4500-5300	9	900	20	Research	S 7, Total: 7	
Scholarship (12)	300-400						

*In the mathematical sciences.
**Special TRF program. During 4 years some teaching, some research and some fellowship.

University of Northern Iowa, Cedar Falls 50613

DEPARTMENT OF MATHEMATICS				Applications due: 3/15/78		Bachelor's by inst.	1313
David Duncan, Head						Bachelor's by dept.	26
Graduate Assistantship (3)	2226	9		12		Master's by dept.	7

KANSAS

Fort Hays Kansas State College, Hays 67601

DEPARTMENT OF MATHEMATICS				Applications due: 3/1/78		Bachelor's by inst.	864
E. Beougher, Chairman						Bachelor's by dept.	14
Teaching Assistantship (1)	2100	9	*	20		Master's by dept.	1

*Resident: \$20.75 per credit hour; nonresident: \$40.75 per credit hour.

TYPE <small>of financial assistance (with number anticipated 1978-1979)</small>	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED <small>Academic year 1976-1977</small>
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	
Kansas State University, Manhattan 66506						
DEPARTMENT OF MATHEMATICS John E. Maxfield, Head						Bachelor's by inst. 2778 Bachelor's by dept. 14 Master's by dept. 5
Teaching Assistantship (21)	3285-4185	9	209/7 hrs.	4	Teaching	Ph.D. (1974-1977 incl.) A&NT 1, G&T 2, L 1, A&FA 2. Total: 6
DEPARTMENT OF COMPUTER SCIENCE Paul S. Fisher, Head						Bachelor's by inst. 2778 Bachelor's by dept. 35 Master's by dept. 25
Teaching Assistantship (10)	350-700	9	19/cr. hr.	20	Teaching	Ph.D. (1977 only) CS 4. Total: 4
Research Assistantship (15)	350-1100	9	19/cr. hr.	20-30	Research	
*Teaching Assistantship: 1/31/78; Research Assistantship: Open.						
DEPARTMENT OF STATISTICS Arthur D. Dayton, Head						Bachelor's by inst. 2778 Bachelor's by dept. 5 Master's by dept. 5
Teaching Assistantship (14)	3800-4000	9*	263**	16	Teaching	Ph.D. (1974-1977 incl.) S 9. Total: 9
Research Assistantship (3)	4400-5000	12		20	Research	
*Summertime positions are a supplement. **For 10 credit hours.						
Pittsburg State University, Pittsburg 66762						
DEPARTMENT OF MATHEMATICS Helen F. Kriegsman, Chairman						Bachelor's by inst. 739 Bachelor's by dept. 12 Master's by dept. 5
Teaching Assistantship (5)	2367	9	*	6 ^c		
*\$10 per credit hour; \$45.25 privilege fee.						
University of Kansas, Lawrence 66045						
DEPARTMENT OF MATHEMATICS R.N. Bradt, Chairman						Bachelor's by inst. 3272 Bachelor's by dept. 14 Master's by dept. 5
Teaching Assistantship (45)	3900-4200	9	29/cr. hr. *	5-6 ^c	Teaching	Ph.D. (1974-1977 incl.) A&NT 2, G&T 4, A&FA 2. Total: 8
*Approximately 10 tuition scholarships will be awarded.						
DEPARTMENT OF COMPUTER SCIENCE Victor L. Wallace, Chairman						Bachelor's by inst. 3272 Bachelor's by dept. 29 Master's by dept. 8
Fellowship (2)	3200-3500	9				Ph.D. (1974-1977 incl.) CS 3. Total: 3
Teaching Assistantship (30)	4200-6300	9	*	20	Teaching	
Research Assistantship (8)	4200	9		20	Research	
*\$28.50 per credit hour or \$341.90 total.						
Wichita State University, Wichita 67208						
DEPARTMENT OF MATHEMATICS John J. Hutchinson, Chairman						Bachelor's by inst. 1753 Bachelor's by dept. 15 Master's by dept. 6
Teaching Assistantship (10)	3300	9	17	3-5		
KENTUCKY						
Eastern Kentucky University, Richmond 40475						
DEPARTMENT OF MATHEMATICAL SCIENCES Bennie R. Lane, Chairman						Bachelor's by inst. 1529 Bachelor's by dept. 9 Master's by dept. 2
Teaching Assistantship (6)	2700	9	550	3-6	Teaching	
Morehead State University, Morehead 40351						
DEPARTMENT OF MATHEMATICS Glenn E. Johnston, Head						Bachelor's by inst. 1500 Bachelor's by dept. 10 Master's by dept. 2
Teaching Assistantship (4)	2400	9	*	20	Teaching	
*Resident: \$275; nonresident: \$700.						
Murray State University, Murray 42071						
DEPARTMENT OF MATHEMATICS Jack D. Wilson, Acting Chairman						Bachelor's by inst. 936 Bachelor's by dept. 8 Master's by dept. 2
Teaching Assistantship (4)	2400	9		15		

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
				hours per week	type of service	
University of Kentucky, Lexington 40506						
DEPARTMENT OF MATHEMATICS John Mack, Chairman			Applications due: 2/1/78		Bachelor's by inst. 2649 Bachelor's by dept. 13 Master's by dept. 7	
Fellowship (5)	3100-3600	9	310/sem.			
Teaching Assistantship (40)	4100-4300	9	310/sem.	6 ^c	Teaching	Ph.D. (1974-1977 incl.) A&NT 2, G&T 3, A&FA 2, OR 1, AM 1. Total: 9
Research Assistantship (2)	3100-4000	9	310/sem.			
DEPARTMENT OF COMPUTER SCIENCE T. B. Curtz, Chairman			Applications due: *		Bachelor's by inst. 2649 Bachelor's by dept. 15 Master's by dept. 8	
Fellowship (2)	3000	9	310/sem.			
Teaching Assistantship (10)	3700-3850	10	310/sem.	20	Teaching	
Research Assistantship (1)	3700-3850	10	310/sem.	20	Program- ming support	
Internship (10)	3700-3850	9-10	310/sem.	20	Program- ming support	
*Assistantship: 3/15/78; Fellowship: 2/1/78; Internship: 5/1/78.						
DEPARTMENT OF STATISTICS R. L. Anderson, Chairman			Applications due: 2/1/78		Bachelor's by inst. 2649 Master's by dept. 6	
Fellowship (3)	3100-4100	9	620	5		Ph.D. (1974-1977 incl.) S IO. Total: 10
Teaching Assistantship (8)	4000	9	620	20		
University of Louisville, Louisville 40208						
DEPARTMENT OF MATHEMATICS Roger H. Geeslin, Chairman			Applications due: 3/15/78		Bachelor's by inst. 1262 Bachelor's by dept. 16 Master's by dept. 11	
Teaching Assistantship (4-6)	4410-4520	9		6 ^c	Teaching	
Western Kentucky University, Bowling Green 42101						
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE Robert C. Bueker, Chairman			Applications due: 3/1/78		Bachelor's by inst. 1052 Bachelor's by dept. 26 Master's by dept. 6	
Teaching Assistantship (7)	2400-3000	9	275/sem.	10	Teaching, tutorials	
LOUISIANA						
Louisiana State University, Baton Rouge 70803						
DEPARTMENT OF MATHEMATICS L. I. Wade, Head			Applications due: 4/78		Bachelor's by inst. 2954 Bachelor's by dept. 9 Master's by dept. 12	
Teaching Assistantship (32)	4200	9		6	Teaching	Ph.D. (1974-1977 incl.) G&T 4, A&FA 5. Total: 9
DEPARTMENT OF COMPUTER SCIENCE W. G. Rudd, Chairman			Applications due: 7/15/78		Bachelor's by inst. 2954 Bachelor's by dept. 41 Master's by dept. 4	
Teaching Assistantship (4)	4000	12		16		
DEPARTMENT OF EXPERIMENTAL STATISTICS Prentiss E. Schilling, Head			Applications due: 5/1/78		Master's by dept. 5	
Teaching Assistantship (2)	4200	12	70	20		
Research Assistantship (2)	4200	12	70	20		
DEPARTMENT OF QUANTITATIVE METHODS W. W. Thompson, Chairman			Applications due: 4/78		Bachelor's by inst. 2954 Master's by dept. 5	
Teaching Fellowship (4)	2800-4000	9		20		Ph.D. (1974-1977 incl.) S 2, OR 3. Total: 5
Teaching Assistantship (6)	2800-4000	9		20		
Louisiana Tech University, Ruston 71272						
DEPARTMENT OF MATHEMATICS AND STATISTICS B. J. Attebery, Chairman			Applications due: 3/1/78		Bachelor's by inst. 1704 Bachelor's by dept. 4 Master's by dept. 4	
Teaching Assistantship (8)	2000-3000	9	153	12-15		Ph.D. (1974-1977 incl.) A&FA 2, AM 1. Total: 3
McNeese State University, Lake Charles 70609						
DEPARTMENT OF MATHEMATICAL SCIENCES Patrick L. Ford, Head			Applications due: 6/78		Bachelor's by inst. 834 Bachelor's by dept. 29 Master's by dept. 1	
Teaching Fellowship (4)	2400	9	160	6		

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION		SERVICE REQUIRED		DEGREES AWARDED	
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1976-1977		
Nicholls State University, Thibodaux 70301								
DEPARTMENT OF MATHEMATICS								
Larry S. Haw, Chairman								
Teaching Assistantship (6)	2532	9	17	6 ^C	Teaching	Bachelor's by inst.	607	
						Bachelor's by dept.	12	
						Master's by dept.	2	
Northeast Louisiana University, Monroe 71203								
DEPARTMENT OF MATHEMATICS								
R.D. Finley, Head								
Teaching Assistantship (10)	3000	9				Applications due: 5/1/77	Bachelor's by inst.	1224
							Bachelor's by dept.	11
							Master's by dept.	4
Northwestern State University, Natchitoches 71457								
DEPARTMENT OF MATHEMATICS								
Russell Whittington, Jr., Head								
Teaching Assistantship (3)	2400	9	400	10		Applications due: 3/1/78	Bachelor's by inst.	674
							Bachelor's by dept.	10
							Master's by dept.	2
Southeastern Louisiana University, Hammond 70402								
DEPARTMENT OF MATHEMATICS								
Robert C. Brown, Head								
Teaching Assistantship (4)	2400	9	approx. 78	6 ^C		Applications due: 4/15/78	Bachelor's by inst.	828
							Bachelor's by dept.	11
							Master's by dept.	1
Tulane University, New Orleans 70118								
DEPARTMENT OF MATHEMATICS								
Laszlo Fuchs, Chairman								
Teaching Assistantship (8)	3200-3400	8		3-4 ^C		Applications due: 3/1/78	Bachelor's by inst.	846
							Bachelor's by dept.	24
							Ph.D. (1974-1977 incl.)	
							A&NT 5, G&T 3, A&FA 3,	
							S 2. Total: 13	
University of New Orleans, New Orleans 70122								
DEPARTMENT OF MATHEMATICS								
Adam J. Hulin, Chairman								
Teaching Assistantship (9)	3000-3300	9	55	6 ^C	Teaching	Applications due: 5/1/78	Bachelor's by inst.	1455
							Bachelor's by dept.	15
							Master's by dept.	5
University of Southwestern Louisiana, Lafayette 70504								
DEPARTMENT OF MATHEMATICS AND STATISTICS								
Duane Blumberg, Chairman								
Fellowship (2)	3000	9				Applications due: 4/78	Bachelor's by inst.	1575
Teaching Assistantship (23)	2500-3500	9		6	Teaching		Bachelor's by dept.	9
Scholarship added to							Master's by dept.	14
Assistantship (10)	100-500	9					Ph.D. (1974-1977 incl.)	
							A&NT 3, P 1, S 2. Total: 9	

TULANE UNIVERSITY

Faculty: *ALGEBRA* — Mark Benard, Alfred H. Clifford, John Dauns, Laszlo Fuchs, Pierre A. Grillet, William R. Nico: *PARTIAL DIFFERENTIAL EQUATIONS* — J. Thomas Beale, Edward D. Conway, Jerome A. Goldstein, Steven I. Rosencrans: *PROBABILITY AND STATISTICS* — Charles B. Bell, Patrick I. Brockett, Tony T. D. Huang, William N. Hudson, Arnold Levine: *SEVERAL COMPLEX VARIABLES* — Frank T. Birtel, George J. Pothering, Frank D. Quigley, Albert L. Vitter, Pit-Mann Wong, William R. Zame: *TOPOLOGY* — Ronald A. Fintushel, Ronald J. Knill, Terry C. Lawson, James T. Rogers; *TOPOLOGICAL ALGEBRA* — Maurice J. Dupré, Karl H. Hofmann, John R. Liukkonen, Michael W. Mislove.

Graduate Students: Thirty, all Ph.D. students, with teaching responsibilities of three hours per week. (The Department also participates in an interdisciplinary Master's Degree in Applied Mathematics. For information on this program, write to Professor S. C. Cowin, Department of Biomedical Engineering, Tulane University.)

Facilities: We have an outstanding library in the same space as graduate student and faculty offices. The atmosphere encourages informal, intense cooperation between graduate students and faculty. Tulane is located in cosmopolitan New Orleans. For detailed information, write for the brochure *MATHEMATICS AT TULANE*.

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	

MAINE

University of Maine at Orono 04473

DEPARTMENT OF MATHEMATICS
Gary Haggard, Chairman

Applications due: 4/1/78

Bachelor's by inst. 1455
Bachelor's by dept. 32
Master's by dept. 3

Fellowship (2) 3240 12
Teaching Assistantship (12) 3000 9

20 Recitation
Section,
Lab
Supervision

MARYLAND

Johns Hopkins University, Baltimore 21218

DEPARTMENT OF MATHEMATICS
J.H. Sampson, Chairman

Applications due: 3/15/78

Bachelor's by inst. 512
Bachelor's by dept. 8

Teaching Assistantship (16) 2600-3200 9

5^c Teaching

Ph.D. (1974-1977 incl.)
A&NT 7, G&T 4, A&FA 3,
Total: 14

DEPARTMENT OF MATHEMATICAL SCIENCES
Roger A. Horn, Chairman

Applications due: 2/1/78

Bachelor's by inst. 512
Bachelor's by dept. 16
Master's by dept. 10

Teaching Fellowship (20) Varies 9

3750 6-8 Teaching

Ph.D. (1974-1977 incl.)
S 4, OR 6, CS 1, AM 1,
Total: 12

University of Maryland, Baltimore County, Baltimore 21228

DEPARTMENT OF MATHEMATICS
Y.M. Lynn, Chairman

Applications due: 3/31/78

Bachelor's by inst. 671
Bachelor's by dept. 17
Master's by dept. 1

Teaching Assistantship (12) 3800-4750 9

15 Teaching

Ph.D. (1974-1977 incl.)
AM 2, Total: 2

UNIVERSITY OF MARYLAND BALTIMORE COUNTY

Graduate Study in Applied Mathematics Leading to M.S. and Ph.D. Degrees

FIELDS: Ordinary Partial and Functional Differential Equations, Probability and Statistics, Numerical Analysis, Stochastic Control and Estimation, Dynamical Systems, Fluid Dynamics, Complex Analysis, Systems Analysis, Operations Research.

TEACHING ASSISTANTSHIPS: \$3800—\$4750 with Remission of Fees

APPLY TO:

Chairman, Graduate Committee
Department of Mathematics
UNIVERSITY OF MARYLAND BALTIMORE COUNTY
Baltimore, Maryland 21228

UNIVERSITY OF MARYLAND, COLLEGE PARK

GRADUATE STUDIES IN APPLIED MATHEMATICS

The Interdisciplinary Applied Mathematics Program is sponsored by eleven departments including Mathematics, Physics and Astronomy, Computer Science, the Units of the College of Engineering, Economics, and the College of Business and Management. The program involves seventy-five faculty members, and at present about fifty graduate students are enrolled. The M.A. and Ph.D. degrees are offered. Courses of study are flexible and combine Mathematics with areas of application. Students are assigned individual study advisory committees. Teaching assistantships are available through the Department of Mathematics.

For Information Write

Director, Applied Mathematics Program
University of Maryland
College Park, Maryland 20742

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
				hours per week	type of service	
University of Maryland, College Park 20742						
DEPARTMENT OF MATHEMATICS*			Applications due: 2/1/78		Bachelor's by inst. 5322	
W. E. Kirwan, Chairman					Bachelor's by dept. 53	
Fellowship (2) 3800-4750 10			**	Varies	Research	Master's by dept. 15
Teaching Assistantship (115) 3800-4750 10				20	Teaching, grading	Ph.D. (1974-1977 incl.) A&NT 3, G&T 4, L 3, A&FA 7, P 3, S 3, AM 6. Total: 29
*Students in the Applied Mathematics Program should apply for financial aid to the Department of Mathematics.						
**Resident: \$60 per credit hour; nonresident: \$95 per credit hour.						

MASSACHUSETTS

Boston College, Chestnut Hill 02167

DEPARTMENT OF MATHEMATICS			Applications due: 2/15/78		Bachelor's by inst. 1862	
R. R. Carroll, Chairman					Bachelor's by dept. 42	
Fellowship (10) 3000 9			6 ^C		Master's by dept. 6	

Boston University, Boston 02215

DEPARTMENT OF MATHEMATICS			Applications due: 4/1/78		Bachelor's by inst. 4500	
Robin Esch, Chairman					Bachelor's by dept. 27	
Fellowship (2) 2600 9					Master's by dept. 6	
Teaching Fellowship (18) 3100 9			5 courses	15	Ph.D. (1974-1977 incl.)	
Teaching Assistantship (3) 9 9				10	A&NT 5, L 1, A&FA 4,	
Research Assistantship (4)* 12 12			Varies	Varies	S 5, AM 2. Total: 17	

*Contract pay, varies.

Brandeis University, Waltham 02154

DEPARTMENT OF MATHEMATICS			Applications due: 2/15/78		Bachelor's by inst. 706	
Maurice Auslander, Chairman					Bachelor's by dept. 20	
Fellowship (10-14) 4000 9					Ph.D. (1974-1977 incl.) Total: 17	

Harvard University, Cambridge 02138

DEPARTMENT OF MATHEMATICS			Applications due: 1/15/78		Bachelor's by dept. 30	
Shlomo Sternberg, Chairman					Master's by dept. 6	
Teaching Fellowship (19) 2790-3390 9			3 ^C		Teaching	Ph.D. (1974-1977 incl.)
Research Assistantship (3) 9 9					Research	A&NT 25, G&T 5, A&FA 6,
Scholarship (12) 1000-4000 9					P 1. Total: 37	

DEPARTMENT OF APPLIED MATHEMATICS

Paul C. Martin, Dean			Applications due:*		Bachelor's by inst. 1552	
					Bachelor's by dept. 33	
Teaching Fellowship (20) 2325-2825 9			10 ^C		Teaching	Master's by dept. 25
Teaching Assistantship (5) 2000-2325 9			10 ^C		Teaching	Ph.D. (1974-1977 incl.)
Research Assistantship (100) 4790-6860 12			20		Research	Total: 28
Scholarship (30) 7764 9			10 ^C		Teaching	

*Before 1/1/78.

DEPARTMENT OF STATISTICS

Arthur P. Dempster, Chairman			Applications due: 1/1/78		Bachelor's by inst. 1552	
					Bachelor's by dept. 1	
Teaching Fellowship (16) 1000-1200 5*			4		Master's by dept. 2	
Research Assistantship (6) **					Ph.D. (1974-1977 incl.)	
Scholarship (4) ***					S 12. Total: 12	

*For 1/5 time per semester.

**Dollar amount not known at this time.

***Tuition plus a stipend of which the dollar amount is not known at this time.

Massachusetts Institute of Technology, Cambridge 02139

DEPARTMENT OF MATHEMATICS			Applications due: 1/16/78		Bachelor's by inst. 1018	
Kenneth Hoffman, Chairman					Bachelor's by dept. 94	
Fellowship (24) 2925 9					Master's by dept. 10	
					Ph.D. (1974-1977 incl.)	
Teaching Assistantship (47) 3900 12					A&NT 8, G&T 19, L 6,	
			6		A&FA 8, P 4, S 1, OR 1,	
			16		AM 9, Other 11. Total: 67	
Research Assistantship (8) 8055 9			4350	16	Research	

TYPE <small>of financial assistance (with number anticipated 1978-1979)</small>	STIPEND		TUITION <small>if not included in stipend (dollars)</small>	SERVICE REQUIRED		DEGREES AWARDED <small>Academic year 1976-1977</small>
	amount in dollars	9 or 12 months		hours per week	type of service	
Northeastern University, Boston 02115						
DEPARTMENT OF MATHEMATICS Maurice Gilmore, Chairman			Applications due: 3/15/78		Bachelor's by inst. 2511 Bachelor's by dept. 23 Master's by dept. 17	
Teaching Assistantship (30)	3000-3300	9		3	Teaching	
Tuitionship (7)	Tuition only			3	Conference	Ph.D. (1974-1977 incl.)
				4-8	Grading, workshop, etc.	A&NT 2, G&T 1, A&FA 2. Total: 5
Southeastern Massachusetts University, North Dartmouth 02747						
DEPARTMENT OF MATHEMATICS Anthony J. John, Chairman					Bachelor's by inst. 1100 Bachelor's by dept. 27 Master's by dept. 2	
Teaching Assistantship (1)	3000	9	200	5		
Tufts University, Medford 02155						
DEPARTMENT OF MATHEMATICS George F. Leger, Chairman			Applications due: 3/15/78		Bachelor's by inst. 1201 Bachelor's by dept. 53	
Teaching Assistantship (3)	3100-3500	9	4150	3 ^C	Teaching	Ph.D. (1974-1977 incl.)
Scholarship (3)	4150	9				A&FA 1. Total: 1
University of Massachusetts, Amherst 01002						
DEPARTMENT OF MATHEMATICS AND STATISTICS Edward A. Connors, Head			Applications due: 2/15/78		Bachelor's by inst. 4158 Bachelor's by dept. 44 Master's by dept. 4	
Fellowship (2)	3300	12				
Teaching Assistantship (44)	3600-4000	9		6 ^C	Teaching	Ph.D. (1974-1977 incl.)
						A&NT 3, G&T 5, P 1, S 1, AM 1, Other 2. Total: 13
DEPARTMENT OF COMPUTER AND INFORMATION SCIENCE						
Robert M. Graham, Chairman			Applications due: 2/1/78		Bachelor's by inst. 4158 Master's by dept. 20	
Fellowship (2)	3000	9				Ph.D. (1974-1977 incl.)
Teaching Assistantship (9)	3600	9		20	Teaching	CS 7. Total: 7
Research Assistantship (20)	3600	9		20	Research	
University of Massachusetts at Boston 02125						
DEPARTMENT OF MATHEMATICS Bernice Auslander, Chairman			Applications due: 4/15/78		Bachelor's by inst. 860 Bachelor's by dept. 35 Master's by dept. 3	
Teaching Assistantship (4)	3000	9	33.50/cr.	3	Teaching	
Worcester Polytechnic Institute, Worcester 01609						
DEPARTMENT OF COMPUTER SCIENCE Norman Sondak, Head			Applications due: 3/78		Bachelor's by inst. 500 Bachelor's by dept. 40 Master's by dept. 10	
Teaching Assistantship (7)	3300	9		20	Teaching	
Research Assistantship (2)	3300	9		20	Research	
Scholarship (1)	Varies	9				



**University of Massachusetts at Amherst
DEPARTMENT OF MATHEMATICS AND STATISTICS**

Graduate studies leading to the Master's and Ph.D. in Mathematics and Statistics ... small classes with individual attention ... teaching assistantships at \$3600-\$4000 ... 65 faculty members ... 49 graduate students, 43 of them supported ... private offices and tuition waivers for T.A.'s ... possibilities for added income through summer teaching ... university housing available ... free bus system throughout the area ... for further information contact:

Professor M. K. Bennett
Director of Graduate Admissions
Department of Mathematics and Statistics
University of Massachusetts
Amherst, Massachusetts 01003

UMASS/Amherst is an Equal Opportunity/Affirmative Action Employer.

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	

MICHIGAN

Central Michigan University, Mount Pleasant 48859

DEPARTMENT OF MATHEMATICS Edward H. Whitmore, Chairman			Applications due: 3/1/78		Bachelor's by inst.	2396
					Bachelor's by dept.	66
					Master's by dept.	7
Fellowship (25)	2000-2500	9				
Teaching Fellowship (8)	3300-3900	9	32/sem. hr.	6 ^C		

Eastern Michigan University, Ypsilanti 48197

DEPARTMENT OF MATHEMATICS James H. Northey, Head			Applications due: 3/1/78		Bachelor's by inst.	2351
					Bachelor's by dept.	29
					Master's by dept.	6
Graduate Assistantship (0-3)	3000-3200	9	*	20	Varies	

*1977-78: in-state \$37 per hour; out-of-state: \$90 per hour; \$20 registration fee.

Michigan State University, East Lansing 48824

DEPARTMENT OF MATHEMATICS Joseph E. Adney, Chairman			Applications due: 3/1/78		Bachelor's by inst.	5908
					Bachelor's by dept.	62
					Master's by dept.	19
Teaching Assistantship (120)	4500-5135	9	28/cr.	5 ^C	Teaching	
Research Assistantship (20)	690-740	3*		10	Research	
Scholarship (3)	500					Ph.D. (1974-1977 incl.) A&NT 9, G&T 4, A&FA 5, AM 10, Other 2. Total: 30

*Summer.

DEPARTMENT OF COMPUTER SCIENCE Harry G. Hedges, Chairman			Applications due: 3/15/78		Bachelor's by inst.	5908
					Bachelor's by dept.	52
					Master's by dept.	16
Teaching Assistantship (4)	4700-6000	9	29/cr.	3 ^C	Teaching	
Research Assistantship (8)	4700-6000	9	29/cr.	20	Research	
						Ph.D. (1974-1977 incl.) CS 7. Total: 7

DEPARTMENT OF STATISTICS AND PROBABILITY V. Mandrekar, Chairman			Applications due: 3/1/78		Bachelor's by inst.	5908
					Bachelor's by dept.	2
					Master's by dept.	7
Teaching Assistantship (18)	4500- 4918.50	9	28/cr.	15	Teaching	
						Ph.D. (1974-1977 incl.) P 2, S 8. Total: 10

UMASS/BOSTON

Department of Mathematics Master of Arts in Mathematics

Graduate studies leading to the Master's Degree in Mathematics. Courses in independent study are offered in algebra, analysis, topology, geometry, probability and applied mathematics. Classes are scheduled in the late afternoon and early evening. Part time students are welcome and efforts are made to schedule classes to accommodate working students and teachers.

Qualified applicants may be eligible for financial aid in the form of a number of teaching assistantships with remission of tuition fees.

For information write:

Graduate Program in Mathematics
Department of Mathematics, College of Liberal Arts
University of Massachusetts at Boston
Harbor Campus
Boston, Massachusetts 02125

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
Michigan Technological University, Houghton 49931						
DEPARTMENT OF MATHEMATICS Z. C. Motteler, Head				Applications due: 3/1/78		Bachelor's by inst. 800 Bachelor's by dept. 20 Master's by dept. 3
Teaching Assistantship (16)	3600	9		4-5 ^c		
Oakland University, Rochester 48063						
DEPARTMENT OF MATHEMATICS Louis R. Bragg, Chairperson				Applications due: 4/1/78		Bachelor's by inst. 1250 Bachelor's by dept. 23 Master's by dept. 4
Teaching Assistantship (3-5)	2700-3000	9		15-20		
University of Michigan, Ann Arbor 48109						
DEPARTMENT OF MATHEMATICS F. W. Gehring, Chairman				Applications due: 2/1/78		Bachelor's by inst. 4615 Bachelor's by dept. 61 Master's by dept. 42
Fellowship (16)	2475-3510	9		Full Time Study & Research		Ph.D. (1974-1977 incl.) A&NT 12, G&T 3, L 1, A&FA 20, P 1, Other 1. Total: 38
Teaching Assistantship (97)*	2420-4840	9	430+/term	6 Teaching		
Scholarship (8)**			***	Full Time Study		
Other (16)#	2475-3510	9		Full Time Study		
Student Assistantship (50)##	1092-1935	9	***	Grade Papers		
*Approximately nine of these fellowships will be combination appointments. **Primarily for students in Actuarial Science, full tuition only. ***Less than 31 credit hours toward program--resident: \$60 per credit hour; nonresident: \$148 per credit hour. 31 hours or more toward program--resident \$90 per credit hour; nonresident: \$222 per credit hour; candidacy: \$480. #Primarily for students of certain minority groups. ##Undergraduate students are also used in this category (approximately 1/2).						
Wayne State University, Detroit 48202						
DEPARTMENT OF MATHEMATICS Bertram J. Eisenstadt, Chairman				Applications due: 4/1/78*		Bachelor's by inst. 5783 Bachelor's by dept. 23 Master's by dept. 10
Fellowship (1)	3500	9	**			Ph.D. (1974-1977 incl.) A&NT 1, G&T 1, A&FA 4, P 3, S 5, AM 1. Total: 15
Teaching Assistantship (20)	3350-5100	9				
	3650-5800	9		6		
Research Assistantship (1)	3350-5800	9				
*Late applications will be considered if positions are still available. **Up to 12 hours per quarter included.						

WAYNE STATE UNIVERSITY

invites applications for

GRADUATE STUDY IN MATHEMATICS

Current research leading to the Ph.D. is being conducted in a wide variety of fields. Masters degrees can be obtained in Mathematics, Applied Mathematics, Mathematical Statistics, Computer Science, and Teaching Community College Mathematics.

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Professor B.J. Eisenstadt, Chairman
Department of Mathematics
Wayne State University
Detroit, Michigan 48202

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION		SERVICE REQUIRED		DEGREES AWARDED	
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1976-1977		

Western Michigan University, Kalamazoo 49008

DEPARTMENT OF MATHEMATICS				Applications due: *		Bachelor's by inst. 3295	
James H. Powell, Chairman						Bachelor's by dept. 77	
						Master's by dept. 22	
Fellowship (6)	3000-4000	8	33.50/cr.hr.				
Teaching Assistantship (20)	3600	8	33.50/cr.hr.	6 ^C	Teaching	Ph.D. (1974-1977 incl.)	
Spring/Summer Assistantship (25)	800-900	2	33.50/cr.hr.	6 ^C	Teaching	A&NT 1, Other 7. Total: 8	

*Assistantship: 3/1/78; Fellowship: 2/15/78.

MINNESOTA

University of Minnesota, Minneapolis 55455

DEPARTMENT OF MATHEMATICS				Applications due: 2/15/78		Bachelor's by inst. 6700	
Johannes C. C. Nitsche, Head						Bachelor's by dept. 46	
						Master's by dept. 8	
Fellowship (6)	3000-3500	9					
Teaching Fellowship (4)	5352-6126	9		2 ^C	Teaching	Ph.D. (1974-1977 incl.)	
Teaching Assistantship (85)	4703-5252	9	28.50/cr.	4 ^C	Teaching	A&NT 4, G&T 4, A&FA 13,	
Research Assistantship (2)	4469	9	28.50/cr.			P 5, AM 3, Other 1.	
						Total: 30	
DEPARTMENT OF COMPUTER SCIENCE				Applications due: 2/15/78		Bachelor's by inst. 6700	
J.B. Rosen, Head						Bachelor's by dept. 48	
						Master's by dept. 16	
Fellowship (3-4)	6000-6500	9 & 12		5-10	Teaching		
Teaching Assistantship (10)	4500-5000	9	900	10-15	Varies	Ph.D. (1974-1977 incl.)	
Research Assistantship (8)	4500-5000	9 & 12	900	10-15	Research	CS 7, Total: 7	
SCHOOL OF STATISTICS				Applications due: 3/15/78		Bachelor's by inst. 6700	
Seymour Geisser, Director						Bachelor's by dept. 3	
						Master's by dept. 5	
Teaching Assistantship (15)	1650-4950	9	850	20			
Research Assistantship (5)	1567-4700	9	850	20		Ph.D. (1974-1977 incl.)	
						S 13, Total: 13	

MISSISSIPPI

Alcorn State University, Lorman 39096

DEPARTMENT OF MATHEMATICS				Applications due: 3/1/78		Bachelor's by inst. 400	
M.M. Awad, Chairman						Bachelor's by dept. 12	
						Master's by dept. 10	
Teaching Assistantship (3)	2300-2600	12	243	12			

Mississippi State University, Mississippi State 39762

DEPARTMENT OF MATHEMATICS				Applications due: 3/1/78		Bachelor's by inst. 1919	
T.A. Atchison, Head						Bachelor's by dept. 11	
						Master's by dept. 5	
Teaching Assistantship (15)	3300-3800	9	260/sem.	6 ^C	Teaching		
DEPARTMENT OF COMPUTER SCIENCE AND STATISTICS				Applications due: 8/1/78		Bachelor's by inst. 1919	
Fred Davis, Director						Bachelor's by dept. 8	
						Master's by dept. 10	
Teaching Assistantship (3)	3060	9	667	20	Teaching		
Research Assistantship (5)	4080	12	667	20	Research		

MATHEMATICS AT MINNESOTA

The University of Minnesota offers graduate programs leading to the M.S. and Ph.D. degrees. There are 75 full time faculty members and almost all areas of mathematics are well represented. In recent years there have been fewer than two graduate students per faculty member. Excellent library facilities and ample office space are available in the mathematics building. Financial aid is available to qualified students in the form of Graduate Fellowships, and Teaching Assistantships. For further information write to:

Professor Howard Jenkins
Associate Head, School of Mathematics
UNIVERSITY OF MINNESOTA
Minneapolis, Minnesota 55455

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
University of Mississippi, University 38677						
DEPARTMENT OF MATHEMATICS Eldon L. Miller, Chairman			Applications due: 3/15/78		Bachelor's by inst. 2167 Bachelor's by dept. 12 Master's by dept. 3	
Fellowship (3)	4400	12	351/sem.			Ph.D. (1974-1977 incl.) G&T 1, A&FA 3. Total: 4
Teaching Assistantship (15)	3800-4000	9	351/sem.			
Texaco Fellowship (1)	5000	12				
University of Southern Mississippi, Hattiesburg 39401						
DEPARTMENT OF MATHEMATICS Jim Caveny, Chairman			Applications due: 3/15/78		Bachelor's by inst. 1469 Bachelor's by dept. 84 Master's by dept. 10	
Teaching Fellowship (8)	1500-3000	9	220/qtr.	10	Teaching	
DEPARTMENT OF COMPUTER SCIENCE Danny R. Carter, Chairman			Applications due: 3/1/78		Bachelor's by inst. 1469 Bachelor's by dept. 280 Master's by dept. 8	
Teaching Assistantship (2)	2000-2400	9	180	10		
Research Assistantship (1)	2000-2400	9	180	10		
MISSOURI						
Northeast Missouri State University, Kirksville 63501						
DEPARTMENT OF MATHEMATICS Dale Woods, Head			Applications due: 4/1/78		Bachelor's by inst. 919 Bachelor's by dept. 23 Master's by dept. 8	
Teaching Assistantship (10)	6000	12	*	6		
Scholarship (5)	500-1000	9		6-10		
*Tuition paid for 9 semester hours.						
St. Louis University, St. Louis 63103						
DEPARTMENT OF MATHEMATICS Raymond Freese, Chairman			Applications due: 3/1/78		Bachelor's by inst. 1500 Bachelor's by dept. 25 Master's by dept. 13	
Teaching Assistantship (10)	3000	9	*	6 ^c	Teaching	Ph.D. (1974-1977 incl.) G&T 2, Other 2. Total: 4
*6 hours per semester included in assistantship.						
Southeast Missouri State University, Cape Girardeau 63701						
DEPARTMENT OF MATHEMATICS Harold W. Hager, Chairman			Applications due: 5/1/78		Bachelor's by inst. 1357 Bachelor's by dept. 39 Master's by dept. 4	
Teaching Assistantship (5)	2200	9		6 ^c		
Southwest Missouri State University, Springfield 65802						
DEPARTMENT OF MATHEMATICS L. T. Shiflett, Head			Applications due: 4/15/78		Bachelor's by inst. 1633 Bachelor's by dept. 27 Master's by dept. 4	
Teaching Assistantship (5)	2500	9	400	6		
University of Missouri-Columbia 65201						
DEPARTMENT OF MATHEMATICS C. M. Petty, Chairman			Applications due: 3/1/78		Bachelor's by inst. 3700 Bachelor's by dept. 23 Master's by dept. 12	
Teaching Assistantship (65)	3690-4153	9	322/sem.	6-7 ^c		Ph.D. (1974-1977 incl.) A&NT 4, G&T 1, A&FA 6, AM 1. Total: 12
DEPARTMENT OF STATISTICS Asit P. Basu, Chairman			Applications due: 3/1/78		Bachelor's by inst. 3700 Bachelor's by dept. 3 Master's by dept. 4	
Teaching Assistantship (8)	3800-4300	9		6 ^c	Teaching	Ph.D. (1974-1977 incl.) S 2. Total: 2
Research Assistantship (2)	4644-5254	12		20	Research	
University of Missouri-Kansas City 64110						
DEPARTMENT OF MATHEMATICS Paul Liebnitz, Chairman			Applications due: 3/15/78		Bachelor's by inst. 1170 Bachelor's by dept. 13 Master's by dept. 5	
Teaching Assistantship (10)	3600-3900	9	335/sem.	5-6 ^c	Teaching	Ph.D. (1974-1977 incl.) A&NT 1, G&T 2, A&FA 2. Total: 5
University of Missouri-Rolla 65401						
DEPARTMENT OF MATHEMATICS Glen Haddock, Chairman			Applications due: 1/15/78		Bachelor's by inst. 700 Bachelor's by dept. 10 Master's by dept. 3	
Teaching Assistantship (15)	4250	9	700/yr.	6-7 ^c	Teaching	Ph.D. (1974-1977 incl.) A&FA 4, S 2, CS 6, AM 2. Total: 14

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1976-1977
University of Missouri-St. Louis 63121						
DEPARTMENT OF MATHEMATICS Raymond Balbes, Chairperson						Bachelor's by inst. 1385
Teaching Assistantship (8) 3800-4000 9 324, 50 6 Teaching						Bachelor's by dept. 14
						Master's by dept. 2
Washington University, St. Louis 63130						
DEPARTMENT OF MATHEMATICS Robert H. McDowell, Chairman						Applications due: 2/15/78
Fellowship (7) 3100-3200* 9						Bachelor's by inst. 1017
Teaching Fellowship (9) 3100-3200* 9						Bachelor's by dept. 12
						Master's by dept. 2
Teaching Assistantship (3) 3100-3200* 9						Ph.D. (1974-1977 incl.)
Research Assistantship (3) 3100-3200* 9						G&T 3, A&FA 10. Total: 13
Scholarship (2) 9						
Med-School Internship (1) 3400* 9						

*Plus tuition.

MONTANA

Montana State University, Bozeman 59717

DEPARTMENT OF MATHEMATICS K.J. Tiaht, Professor						Applications due: 4/1/78
Teaching Assistantship (32) 3200-5400 9 94/qtr. 6-7 ^C						Bachelor's by inst. 1420
Research Assistantship (3) 3200-5400 9 94/qtr. 20						Bachelor's by dept. 21
						Master's by dept. 5
						Ph.D. (1974-1977 incl.)
						A&NT 1, A&FA 4, S 3.
						Total: 8

University of Montana, Missoula 59801

DEPARTMENT OF MATHEMATICS William R. Ballard, Chairman						Applications due: 4/1/78
Teaching Assistantship (20) 3100-3500 9 *						Bachelor's by inst. 1247
						Bachelor's by dept. 8
						Master's by dept. 1
						Ph.D. (1974-1977 incl.)
						A&NT 1, G&T 1, A&FA 1,
						Other 2. Total: 5

*The fee for carrying 12 credits in the academic year 1977-1978: resident--\$280.50; nonresident: \$352.50.

Ph. D. in Mathematical Sciences at the UNIVERSITY OF MONTANA

This program for the advanced training of college mathematics teachers and other mathematical "generalists" has been developed with the aid of a grant from the *Advanced Training Projects, NSF Division of Graduate Education*.

It emphasizes breadth of knowledge, skill in the communication of mathematical thought, an awareness of the influence of mathematics on modern society and intellectual life, and the development of a sense of vocation as teacher and scholar. It provides opportunity for traditional or non-traditional thesis work, within pure mathematics or in interdisciplinary projects. For details, please write for the "Ph.D. Packet" to

Chairman, Graduate Committee
Mathematics Department, University of Montana
Missoula, Montana 59801

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	

NEBRASKA

Kearney State College, Kearney 68847

DEPARTMENT OF MATHEMATICS, STATISTICS AND
COMPUTER SCIENCE

L.M. Larsen, Chairman

Applications due: 3/1/78

Bachelor's by inst. 746
Bachelor's by dept. 35
Master's by dept. 7

Teaching Assistantship (2) 2500 9 5-6

University of Nebraska, Lincoln 68588

DEPARTMENT OF MATHEMATICS AND STATISTICS

David L. Skoug, Chairman

Applications due: 4/1/78

Bachelor's by inst. 3000
Bachelor's by dept. 55
Master's by dept. 15

Teaching Assistantship (38) 3600-5600 9 21/cr. hr. 4-6^C Teaching

Ph.D. (1974-1977 incl.)
A&NT 1, A&FA 6, AM 1,
Total: 8

DEPARTMENT OF COMPUTER SCIENCE

George Nagy, Chairman

Applications due: 4/1/78

Bachelor's by inst. 3000
Bachelor's by dept. 25
Master's by dept. 12

Teaching Assistantship (11) 3500-4000 9 650 18 Teaching
Research Assistantship (5) 3500-4000 9 650 18 Research
Scholarship (1) up to 1000 9 650-1400

University of Nebraska at Omaha 68101

DEPARTMENT OF MATHEMATICS AND COMPUTER
SCIENCE

Margaret P. Gessaman, Chairman

Applications due: 4/15/78

Bachelor's by inst. 1900
Bachelor's by dept. 20
Master's by dept. 5

Teaching Assistantship (4) 3225 9 * 6 Teaching

*Resident: \$21 per credit hour; nonresident: \$57 per credit hour.

NEVADA

University of Nevada, Las Vegas 89154

DEPARTMENT OF MATHEMATICS

S. Verma, Chairman

Applications due: 4/15/78

Bachelor's by inst. 579
Bachelor's by dept. 4
Master's by dept. 8

Teaching Assistantship (6) 3400-3600 9 5/cr. 6 Teaching

University of Nevada, Reno 89557

DEPARTMENT OF MATHEMATICS

E.M. Beesley, Chairman

Applications due: 3/15/78

Bachelor's by inst. 780
Bachelor's by dept. 7
Master's by dept. 2

Teaching Assistantship (4) 3400-4000 9 20 Teaching

UNIVERSITY OF NEVADA - LAS VEGAS

Graduate study programs for a M.S. degree are offered with courses leading to specialization in the following areas: ALGEBRA, APPLIED STATISTICS, COMPUTER SCIENCE, DIFFERENTIAL EQUATIONS, FOUNDATIONS, FUNCTIONAL & NUMERICAL ANALYSIS, OPERATIONS RESEARCH, PROBABILITY THEORY, REAL & COMPLEX VARIABLES and TOPOLOGY.

Excellent computing facilities are available for research. The Department of Mathematics, through an active faculty, offers graduate students both an unusual amount of personal attention and a lively research atmosphere. A number of invigorating research seminars in various fields are held during each academic year. Application forms for admission to the Graduate College and for Assistantship may be obtained from the Chairman, Department of Mathematics, University of Nevada, Las Vegas, Nevada 89154.

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1976-1977

NEW HAMPSHIRE

Dartmouth College, Hanover 03755

DEPARTMENT OF MATHEMATICS Richard H. Crowell, Chairman				Applications due: 3/1/78		Bachelor's by inst. 983 Bachelor's by dept. 71 Master's by dept. 2
Teaching Fellowship (16)	4260			4-10	Teaching	Ph.D. (1974-1977 incl.) A&NT 4, G&T 1, L 3, A&FA 1, P 2, Other 2. Total: 13

University of New Hampshire, Durham 03824

DEPARTMENT OF MATHEMATICS M. E. Munroe, Chairman				Applications due: 2/15/78		Bachelor's by dept. 55 Master's by dept. 19
Fellowship (1)	3300	9		6 ^c	Teaching	Ph.D. (1974-1977 incl.) A&NT 1, G&T 1, A&FA 1. Total: 3
Teaching Assistantship (8)	3300	9				
Scholarship (3)	Tuition only	9				

NEW JERSEY

Fairleigh Dickinson University, Madison 07940

DEPARTMENT OF MATHEMATICS AND PHYSICS H.A. Elkholy, Chairman				Applications due: 3/1/78		Bachelor's by inst. 647 Bachelor's by dept. 10 Master's by dept. 3
Teaching Fellowship (3)	3000	9		6	Teaching	

Fairleigh Dickinson University, Teaneck 07666

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE Donald Bein, Chairperson				Applications due: 4/30/78		Bachelor's by inst. 2203 Bachelor's by dept. 25 Master's by dept. 40
Teaching Fellowship (8)	3000-4000	9		6 ^c		

Montclair State College, Upper Montclair 07043

DEPARTMENT OF MATHEMATICS Robert Garfunkel, Chairman				Applications due: 4/1/78		Bachelor's by inst. 1597 Bachelor's by dept. 76 Master's by dept. 40
Teaching Assistantship (4)	2500	9		15		

New Jersey Institute of Technology, Newark 07102

DEPARTMENT OF MATHEMATICS Henry Zatzkis, Chairman				Applications due: 3/15/78		Bachelor's by inst. 595 Bachelor's by dept. 8 Master's by dept. 8
Teaching Assistantship (1)	3500	9		6		

University of New Hampshire

M. E. Munroe, Chairman

Department of Mathematics, Kingsbury Hall

Durham, N.H. 03824

M.S. and Ph.D. opportunities in Algebra, Analysis, Topology and Mathematics-Education. Small classes. Advanced work on individual basis. Open stack library. Half way between Boston and N.H. ski resorts. Assistantships \$3300/academic year.

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1976-1977
Princeton University, Princeton 08540						
DEPARTMENT OF MATHEMATICS			Applications due: 2/15/78			Bachelor's by inst. 949
Robert C. Gunning, Chairman						Bachelor's by dept. 21
Fellowship (30)			1700-5400	9-12		Master's by dept. 24
Teaching Assistantship (11)*			3400-4000	10	20	Ph.D. (1974-1977 incl.)
Research Assistantship (12)*			2800-3500	10		A&NT 3, G&T 2, L 1, A&FA 8. Total: 14
*Most assistants 1/2 teaching, 1/2 research						
Rutgers University, New Brunswick 08903						
DEPARTMENT OF MATHEMATICS			Applications due: 3/1/78			Bachelor's by inst. 6130
Daniel Gorenstein, Chairman						Bachelor's by dept. 84
Fellowship (4)			5000	9		Master's by dept. 8
Teaching Assistantship (40)			3969-4365	9	5-6 Teaching	Ph.D. (1974-1977 incl.)
Research Assistantship (12)			3969-4365	9		A&NT 14, G&T 10, L 7, A&FA 9. Total: 40
DEPARTMENT OF STATISTICS			Applications due: 3/1/78			Bachelor's by inst. 6130
William E. Strawderman, Chairman						Bachelor's by dept. 10
Fellowship (4 1/2)			5000	9		Master's by dept. 18
Teaching Assistantship (6)			3969-4365	9	Maxi- mum 15 Teaching	Ph.D. (1974-1977 incl.)
Research Assistantship (5)			3969-4365	9	Maxi- mum 15 Research	S 4. Total: 4
Seton Hall University, South Orange 07079						
DEPARTMENT OF MATHEMATICS			Applications due: 4/1/78			Bachelor's by inst. 1170
Charles Franke, Chairman						Bachelor's by dept. 15
Teaching Assistantship (9)			2200	9	6 ^c	Master's by dept. 2
Trenton State College, Trenton 08625						
DEPARTMENT OF MATHEMATICAL SCIENCES			Applications due: 5/1/78			Bachelor's by inst. 1100
Robert Price, Chairman						Bachelor's by dept. 35
Assistantships (3-6)			2000	9	15	Master's by dept. 20
NEW MEXICO						
New Mexico Institute of Mining and Technology, Socorro 87801						
DEPARTMENT OF MATHEMATICS			Applications due: 3/30/78			Bachelor's by inst. 148
Alan Sharples, Head						Bachelor's by dept. 18
Teaching Assistantship (6)			3400-3600	9	11/cr. hr. 5-6 ^c Teaching	Master's by dept. 3
Research Assistantship (1)			3150-3350	9	11/cr. hr. 20 Research	
New Mexico State University, Las Cruces 88003						
DEPARTMENT OF MATHEMATICAL SCIENCES			Applications due: 2/15/78			Bachelor's by inst. 1277
John D. DePree, Chairman						Bachelor's by dept. 20
Teaching Assistantship (23)			4000-4200	9	22/cr. hr. 20	Master's by dept. 5
DEPARTMENT OF COMPUTER SCIENCE						Ph.D. (1974-1977 incl.)
J. Mack Adams, Head						A&NT 4, G&T 1, A&FA 2, OR 1, CS 1, AM 3. Total: 12
Teaching Assistantship (5)			4000	9	276/12 cr. 20 Teaching	Bachelor's by inst. 1277
Research Assistantship (3)			4000	9	276/12 cr. 20 Research	Bachelor's by dept. 19
DEPARTMENT OF MATHEMATICS AND STATISTICS			Applications due: 2/15/78			Master's by dept. 9
Richard J. Griego, Chairman						Bachelor's by inst. 1914
Teaching Assistantship (22)			3800-4000	9	5 ^c	Bachelor's by dept. 30
DEPARTMENT OF COMPUTING SCIENCE			Applications due: 4/1/78			Master's by dept. 7
D.R. Morrison, Chairman						Ph.D. (1974-1977 incl.)
Teaching Assistantship (5)			3600-3800	9	20 Teaching	A&NT 2, A&FA 6, P 2, S 7, CS 1, AM 1. Total: 19
Research Assistantship (2)			3600-3800	9	20 Research	Bachelor's by inst. 1914
						Bachelor's by dept. 4
						Master's by dept. 6

Graduate Programs in Mathematics

The Department of Mathematical Sciences offers programs leading to the degrees of M.S. and Ph.D. in pure and applied mathematics. The department is best known as a research center in abelian groups; however, the research interests of the faculty are diverse and specialization is available in most areas. Broadly based and applicable programs are encouraged. The department cooperates with a number of other departments; e.g., Computer Science, Experimental Statistics, and Industrial Engineering, in offering interdisciplinary programs.

Colloquia

The Department maintains a varied and active colloquium series, ranging from brief research reports by its own faculty and visitors to major conferences. Recent principal speakers include S. Eilenberg, I. Kaplansky, G. Whitehead, E. Bishop, R. Bott, J. Tate, H. Chernoff, and G.C. Rota, L. Fuchs, R. Warfield, E. Hewitt, and R. Wightman.

Facilities

The Department of Mathematical Sciences is located in Walden Hall, a three-story building containing offices, classrooms, departmental reading room, lounges for faculty and students, terminals for the IBM 360/65 computer, and a self-paced learning center. Private offices are assigned to each graduate student. Dormitory rooms (\$260 per semester, double occupancy) and a variety of married student housing (\$144 per month) are available.

The Graduate Faculty

- D.M. Arnold: abelian groups
R.J. Bagby: real and harmonic analysis
J.D. DePree, Head: complex and functional analysis
E.D. Gaughan: analysis
J.B. Giever: algebraic topology, applied mathematics
R.H. Hunter: abelian groups
D.G. Johnson: rings of continuous functions, mathematics education
D.J. Johnson: approximation theory
W.H. Julian: applied and constructive analysis
J.E. Kist: functional analysis
R.A. Knoebel: algebra
W.M. Krueger: algebraic topology
A.H. Kruse: foundations
J.O. Loustaunau: functional analysis
B. MacKichan: partial differential equations
M. Mandelker: rings of continuous functions, constructive analysis
R. Mines: algebra, constructive mathematics
K.L. Phillips: analysis
F. Richman: algebra, constructive mathematics
G.S. Rogers: probability, statistics
C.C. Sherman: algebraic K-theory
C.W. Swartz: functional analysis
J.D. Thomas: applied mathematics, numerical analysis
W.C. Torrez: probability
I.E. Vance: mathematics education
C.L. Walker: abelian groups
E.A. Walker: abelian groups
F.D. Williams: algebraic topology
R.J. Wisner: algebra, number theory, mathematics education
J.D. Zund: mathematical physics, geometry

Visiting Faculty

- J.A. Chao: analysis
M.M. Chao: analysis
M.H. Frese: applied analysis
S.D. Frese: algebra
P.I. Hsieh: statistics
G.S. Sylvester: applied analysis



Financial Support

The Department of Mathematical Sciences awards 23 teaching assistantships annually. Current stipends for the academic year range from \$4000 to \$4200. Teaching assistants are required to pay tuition charges (approximately \$200 per semester). Some support is available during the summer.

Environment

New Mexico State University lies in the valley of the Rio Grande, adjacent to Las Cruces, New Mexico (population 50,000). It is 45 miles north of the twin cities of El Paso, Texas, and Juarez, Mexico, which have a combined population of nearly one million. The climate in Las Cruces is sunny and dry with warm days and cool nights. Ski resorts, lakes, extensive national forests and wilderness areas are within three hours driving time. The 9,000 ft. Organ Mountains, which offer an opportunity for hiking and excellent rock-climbing, are 15 miles from the university.

More Information

For further information about graduate study at New Mexico State University, and an application for financial assistance, write:

Chairman
Dept. of Mathematical Sciences
New Mexico State University
Las Cruces, New Mexico 88003.

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	

NEW YORK

Adelphi University, Garden City 11530

DEPARTMENT OF MATHEMATICS			Applications due: 2/15/78		Bachelor's by inst.	1436
Donald I. Hammer, Chairman					Bachelor's by dept.	12
NSF Fellowship (1)	3400	9			Master's by dept.	13
Teaching Assistantship (9)	2400-3800	9		20 Teaching	Ph.D. (1974-1977 incl.)	
Scholarship (5)		9			A&NT 1, A&FA 1, AM 3,	
Computing Center					Other 5. Total: 10	
Assistantship (2)	2800	9		20 Teaching		

City University of New York, Brooklyn College, Brooklyn 11210

DEPARTMENT OF MATHEMATICS			Applications due: 5/78			
Lester L. Gavurin, Chairman						
Teaching Assistantship (2)	6350-8775	9		8 ^c Teaching		

City University of New York, City College, New York 10031

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/78		Bachelor's by inst.	2919
Jonah Mann, Chairman					Bachelor's by dept.	43
Fellowship (1)	2000-4640	9	750/sem.	0-4	Master's by dept.	9
Teaching Assistantship (6)	2640-5280	9	750/sem.	4-8		

City University of New York, Hunter College, New York 10021

DEPARTMENT OF MATHEMATICS			Applications due: 2/20/78		Bachelor's by inst.	1650
Barry M. Cherkas, Chairman					Bachelor's by dept.	30
Teaching Assistantship (8)	2019.60- 5342.40		75/cr.	3-7 ^c Teaching	Master's by dept.	8
Scholarship (1)	500-800					
Part-Time Lecturer (2)	6350- 8475	12	75/cr.	6-8 ^c Teaching		

The Doctoral Program in Mathematics of The City University of New York

is at the Graduate School and University Center Building of CUNY in mid-Manhattan, opposite the Public Library and Bryant Park.

Advanced students have office space and there is an excellent departmental library. The student body is small enough to facilitate close contact with the staff. Financial aid in the form of fellowships, research assistantships, lectureships is available.

Currently, the staff consists of Alphonse T. Vasquez Executive Officer; Louis Auslander, Gilbert Baumslag; Isaac Chavel; Harvey Cohn; Eldon Dyer; Joan Dyer; Edgar A. Feldman; Alex Heller; Alan J. Hoffman; Richard E. Isaac; Stanley Kaplan; Linda Keen; Joseph Lewittes; Edwin E. Moise; Martin Moskowitz; Burton Randol; Harry E. Rauch; Joseph Roitberg; Raymond Smullyan; Michael Shub; Philip Wolfe; H. Peyton Young.

For a description of courses currently offered and other information, write to the

Executive Officer in Mathematics

The Graduate School

THE CITY UNIVERSITY OF NEW YORK

33 West 42nd Street

New York, New York 10036

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED	
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1976-1977	

City University of New York, Queens College, Flushing 11367

DEPARTMENT OF MATHEMATICS				Applications due: 4/1/78		Bachelor's by inst.	3663
Joseph Hershenov, Chairman						Bachelor's by dept.	74
Teaching Assistantship (4)	1980-6350	9	*	3-8	Teaching	Master's by dept.	4

*Resident: \$75 per credit; nonresident: \$95 per credit.

DEPARTMENT OF COMPUTER SCIENCE				Applications due: 1/16/78		Bachelor's by inst.	987
John Moyne, Chairman						Bachelor's by dept.	61
Teaching Fellowship (7)	2970-7135	12	*	3-9 ^C	Teaching	Master's by dept.	9
Teaching Assistantship (8)	250-300	9	460/sem.	3-9	Research		

*\$75 per credit; maximum \$750 per semester.

Clarkson College of Technology, Potsdam 13676

DEPARTMENT OF MATHEMATICS				Applications due: 2/15/78*		Bachelor's by inst.	636
Alan C. Newell, Chairman						Bachelor's by dept.	30
Teaching Assistantship (15)	4000-6000	12		12	Teaching, grading	Master's by dept.	6
Research Assistantship (1)	4000-6000	12		12	Research	Ph.D. (1974-1977 incl.)	
Tuition Waiver (4)	3575	12		6	Teaching, grading	AM I. Total: 1	

*Late applications will be considered.

Columbia University, New York 10027

DEPARTMENT OF MATHEMATICS				Applications due: 1/9/78		Bachelor's by inst.	1528
Hyman Bass, Chairman						Bachelor's by dept.	12
Fellowship (40)	3600-4400	9 or 11	*			Ph.D. (1974-1977 incl.)	

*Students are accepted as Ph.D. candidates only. All graduate students are currently granted 4 years of support with tuition exemption. Students are required to serve as teaching assistants for 2 out of the 4 years.

A&NT 8, G&T 7, A&FA 4.
Total: 19

CLARKSON COLLEGE OF TECHNOLOGY

GRADUATE STUDY IN MATHEMATICS

Clarkson offers the M.S. and Ph.D. in mathematics with individual attention by an active research faculty in an attractive northern New York location. A broad mathematical curriculum is offered with emphasis on applied mathematics.

Present research topics include: Prediction of Oil and Mineral Resources, Algorithms and Stability of Nonlinear Partial Difference Equations, Finite Elements, Software for PDE, Nonlinear Waves and Solitons, The Plasma Heating Problem, Interacting Markov Processes, Statistical Mechanics, Models of Vision, Theoretical Computer Science, Logic, Combinatorics, Theory and Applications of Matrices, Generalized Inverses of Matrices and Their Applications to Numerical Analysis and Systems Science, Integral and Discrete Transforms, Mathematical Physics, Complex Analysis, Special Functions, Analytic Number Theory, Differential Topology, Functional Analysis, Linear Topological Spaces, Nuclear Spaces, Banach Algebras.

A number of research and teaching assistantships, and tuition scholarships are available. Special assistantships up to \$6,000 plus tuition are available for highly qualified applicants.

Write to: Graduate Committee
Department of Mathematics
Clarkson College of Technology
Potsdam, New York 13676

Applications received by
February 15, 1978 will be
given early consideration.

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	
DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE						
Omar Wing, Chairman				Applications due: 1/1/78		Bachelor's by inst. 1528 Bachelor's by dept. 29 Master's by dept. 35
Fellowship (5)	3000	9	4607			<u>Ph.D.</u> (1974-1977 incl.) CS 4, Other 15. Total: 19
Teaching Assistantship (14)	2400	9	4607	12		
Research Assistantship (16)	4200-4400	12	4607	15		
Scholarship (2)	375	9	4607			
DEPARTMENT OF MATHEMATICAL STATISTICS						
Howard Levene, Chairman				Applications due: 1/9/78		Bachelor's by inst. 1528 Bachelor's by dept. 6 Master's by dept. 12
Fellowship (6)	3150	9		10	Teaching, assisting	<u>Ph.D.</u> (1974-1977 incl.) S 2, CS 1. Total: 3
Graduate Research Assistantship (5)	3150	9		27	Research	
Cornell University, Ithaca 14853						
DEPARTMENT OF MATHEMATICS						
Clifford J. Earle, Chairman				Applications due: 2/1/78		Bachelor's by inst. 3061 Bachelor's by dept. 40 Master's by dept. 10
Fellowship (4)	2700-3500	9		0-4		<u>Ph.D.</u> (1974-1977 incl.) A&NT 8, G&T 3, L 8, A&FA 2, P 7, S 1, AM 2. Total: 31
Teaching Assistantship (44)	3200-3400	9		15		
Research Assistantship (3)	2700-2900	9		0-4		
CENTER FOR APPLIED MATHEMATICS						
James H. Bramble, Director				Applications due:*		Bachelor's by inst. 3061 Master's by dept. 5
Fellowship (7)	4400					<u>Ph.D.</u> (1974-1977 incl.) AM 14. Total: 14
Teaching Assistantship (11 1/2)	7700-7900			20		
Research Assistantship (2 1/2)	7700-7900					
*1/15/78 for new students; 2/1/78 for returning students.						
BIOMETRICS UNIT						
D. L. Solomon, Head				Applications due: 1/15/78		Bachelor's by inst. 3061 Bachelor's by dept. 5 Master's by dept. 3
Fellowship (2)	1000-3500	12		15		<u>Ph.D.</u> (1974-1977 incl.) S 8. Total: 8
Teaching Assistantship (7)	4528-4803	12		15		
Research Assistantship (1)	3979	12		15		
SCHOOL OF OPERATIONS RESEARCH AND INDUSTRIAL ENGINEERING						
G. Nemhauser, Director						Bachelor's by inst. 3061 Bachelor's by dept. 51 Master's by dept. 34
Fellowship (1)	3000	9	4400			<u>Ph.D.</u> (1974-1977 incl.) OR 26. Total: 26
Teaching Assistantship (13)	3300-3500	9	4400	15		
Research Assistantship (9)	3100	9	4400	15		
Fordham University, New York 10458						
DEPARTMENT OF MATHEMATICS						
Yuh-ching Chen, Chairman				Applications due: 2/1/78		Bachelor's by inst. 1689 Bachelor's by dept. 22 Master's by dept. 3
Fellowship (1)	3000-4000	9				<u>Ph.D.</u> (1974-1977 incl.) A&NT 1, G&T 1, A&FA 4. Total: 6
Teaching Fellowship (2)	3600-4400	9		6 ^C	Teaching	
Teaching Assistantship (6)	3000-4000	9		7-3 ^C	Teaching	
Scholarship (5)		9				
Graduate Assistantship (4)	2000-3000	9		8		
Hofstra University, Hempstead 11530						
DEPARTMENT OF MATHEMATICS						
Edward G. Ostling, Chairman				Applications due: 1/15/78		Bachelor's by inst. 1100 Bachelor's by dept. 25 Master's by dept. 5
Fellowship (2)	600-2400	9	103/sem.hr.	3	Tutoring	
Teaching Assistantship (4)	750-1000	4 1/2		3-4 ^C	Teaching	
Long Island University, C. W. Post College, Greenvale 11548						
DEPARTMENT OF MATHEMATICS						
John C. Stevenson, Chairman				Applications due: 6/78		Bachelor's by inst. 1406 Bachelor's by dept. 16 Master's by dept. 7
Teaching Assistantship (4)	1800	9		20		
New York University—Courant Institute of Mathematical Sciences, New York 10012						
DEPARTMENT OF MATHEMATICS						
Peter D. Lax, Director, Courant Institute of Mathematical Sciences Jerome Berkowitz, Chairman, Department of Mathematics				Applications due: 1/13/78		Master's by dept. 30 <u>Ph.D.</u> (1974-1977 incl.) A&NT 8, G&T 2, L 2, A&FA 7, P 7, AM 21, Other 5. Total: 52
Fellowship (4)	3600	9			Individual	
Research Assistantship (35)	3600	9			Individual	
Scholarship (6)						

TYPE <small>of financial assistance (with number anticipated 1978-1979)</small>	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED <small>Academic year 1976-1977</small>
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	

Polytechnic Institute of New York, Brooklyn 11201

DEPARTMENT OF MATHEMATICS

Harry Hochstadt, Chairman

Teaching Fellowship (10)	2000-2400	9		4	Teaching	Applications due: 3/1/78 Bachelor's by inst. 319 Bachelor's by dept. 20 Master's by dept. 10 Ph.D. (1974-1977 incl.) A&NT 5, G&T 1, A&FA 7, AM 2. Total: 15
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Rensselaer Polytechnic Institute, Troy 12181

DEPARTMENT OF MATHEMATICAL SCIENCES

Richard C. DiPrima, Chairman

Teaching Assistantship (32)	3600-4200	9	200 fees	20	Teaching, grading	Applications due: 2/15/78 Bachelor's by inst. 890 Bachelor's by dept. 75 Master's by dept. 60 Ph.D. (1974-1977 incl.)
Research Assistantship (8)	3600-4200	9	200 fees	20	Research	A&FA 1, S 8, OR 7, CS 3,
Scholarship (20)			varies			AM 10. Total: 29

St. John's University, Jamaica 11439

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

Edward J. Miranda, Chairman

Teaching Fellowship (9)	2400-2600	9		15		Bachelor's by inst. 3200 Master's by inst. 12
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State University College at Brockport 14420

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

Theron D. Rockhill, Chairman

Teaching Assistantship (2)	2500	9		15	Teaching	Applications due: 6/1/78 Bachelor's by inst. 2200 Bachelor's by dept. 60 Master's by dept. 4
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State University College at Buffalo 14223

DEPARTMENT OF MATHEMATICS

William T. Bailey, Chairman

Teaching Assistantship (1-2)	2800	9		*		Applications due: 3/1/78 Bachelor's by inst. 1800 Bachelor's by dept. 30 Master's by dept. 12
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*Teach one course.

State University College at Cortland 13045

DEPARTMENT OF MATHEMATICS

Thomas M. O'Loughlin, Chairman

Teaching Assistantship (1-2)	2500 + tuition	9		20	Teaching	Applications due: * Bachelor's by inst. 1200 Bachelor's by dept. 28 Master's by dept. 6
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*First week of February 1978.

State University College at Fredonia 14063

DEPARTMENT OF MATHEMATICS

James E. McKenna, Acting Chairman

Teaching Assistantship (2)	2400	9		3 ^c		Applications due: 4/1/78 Bachelor's by inst. 777 Bachelor's by dept. 10 Master's by dept. 6
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POLYTECHNIC INSTITUTE OF BROOKLYN

Graduate Study In Mathematics

LOCATION: Brooklyn Campus, and Long Island Center at Farmingdale, Long Island, New York.

DEGREES: M.S. and Ph.D.

FIELDS: Applied Mathematics, Algebra, Analysis, Probability, Statistics, etc.

AVAILABLE MINOR OPTIONS: Applied Mechanics, Aerospace Engineering, Electrophysics, Communication Theory, Automatic Control, Network Theory, Physics, etc.

FELLOWSHIPS: Teaching, Research.

Write for information to: Dean of Graduate School . . . or . . . Department of Mathematics

Polytechnic Institute of Brooklyn

333 Jay Street

Brooklyn, New York 11201

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
State University of New York at Albany 12222						
DEPARTMENT OF MATHEMATICS Thomas H. MacGregor, Chairman			Applications due: 3/15/78*		Bachelor's by inst. 2661 Bachelor's by dept. 106 Master's by dept. 19	
University Fellowship (30)**	4300	9		Full time study	Ph. D. (1974-1977 incl.) A&FA 1. Total: 1	
Teaching Assistantship (25)	3500-3900	9		3-4 ^c Teaching		
Departmental Fellowship (4)	3500-4000	9		Full time study		
Summer Research Assistantship (10)	500-900	2		Full time study		
*Late applications will be considered. **Competitive.						
DEPARTMENT OF COMPUTER SCIENCE Dean N. Arden, Chairman			Applications due: 3/15/78		Bachelor's by inst. 2661 Bachelor's by dept. 13 Master's by dept. 12	
Teaching Assistantship (4)	3300	9		18 Teaching		
State University of New York at Binghamton 13901						
DEPARTMENT OF MATHEMATICAL SCIENCES Louis F. McAuley, Chairman			Applications due: 3/1/78		Bachelor's by inst. 1532 Bachelor's by dept. 83 Master's by dept. 18	
Teaching Fellowship (10)	2000-3900	9		4-8 Assisting	Ph. D. (1974 -1977 incl.) G&T 6, S 1, Other 1.	
Teaching Assistantship (24)	2600-3900	9		4 Teaching	Total: 8	
Research Assistantship (2)	3600-3900	12		20 Research		

STATE UNIVERSITY OF NEW YORK AT ALBANY

The University at Albany offers graduate courses in pure and applied mathematics toward the M. A. and Ph. D. degrees. The M. A. statistics program includes the courses: *Statistics Labs, Linear Models, Mathematical Statistics, Applied Stochastic Processes, Applied Statistics, Biostatistics, Time Series Analysis*. The M. A. teaching program includes courses in analysis, algebra, geometry, statistics and mathematics education. The faculty is highly active in research, and several are known nationally and internationally for their scholarly contributions to mathematics. Faculty-student seminars on current research work are held each semester. There is a varied program of visiting mathematicians for colloquia and symposia. The library holdings in mathematics are excellent and contain over 200 current subscriptions to mathematical journals. The department's teletype terminals access the University's UNIVAC 1110. The Albany area has a concentration of important scientific and educational institutions.

Studies leading to the Ph. D. are offered in the following fields: *algebra, algebraic geometry, algebraic topology, commutative algebra, complex analysis, differential topology, ergodic theory, functional analysis, function algebras, geometry, global analysis, harmonic analysis, number theory, partial differential equations, probability, real analysis, several complex variables, statistics, stochastic processes, summability, transformation groups*.

Graduate faculty for 1977-78: G. Allaud, L. Brickman, H. Brown, C. Chen, L. Childs, V. Cowling, E. Davis, M. Ellis, N. Friedman, R. Goldstein, H. Gordon, W. Haboush, W. Hammond, B. Jamison, J. Jenkins, M. Katz, B. Korenblum, T. Lance, V. Larney, L. Lininger, T. MacGregor, G. Mangano, G. Martin, J. Myers, R. Nirenberg, H. Ogawa, G. Pecelli, R. O'Neil, M. Range, R. Regal, M. Sherman, M. Smiley, H. Stratton, E. Thomas, E. Turner, N. X. Uy, D. Wilken.

For information on financial assistance and application procedures write to:

DIRECTOR OF GRADUATE STUDIES

Department of Mathematics

SUNY at Albany

Albany, New York 12222

(An Equal Opportunity Employer)

TYPE <small>of financial assistance (with number anticipated 1978-1979)</small>	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount	9 or 12	if not included	hours	type	Academic year
	in dollars	months	in stipend (dollars)	per week	of service	1976-1977

State University of New York at Buffalo 14214

DEPARTMENT OF MATHEMATICS
A.D. MacGillivray, Chairman

Applications due: *

Bachelor's by inst. 2250
Bachelor's by dept. 50
Master's by dept. 12

Fellowship (4)	3000	9				
	4000	12				
Teaching Assistantship (44)	3100-3500	9		3-4 ^C		
Scholarship (5)	Varies					
Misc. University (4-6)	Varies			Varies		

Ph.D. (1974-1977 incl.)
A&NT 8, G&T 4, A&FA 4,
AM 6, Total: 22

*Assistantships: 3/15/78; Fellowships: 1/2/78.

State University of New York at Buffalo, Amherst 14226

DEPARTMENT OF COMPUTER SCIENCE
Anthony Ralston, Chairman

Applications due: 2/28/78

Bachelor's by inst. 2250
Bachelor's by dept. 30
Master's by dept. 14

Fellowship (2)	3000-4000	12				
Teaching Assistantship (10)	3450-3750	9		16	*	
Research Assistantship (8)	3450-3900	9		16	**	
Graduate Assistantship (8)	3450-3750	9		16	***	

Ph.D. (1974-1977 incl.)
CS 5, Total: 5

*Assist in undergraduate course.
**Research with faculty.
***In user seminars at computing center.

DEPARTMENT OF STATISTICS
Norman C. Severo, Chairman

Bachelor's by inst. 2250
Bachelor's by dept. 19
Master's by dept. 2

Teaching Assistantship (5)	3100	10				
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Ph.D. (1974-1977 incl.)
S 8, Total: 8

STATE UNIVERSITY OF NEW YORK AT BUFFALO

The Department of Mathematics intends to award George William Hill and Emmy Noether Research Instructorships for 1978-80. Applicants should be recent or prospective Ph.D.'s whose degrees will be completed by September 1, 1978. One Research Instructorship is in Applied Mathematics and one in Pure Mathematics, with each appointment being for two years. The twelve-month stipend, beginning September 1978, is \$16,200 including generous staff benefits. Teaching load will total two one-semester courses during the twelve-month period.

Upon expiration of the two-year appointment, priority consideration for a two-year appointment as assistant professor will be given and will be based upon success and potential in both research and teaching. Each applicant should prepare a summary of his or her post-high school educational background, as well as a sketch of past and projected research activity, and should request at least three mathematicians to send letters of recommendation. Application forms are available upon request. No one holding academic rank at SUNY at Buffalo is eligible to apply. Applications and supporting letters should be sent to

Chairman, Department of Mathematics

SUNY at Buffalo, 106 Diefendorfer Hall, Buffalo, New York 14214

so as to arrive by January 20, 1978. SUNY at Buffalo is an Equal Opportunity/Affirmative Action Employer. We are interested in identifying prospective minority and woman candidates. No person in whatever relation with SUNYAB shall be subject to discrimination on the basis of age, color, national origin, race, religion, sex, or handicap.

STATE UNIVERSITY OF NEW YORK AT BUFFALO

Graduate Assistantships are available in various amounts (this year from \$3100 to \$3375) with remission of tuition. Duties may include lecturing, conducting recitation sections or grading papers. Also, SUNY at Buffalo offers graduate fellowships at \$3000 for a one year appointment, and \$4000 per year for a three year appointment, plus waiver of tuition. Last year three of these fellowships were awarded to students in the Department of Mathematics. A number of summer teaching appointments are customarily offered.

SUNY at Buffalo has an active program in graduate mathematics leading to both M.A. and Ph.D. degrees. Doctorates are offered in algebra, real and complex analysis, differential equations, applied mathematics, functional analysis, logic, number theory, and topology. Interdisciplinary work, especially in mathematical biology, is being expanded and encouraged. For additional information and application forms, write to:

**Director of Graduate Studies—Department of Mathematics
STATE UNIVERSITY OF NEW YORK AT BUFFALO
Diefendorf Hall — Buffalo, New York 14214**

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	

State University of New York at Stony Brook 11794

DEPARTMENT OF MATHEMATICS

Irwin Kra, Chairman

Teaching Fellowship (2-4)	4000	9				
Teaching Assistantship (40-45)	3300-3900	9				
Research Assistantship (5-10)	2000-3900	9				

*Assistantships: 3/1/78; Fellowships: 2/1/78 for first round of offers.

Applications due:*

4 ^C	Teaching
4 ^C	Teaching
4 ^C	Teaching, research

Bachelor's by inst.	2212
Bachelor's by dept.	28
Master's by dept.	13
Ph.D. (1974-1977 incl.)	
A&NT 9, G&T 5, A&FA 10,	
P 1. Total: 25	

DEPARTMENT OF APPLIED MATHEMATICS

Edward J. Beltrami, Chairman

Fellowship (1)	4000	9				
Teaching Assistantship (39)	1650-3300	9	0-900	10-20	Teaching	
Research Assistantship (3)	1000-3300	9	0-900	10-20	Research	
Scholarship (4)		9				
Afro American Institute Grant (1)	4500	9				

*Assistantship: 3/15/78; Fellowships: 1/15/78.

Applications due: *

Bachelor's by inst.	2212
Bachelor's by dept.	67
Master's by dept.	41
Ph.D. (1974-1977)	
AM 10. Total: 10	

Syracuse University, Syracuse 13210

DEPARTMENT OF MATHEMATICS

Erik Hemmingsen, Chairman

Fellowship (2)	4000	9				
Teaching Assistantship (25)	3800-4000	9				

Applications due: 3/1/78

6^C

Bachelor's by inst.	2413
Bachelor's by dept.	17
Master's by dept.	21
Ph.D. (1974-1977 incl.)	
A&NT 1, G&T 1, A&FA 9,	
CS 1, AM 2, Other 1.	
Total: 15	

DEPARTMENT OF COMPUTER AND INFORMATION SCIENCE

Warren Semon, Dean

Fellowship (2)	4000	9				
Teaching Assistantship (4)	4000	9		20		
Research Assistantship (2)	4000	9		20		

University of Rochester, Rochester 14627

DEPARTMENT OF MATHEMATICS

Charles E. Watts, Chairman

Fellowship (10)*	1000	9				
Teaching Assistantship (20)*	1600-3000	9		2-3		
Scholarship (10)						

*Several students do and will hold a Fellowship in addition to their Teaching Assistantship.

Applications due: 2/78

Bachelor's by inst.	1096
Bachelor's by dept.	27
Master's by dept.	8

Ph.D. (1974-1977 incl.)	
A&NT 3, G&T 1, L 1,	
A&FA 4, AM 1, P 1, Other 1.	
Total: 12	

DEPARTMENT OF COMPUTER SCIENCE

Jerome A. Feldman, Chairman

Fellowship (18)	3400	9		15	Research	
Research Assistantship (18)	6424	9	3024	15	Research	

Applications due: 3/1/78

Bachelor's by inst.	1096
Bachelor's by dept.	2
Master's by dept.	8

DEPARTMENT OF STATISTICS

W. J. Hall, Chairman

Teaching Assistantship (13)	2200-4000	9		12-15		
Research Assistantship (3)	3000-7000	9-12		12-30		
Scholarship (1)		9				
Tech Associateship (1)	4200	9		20		

Applications due: 2/15/78

Bachelor's by inst.	1096
Bachelor's by dept.	4
Master's by dept.	3

Ph.D. (1974-1977 incl.)	
S 5. Total: 5	

NORTH CAROLINA

Appalachian State University, Boone 28608

DEPARTMENT OF MATHEMATICAL SCIENCES

Mike Perry, Chairman

Teaching Assistantship (8)	2800-3200	9	530/yr.*	12		
Service-Computer Programming (2)	1050-2100	9	530/yr.*	8-16		

*Subject to increase.

Applications due: 3/15/78

Bachelor's by inst.	1800
Bachelor's by dept.	32
Master's by dept.	7

Duke University, Durham 27706

DEPARTMENT OF MATHEMATICS

Seth L. Warner, Chairman

Fellowship (5)	6000-8000	9-12	3600			
Teaching Assistantship (14)	1400-6000	9	700-2100	varies		
Research Assistantship (2)	4500-4800	12		15		
Graduate Assistantship (6)	3600-8000	9-12	3600	9-15		

Applications due: 3/1/78

Bachelor's by inst.	1305
Bachelor's by dept.	28
Master's by dept.	6

Ph.D. (1974-1977 incl.)	
A&NT 4, G&T 1, L 2,	
A&FA 4, P 1. Total: 12	

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
DEPARTMENT OF COMPUTER SCIENCE				Applications due: 3/1/78		Bachelor's by inst. 1305
Donald Loveland, Chairman						Bachelor's by dept. 22
Fellowship (2) 4200 12						Master's by dept. 6
Teaching Assistantship (4) 2200 9				3 ^C Teaching		Ph.D. (1974-1977 incl.) CS 1. Total: 1
Research Assistantship (11) 3000-4000				20 Research		
Scholarship (1)						
East Carolina University, Greenville 27834						
DEPARTMENT OF MATHEMATICS				Applications due: 3/1/78		Bachelor's by inst. 1922
Frank W. Saunders, Acting Chairman						Bachelor's by dept. 27
Teaching Fellowship (22) 2500 9 *				5 Teaching		Master's by dept. 11
Computer and Office Institutional Research (4) 2500 9 *				15 Assist in Computer Lab or OR		
*\$952/yr. (in-state); \$2,672/yr. (out-of-state); \$1,052/yr. (special talent) tuition (out-of-state).						
North Carolina Central University, Durham 27707						
DEPARTMENT OF MATHEMATICS				Applications due: 4/24/78		Bachelor's by inst. 596
William T. Fletcher, Chairman						Bachelor's by dept. 8
Graduate Assistantship (2) 1500 9 *				10		Master's by dept. 2
*In-state: \$440; out-of-state: \$2006.						
North Carolina State University, Raleigh 27607						
DEPARTMENT OF MATHEMATICS AND SCIENCE EDUCATION				Applications due: 3/1/78		Bachelor's by inst. 2000
Herbert E. Speece, Head						Bachelor's by dept. 42
Teaching Assistantship (1) 3000 9				15		Master's by dept. 9
						Ph.D. (1974-1977 incl.) Other 2. Total: 2
OPERATIONS RESEARCH PROGRAM						Master's by dept. 3
S.E. Elmaghraby, Chairman						Ph.D. (1974-1977 incl.) OR 3. Total: 3
Teaching Assistantship (15) 3100 9				20 Teaching		
Research Assistantship (5) 3400-4200 9				20 Research		
DEPARTMENT OF STATISTICS				Applications due: 3/1/78		Master's by dept. 6
D.D. Mason, Head						Ph.D. (1974-1977 incl.) S 4, Other 1, Total: 5
Teaching Assistantship (14) 3100-5200 9				0-20 Teaching		
Research Assistantship (9) 3600-6000 12				0-20 Research		
University of North Carolina, Chapel Hill 27514						
DEPARTMENT OF MATHEMATICS				Applications due: 2/1/78		Bachelor's by inst. 3289
William W. Smith, Chairman						Bachelor's by dept. 57
Fellowship (1)* 3000-4500 9				260/sem. Research		Master's by dept. 2
Teaching Fellowship (2)* 3000-4500 9				260/sem. 3 **		Ph.D. (1974-1977 incl.)
Teaching Assistantship (27) 4000-5400 9				260/sem. 6 ***		A&NT 3, G&T 3, A&FA 6,
Research Assistantship (7) 2400-5000				260/sem. 3 Research		Other 3. Total: 15
Scholarship (2)				260/sem.		
University Grant in Astronomy (1) 4500				260/sem.		

*Amount is usually supplemented with partial teaching assistantship.

**Teach one course per semester.

***Teach one course per semester; assist one course.

UNIVERSITY OF NORTH CAROLINA

The Department of Mathematics offers programs leading to the degrees Master of Arts, Master of Science, and Doctor of Philosophy. There is great flexibility in arranging the masters degree program to include course work in Operations Research and Systems Analysis, Statistics, Computer Science and other areas related to mathematical sciences. Financial assistance is available and can be obtained by writing to address below.

Faculty members are active in research especially in the fields of classical analysis, algebra, combinatorics, differential geometry, dynamical systems, algebraic topology, and foliation theory.

Department of Mathematics
University of North Carolina at Chapel Hill
N.C. 27514

Equal Opportunity/Affirmative Action Employer

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1978-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
DEPARTMENT OF BIOSTATISTICS			Applications due: 3/15/78		Bachelor's by inst.	3289
James E. Grizzle, Head					Master's by dept.	23
Fellowship (25)*	3900	12			Ph.D. (1974-1977 incl.)	
Research Assistantship (18)	5518-6922	12		20	Other 8. Total: 8	
*All fellowships are for continuing students.						
DEPARTMENT OF OPERATIONS RESEARCH			Applications due:*		Bachelor's by inst.	3289
Jon W. Tolle, Chairman					Master's by dept.	7
Fellowship (4)	3000-3500	9	260/sem.	0-10	Research	Ph.D. (1974-1977 incl.)
Teaching Assistantship (12)	3200-4000	9	260/sem.	3	Teaching	OR 3. Total: 3
Research Assistantship (6)	3600-4200	9	260/sem.	10-20	Research	
*Assistantships: 3/1/78; Fellowships: 2/1/78.						
DEPARTMENT OF STATISTICS			Applications due: 2/1/78		Bachelor's by inst.	3289
Gordon D. Simons, Chairman					Master's by dept.	4
Fellowship (3)	3000-4000	9			Ph.D. (1974-1977 incl.)	
Research Assistantship (6)	3300-3400	9	474	3-6	P 4, S 7. Total: 11	
University of North Carolina, Charlotte 28223						
DEPARTMENT OF MATHEMATICS			Applications due: 3/1/78*		Bachelor's by inst.	1126
J. F. Schell, Chairman					Bachelor's by dept.	21
Teaching Assistantship (6)	1750-3500	9	**	3-6 ^c	Teaching	Master's by dept. 11
*Late applications considered if funds are available.						
**In-State: \$80-\$238.50; out-of-state: \$257-\$1068; (out-of-state waivers available).						
University of North Carolina at Greensboro 27412						
DEPARTMENT OF MATHEMATICS			Applications due: 4/1/78		Bachelor's by inst.	1275
E. E. Posey, Head					Bachelor's by dept.	55
Teaching Assistantship (16)	3200	9	350	6 ^c		Master's by dept. 18
Wake Forest University, Winston-Salem 27109						
DEPARTMENT OF MATHEMATICS			Applications due: 3/1/78		Bachelor's by inst.	525
Ivey C. Gentry, Chairman					Master's by dept.	4
Fellowship (3)	4300	9	2750			
Teaching Assistantship (2)	6150	9	2750	12	Teaching	
Scholarship (4)	2750	9				
NORTH DAKOTA						
North Dakota State University, Fargo 58102						
DEPARTMENT OF MATHEMATICS			Applications due: 3/1/78		Bachelor's by inst.	1024
Leonard Shapiro, Chairman					Bachelor's by dept.	21
Teaching Assistantship (8)	3300-4000	9		6 ^c	Teaching	Master's by dept. 4
University of North Dakota, Grand Forks 58202						
DEPARTMENT OF MATHEMATICS			Applications due: 3/15/78		Master's by dept.	3
Ronald Bzoch, Chairman						
Teaching Assistantship (3)	1597-3195	9		3-6 ^c	Teaching	
OHIO						
Bowling Green State University, Bowling Green 43403						
DEPARTMENT OF MATHEMATICS			Applications due: 3/1/78		Bachelor's by inst.	2868
W. L. Terwilliger, Chairman					Bachelor's by dept.	35
Fellowship (4)	3000	12			Master's by dept.	12
Teaching Fellowship (16)	4410	9	57/qtr.	6 ^c	Teaching	Ph.D. (1974-1977 incl.)
Teaching Assistantship (24)	3241	9	57/qtr.	6 ^c	Teaching	A&NT 4, P 4. Total: 8
Research Assistantship (1)	4410	12	57/qtr.	open	Research	
DEPARTMENT OF COMPUTER SCIENCE			Applications due: 3/15/78		Bachelor's by inst.	2868
David L. Fulton, Chairman					Bachelor's by dept.	47
Teaching Assistantship (6)	3241	9	50/qtr.	20	Teaching	Master's by dept. 11
Research Assistantship (8)	3241	9	50/qtr.	20	Program- ming	
DEPARTMENT OF QUANTITATIVE ANALYSIS AND CONTROL			Applications due: *		Bachelor's by inst.	2868
Robert A. Patton, Chairman					Bachelor's by dept.	4
Teaching Assistantship (5)	1620-3240	9		4	Master's by dept.	5
*Priority given to those received by March 1, 1978.						

TYPE <small>of financial assistance (with number anticipated 1978-1979)</small>	STIPEND		TUITION <small>if not included in stipend (dollars)</small>	SERVICE REQUIRED		DEGREES AWARDED <small>Academic year 1976-1977</small>
	amount in dollars	9 or 12 months		hours per week	type of service	
Case Western Reserve University, Cleveland 44106						
DEPARTMENT OF MATHEMATICS AND STATISTICS Shelemiyahu Zacks, Chairman			Applications due: 3/1/78		Bachelor's by inst. 671 Bachelor's by dept. 17 Master's by dept. 2	
Teaching Assistantship (7 or 8)	3600-4800*	9		3-6 ^C	Teaching	Ph.D. (1974-1977 incl.) A&NT 1, G&T 2, A&FA 3, P 6, S 1. Total: 13
Research Assistantship (1 or 2)	3600-4800*	9		15	Research	
*plus tuition.						
DEPARTMENT OF BIOMETRY H. B. Houser, Chairman			Applications due: 3/15/78		Bachelor's by inst. 671 Master's by dept. 3	
Fellowship (3)	5850	9		10		
DEPARTMENT OF OPERATIONS RESEARCH Hamilton Emmons, Chairman			Applications due: 4/78		Bachelor's by inst. 671 Master's by dept. 15	
Fellowship (3)	5130-7142.76	9		20	Research	Ph.D. (1974-1977 incl.) OR 25. Total: 25
Graduate Assistantship (10)	5130	9		20	Teaching or research	
Tuition Fellowship (5)		9		12	Teaching or research	
Cleveland State University, Cleveland 44115						
DEPARTMENT OF MATHEMATICS R.R. Stoll, Chairman			Applications due: 9/1/78		Bachelor's by inst. 1397 Bachelor's by dept. 40 Master's by dept. 6	
Teaching Assistantship (4)	3000	9		20	Teaching, grading	
John Carroll University, Cleveland 44118						
DEPARTMENT OF MATHEMATICS Leo J. Schneider, Chairman			Applications due: 3/1/78*		Bachelor's by inst. 305 Bachelor's by dept. 16 Master's by dept. 7	
Teaching Assistantship (7)	2600	9		20	Teaching, correcting	
*Late applications accepted.						
Kent State University, Kent 44242						
DEPARTMENT OF MATHEMATICS Olaf P. Stackelberg, Chairman			Applications due: 3/1/78*		Bachelor's by inst. 3572 Bachelor's by dept. 47 Master's by dept. 8	
Fellowship (1)	3200	9				Ph.D. (1974-1977 incl.) A&NT 2, G&T 1, A&FA 2, Other 2. Total: 7
Teaching Fellowship (9)	4000-4200	9		5 ^C	Teaching	
Teaching Assistantship (19)	3300-3800	9		5 ^C	Teaching	
*Late applications will be considered.						
Miami University, Oxford 45056						
DEPARTMENT OF MATHEMATICS AND STATISTICS S.E. Bohn, Chairman			Applications due: 3/15/78		Bachelor's by inst. 3000 Bachelor's by dept. 50 Master's by dept. 14	
Teaching Assistantship (25)	3150-3600	9	10.50/sem. hr.		18	

KENT STATE UNIVERSITY

The Department of Mathematics at Kent State University is now accepting applications for Teaching Assistantships and Teaching Fellowships for the 1978-79 academic year. Stipends range from \$3,300 plus tuition waiver to \$4,300 plus tuition waiver.

The Department offers programs leading to the M.A., M.S. and the Ph.D. degrees with areas of concentration in pure mathematics, applied mathematics, and mathematics for secondary teachers. The Doctor of Philosophy degree is offered in several areas which include numerical analysis, approximation theory, classical analysis, functional analysis, ring theory, general topology, geometric topology, complex analysis, probability theory.

Completed applications should be received by March 1, 1978. However, late applications will be considered. Please direct inquiries to:

**Coordinator of Graduate Studies
Department of Mathematics 1A
KENT STATE UNIVERSITY
Kent, Ohio 44242**

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
Ohio State University, Columbus 43210						
DEPARTMENT OF MATHEMATICS Joseph Landin, Chairman				Applications due: 2/16/78		Bachelor's by inst. 5050 Bachelor's by dept. 24 Master's by dept. 28
Fellowship (20)	4200	12				Ph.D. (1974-1977 incl.) A&NT 10, G&T 4, A&FA 5, P 2, AM 2, Other 9. Total: 32
Teaching Assistantship (60)	3600	9		20		
DEPARTMENT OF COMPUTER AND INFORMATION SCIENCE Marshall C. Yovits, Chairman				Applications due: *		Bachelor's by inst. 5050 Bachelor's by dept. 118 Master's by dept. 70
Fellowship (20)	3000	10				Ph.D. (1974-1977 incl.) CS 25. Total: 25
	3600	12				
Teaching Assistantship (55)	3375-4800	9;12		15-20	Teaching	
Research Assistantship (14)	3150-4500	9;12		20	Research	
Computer Center (2)	4200-5000	12		20	Program- ming, research	
Ohio College Library Center (1)	4200-4500	12		20	Program- ming, research	
*Assistantship: Open; Fellowship: 2/1/78.						
DEPARTMENT OF STATISTICS D.R. Whitney, Chairman				Applications due: 2/1/78		Bachelor's by inst. 5050 Bachelor's by dept. 5 Master's by dept. 6
Fellowship (3)	2400-3300	9				Ph.D. (1974-1977 incl.) S 22. Total: 22
Teaching Assistantship (30)	3375-4000	9		20	Teaching	
Ohio University, Athens 45701						
DEPARTMENT OF MATHEMATICS D.O. Norris, Chairman				Applications due: 3/1/78		Bachelor's by inst. 2351 Bachelor's by dept. 14 Master's by dept. 5
Teaching Assistantship (16)	3200-4200	9 or 12	55 fees	5 ^c	Teaching	Ph.D. (1974-1977 incl.) A&NT 2, G&T 2, A&FA 1, AM 1. Total: 6
University of Akron, Akron 44325						
DEPARTMENT OF MATHEMATICS AND STATISTICS William H. Beyer, Head				Applications due: 3/1/78		Bachelor's by inst. 1699 Bachelor's by dept. 21 Master's by dept. 7
Teaching Assistantship (18)	2750-3500	9		15-20	Teaching	
University of Cincinnati Medical College, Cincinnati 45267						
DIVISION OF EPIDEMIOLOGY AND BIostatISTICS C. Ralph Buncher, Chairman				Applications due: 3/15/78		Master's by dept. 2 Ph.D. (1974-1977 incl.) S I. Total: 1
Research Assistantship (2)	3600	12		15-20	Research	
Scholarship (5)	2250-3000	9 or 12				
University of Dayton, Dayton 45469						
DEPARTMENT OF MATHEMATICS John McCloskey, Chairman				Applications due: 3/1/78		Bachelor's by inst. 1135 Bachelor's by dept. 14 Master's by dept. 2
Teaching Assistantship (6)	3200	9		6 ^c		
Research Assistantship (1)	3200	9		20		
University of Toledo, Toledo 43606						
DEPARTMENT OF MATHEMATICS Simmie S. Blakney, Chairman				Applications due: 3/15/78		Bachelor's by dept. 6 Master's by dept. 5
Teaching Assistantship (16)	3250-4250	9		4-6	Teaching	Ph.D. (1974-1977 incl.) G&T 2. Total: 2
Wright State University, Dayton 45435						
DEPARTMENT OF MATHEMATICS David Sachs, Acting Chairman				Applications due: 9/1/78		Bachelor's by inst. 1172 Bachelor's by dept. 15 Master's by dept. 7
Teaching Assistantship (15)	3300-3400	9	7/hr.	16	*	
*Teaching and/or working in supplemental instruction program.						

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1978-1977
				hours per week	type of service	
Youngstown State University, Youngstown 44555						
DEPARTMENT OF MATHEMATICS Dean R. Brown, Acting Chairman			Applications due: *		Bachelor's by inst. 1354 Bachelor's by dept. 19 Master's by dept. 4	
Teaching Assistantship (3)	2900-3300	9		20	Teaching	
*As early as possible, preferably by 3/15/78.						
OKLAHOMA						
Oklahoma State University, Stillwater 74074						
DEPARTMENT OF MATHEMATICS John Jewett, Chairman					Bachelor's by inst. 4000 Bachelor's by dept. 30 Master's by dept. 10	
Teaching Assistantship (55)	3555-3780	9		5-6 ^C	Teaching	Ph.D. (1974-1977 incl.) A&NT 1, G&T 3, A&FA 2, P 1. Total: 7
University of Oklahoma, Norman 73019						
DEPARTMENT OF MATHEMATICS Morris L. Marx, Chairman			Applications due: 2/15/78		Bachelor's by inst. 2295 Bachelor's by dept. 47 Master's by dept. 12	
Teaching Assistantship (40)	3600-3800	9	20.75/cr. hr.	6 ^C	Teaching	Ph.D. (1974-1977 incl.) A&NT 3, G&T 4, A&FA 1, Other 2. Total: 10
University of Tulsa, Tulsa 74104						
DEPARTMENT OF MATHEMATICAL SCIENCE William A. Coberly, Chairman			Applications due: 4/1/78		Bachelor's by inst. 804 Bachelor's by dept. 9 Master's by dept. 2	
Teaching Assistantship (6)	2750	9		6 ^C	Teaching	
Research Assistantship (1)	2750	9		18	Research	
Scholarship (1)	2800	9				
OREGON						
Oregon State University, Corvallis 97331						
DEPARTMENT OF MATHEMATICS William J. Firey, Acting Chairman			Applications due: 4/1/78		Bachelor's by inst. 2774 Bachelor's by dept. 22 Master's by dept. 4	
Teaching Assistantship (30)	3700-4300	9	62/term	12-15	Teaching	Ph.D. (1974-1977 incl.) A&NT 4, G&T 2, A&FA 7, P 1, AM 1, Total: 15
DEPARTMENT OF STATISTICS Lyle D. Calvin, Chairman			Applications due: 2/15/78		Bachelor's by inst. 2774 Master's by dept. 7	
Teaching Assistantship (10)	3000-3600	9	65/term	12-15		Ph.D. (1974-1977 incl.)
Research Assistantship (6)	3000-3600	9	65/term	12-15		S 8, OR 1. Total: 9
University of Oregon, Eugene 97403						
DEPARTMENT OF MATHEMATICS Fred C. Andrews, Head			Applications due: 3/1/78		Bachelor's by inst. 2444 Bachelor's by dept. 40 Master's by dept. 9	
Teaching Fellowship (32)	3560-4750	9	66/term	4 ^C	Teaching	Ph.D. (1974-1977 incl.) A&NT 6, G&T 2, L 1, A&FA 3, S 2. Total: 14
DEPARTMENT OF COMPUTER SCIENCE Stephen Hedentniemi, Head			Applications due: 4/15/78		Bachelor's by inst. 2444 Bachelor's by dept. 28 Master's by dept. 19	
Teaching Fellowship (9)	2835-3315	9		12-15		
PENNSYLVANIA						
Bucknell University, Lewisburg 17837						
DEPARTMENT OF MATHEMATICS David S. Ray, Head			Applications due: 3/1/78		Bachelor's by inst. 722 Bachelor's by dept. 54 Master's by dept. 2	
Fellowship (2)	900	9				
Teaching Fellowship (5)	2500	9		20	Teaching	
Scholarship (3)		9				
California State College, California 15419						
DEPARTMENT OF MATHEMATICS August J. Bethem, Chairman					Bachelor's by inst. 598 Bachelor's by dept. 2	
Teaching Assistantship (1)	1812	9		10		

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1976-1977
Carnegie-Mellon University, Pittsburgh 15213						
DEPARTMENT OF MATHEMATICS George J. Fix, Head					Applications due: 3/15/78	Bachelor's by dept. 43 Master's by dept. 11
Teaching Fellowship (7)	2700-3500	9		4 ^C	Teaching	Ph.D. (1974-1977 incl.) G&T 1, A&FA 9, OR 2, AM 5, Other 3. Total: 20
Teaching Assistantship (10)	3000-4000	9		4-6 ^C	Teaching	
Research Assistantship (12)	7000-8000	9	4000	20	Research	
Scholarship (3)	4000	9				
DEPARTMENT OF STATISTICS Joseph B. Kadane, Chairman					Applications due: 3/15/78	Bachelor's by inst. 644 Master's by dept. 2
Teaching Assistantship (12)	2925-3150	9		12	Teaching assistance	Ph.D. (1974-1977 incl.) S 6. Total: 6
Stipend (13)	1125	9				
Clarion State College, Clarion 16214						
DEPARTMENT OF MATHEMATICS Stephen I. Gendler, Chairman					Applications due: 7/1/78	Bachelor's by inst. 818 Bachelor's by dept. 21 Master's by dept. 12
Teaching Assistantship (4)	1350-2700	9		10-20	Teaching	
Drexel University, Philadelphia 19104						
DEPARTMENT OF MATHEMATICAL SCIENCES Loren N. Argabright, Head					Applications due: 3/15/78	Bachelor's by inst. 950 Bachelor's by dept. 39 Master's by dept. 12
Teaching Assistantship (20)	3200-4200	9		6 ^C	Teaching	Ph.D. (1974-1977 incl.) AM 3. Total: 3
Research Assistantship (2)	3200-4200	9		20	Research	
Duquesne University, Pittsburgh 15219						
DEPARTMENT OF MATHEMATICS Robert G. McDermot, Chairman						Bachelor's by inst. 1000 Bachelor's by dept. 4 Master's by dept. 2
Teaching Assistantship (4)	2080	9		6-7 ^C		
Edinboro State College, Edinboro 16412						
DEPARTMENT OF MATHEMATICS R.G. Baker, Chairman					Applications due: 3/1/78	Bachelor's by inst. 1100 Bachelor's by dept. 12 Master's by dept. 4
Research Assistantship (1)	2600	12		20		
Indiana University of Pennsylvania, Indiana 15701						
DEPARTMENT OF MATHEMATICS Melvin R. Woodard, Chairman					Applications due: 3/1/78	Bachelor's by inst. 2108 Bachelor's by dept. 60 Master's by dept. 25
Teaching Assistantship (5)	1300-2705	9		20		
Kutztown State College, Kutztown 19530						
DEPARTMENT OF MATHEMATICS Edward W. Evans, Chairman					Applications due: 4/1/78	Bachelor's by inst. 850 Bachelor's by dept. 25 Master's by dept. 10
Teaching Fellowship (1)	2700	9		20	Teaching, tutoring	

DREXEL UNIVERSITY

The Department of Mathematical Sciences offers graduate programs leading to the M.S. and Ph.D. degrees. The M.S. program is oriented toward training for industrial employment and features a cooperative education option whereby students may spend up to six months working in an industrial environment. The Ph.D. program is primarily concentrated in the areas of analysis, applied mathematics, and computational mathematics. Financial aid is available through teaching and research assistantships and fellowships which carry academic year stipends from \$3200 to \$4200 plus a waiver of tuition and fees. Applicants should request further information from:

Dr. Loren N. Argabright, Head
Department of Mathematical Sciences
DREXEL UNIVERSITY
Philadelphia, Pennsylvania 19104

TYPE <small>of financial assistance (with number anticipated 1978-1979)</small>	STIPEND		TUITION	SERVICE REQUIRED	DEGREES AWARDED
	amount	9 or 12	If not included	hours	Academic year
	in dollars	months	in stipend (dollars)	per week	1976-1977
Lehigh University, Bethlehem 18015					
DEPARTMENT OF MATHEMATICS Everett Pitcher, Chairman				Applications due: 2/15/78*	Bachelor's by inst. 875 Bachelor's by dept. 16 Master's by dept. 6
Fellowship (2)	3000**				
Teaching Assistantship (28)	3500-3600**	9		4-6 ^C	Ph.D. (1974-1977 incl.) A&NT 4, G&T 3, L 1, A&FA 4, S 1, Other 1. Total: 14
Scholarship (2)					
*Late applications considered. **Subject to final budget approval.					

Pennsylvania State University, University Park 16802

DEPARTMENT OF MATHEMATICS Donald C. Rung, Chairman				Applications due: 2/15/78	Bachelor's by inst. 8376 Bachelor's by dept. 58 Master's by dept. 14
Teaching Fellowship (3)	4320	9			
Teaching Assistantship (25)	4032-4320	9		6	Research Teaching
DEPARTMENT OF COMPUTER SCIENCE Patrick C. Fischer, Head					
				Applications due: 2/15/78	Bachelor's by inst. 8376 Bachelor's by dept. 117 Master's by dept. 24
Fellowship (2)	4032	9		6	Research
Teaching Assistantship (30)	3816-4752	9		20	Teaching
Research Assistantship (6)	4032-4752	9		20	Teaching
Summer Support (15)	672-1584	3		10-20	Teaching
Ph.D. (1974-1977 incl.) A&NT 2, AM 1. Total: 3 CS 9. Total: 9					

Shippensburg State College, Shippensburg 17257

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE James L. Sieber, Chairman				Applications due: Open	Bachelor's by inst. 758 Bachelor's by dept. 38 Master's by dept. 3
Teaching Assistantship (2)	2705-2840	9		20	

Temple University, Philadelphia 19122

DEPARTMENT OF MATHEMATICS Albert Schild, Chairman				Applications due: 3/15/78	Bachelor's by inst. 3264 Bachelor's by dept. 22 Master's by dept. 5
Fellowship (2)	4000	12			
Teaching Assistantship (17)	3000-3400	9		6 ^C	Teaching
Research Assistantship (6)	3000-3400	9			Ph.D. (1974-1977 incl.) A&NT 4, G&T 1, A&FA 3, P 1, S 2. Total: 11
Scholarship (2)					

TEMPLE UNIVERSITY, PHILADELPHIA

The Department of Mathematics, Temple University, invites applications for a number of fellowships and assistantships available to support study toward the M.A. and Ph.D. in Mathematics. Graduate offerings include course work, seminars, and thesis guidance in a broad spectrum of mathematical areas, among them: Algebra, Group Theory, Number Theory, Geometry, Topology, Probability and Statistics, Analysis, and Functional Analysis, as well as a variety of options in Applied and Applicable Mathematics. The program is further enriched by a series of regular colloquia talks presented by visiting lecturers.

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For further information and applications for admission and financial support write to:

Dr. Albert Schild, Chairman
Department of Mathematics
Temple University
Philadelphia, Pa. 19122

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
University of Pennsylvania, Philadelphia 19104						
DEPARTMENT OF MATHEMATICS Dock Sang Rim, Chairman			Applications due: 2/1/78		Bachelor's by inst. 2155 Bachelor's by dept. 25 Master's by dept. 5	
Fellowship (2)	2500	9				
Teaching Fellowship (25)	3600*	9		4 ^C		Ph.D. (1974-1977 incl.) A&NT 3, G&T 4, A&FA 9, Other 4. Total: 20
Karcher Fellowship (1)	4000**	9				
*Possibility of summer teaching. **\$1500 possible for summer.						
DEPARTMENT OF STATISTICS John S. deCani, Chairman			Applications due: 2/1/78		Bachelor's by inst. 2155 Master's by dept. 2	
Teaching Fellowship (6 or 7)	3500-3700	9		10	Teaching	Ph.D. (1974-1977 incl.) S 3. Total: 3
University of Pittsburgh, Pittsburgh 15260						
DEPARTMENT OF MATHEMATICS AND STATISTICS W. E. Deskins, Chairman			Applications due: 3/15/78		Bachelor's by inst. 3082 Bachelor's by dept. 90 Master's by dept. 18	
Fellowship (3)	3800*	8				
Teaching Fellowship (14)	5727**	12		6 ^C		Ph.D. (1974-1977 incl.) A&NT 1, L 1, A&FA 2, S 1, AM 2. Total: 7
Teaching Assistantship (25)	5367**	12		6 ^C		
Research Assistantship (5)	5727**	12				
*2 term predoctorate. **3 term.						
DEPARTMENT OF COMPUTER SCIENCE Orrin E. Taulbee, Chairman			Applications due: 3/1/78		Bachelor's by inst. 3082 Bachelor's by dept. 42 Master's by dept. 17	
Teaching Fellowship (9)	3818-5727*	8-12		15-18	Teaching	
Teaching Assistantship (9)	3578-5367*	8-12		15-18	Teaching	Ph.D. (1974-1977 incl.) CS 4. Total: 4
Research Assistantship (6)	3760-5640*	8-12		15-18	Research	
Scholarship (2)						
Industry Cooperative (4)	5000-7000	12	1965	20	Industry	
Computer Center (3)	3578-5367*	8-12		15-18	In user services	
*Stipends may be increased.						
Villanova University, Villanova 19085						
DEPARTMENT OF MATHEMATICS Robert E. Beck, Chairperson			Applications due: 3/15/78		Bachelor's by inst. 1394 Bachelor's by dept. 27 Master's by dept. 28	
Teaching Assistantship (9)	2600	9		3-6 ^C	Teaching	
West Chester State College, West Chester 19380						
DEPARTMENT OF MATHEMATICAL SCIENCES F. Milliman, Acting Chairman			Applications due: 4/15/78		Bachelor's by inst. 1304 Bachelor's by dept. 25 Master's by dept. 8	
Teaching Assistantship (5)	2705-2980*	9		6 ^C	Teaching and/or assisting	
*May be extended over summer.						
Wilkes College, Wilkes-Barre 18703						
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE Bing K. Wong, Chairman			Applications due: 5/1/78		Bachelor's by inst. 465 Bachelor's by dept. 17 Master's by dept. 4	
Teaching Assistantship (2)	2500	9		6		
RHODE ISLAND						
Brown University, Providence 02912						
DEPARTMENT OF MATHEMATICS Jonathan Lubin, Chairman			Applications due: 1/15/78		Bachelor's by inst. 1203 Bachelor's by dept. 35	
Fellowship (6)	2300-3000	9				Ph.D. (1974-1977 incl.) A&NT 1, G&T 4, A&FA 6, Other 3. Total: 14
Teaching Assistantship (16)	2850-3250	9		3-6	Teaching	
Research Assistantship (3)	3250	9				
DIVISION OF APPLIED MATHEMATICS W. Freiberger, Chairman			Applications due: 1/15/78		Bachelor's by inst. 1203 Bachelor's by dept. 40 Master's by dept. 25	
Fellowship (5)	2850	9				
Teaching Assistantship (10)	2850-3150	9		15	Teaching	Ph.D. (1974-1977 incl.) S 1, OR 1, CS 3. Total: 5
Research Assistantship (10)	3846-6525	9	558- 3487.50	15	Teaching, research	
Proctorships (4)	2430-2625	9		15	Teaching, research	

TYPE <small>of financial assistance (with number anticipated 1978-1979)</small>	STIPEND <small>amount in dollars</small>	9 or 12 <small>months</small>	TUITION <small>if not included in stipend (dollars)</small>	SERVICE REQUIRED		DEGREES AWARDED <small>Academic year 1976-1977</small>
				hours <small>per week</small>	type <small>of service</small>	
Rhode Island College, Providence 02908						
DEPARTMENT OF MATHEMATICS James T. Sedlock, Chairman			Applications due: 4/1/78		Bachelor's by inst. 880 Bachelor's by dept. 21 Master's by dept. 11	
Teaching Assistantship (3)	2500	9		6		
University of Rhode Island, Kingston 02881						
DEPARTMENT OF MATHEMATICS Gerasimos Ladas, Chairman			Applications due: 4/15/78		Bachelor's by inst. 1978 Bachelor's by dept. 10 Master's by dept. 7	
Fellowship (1)	3000	9				
Teaching Assistantship (12)	3250-3650	9		3-6	Teaching	Ph.D. (1974-1977 incl.) AM 3. Total: 3
DEPARTMENT OF COMPUTER SCIENCE AND EXPERIMENTAL STATISTICS William J. Hemmerle, Chairman			Applications due: 4/15/78		Bachelor's by inst. 1978 Bachelor's by dept. 11 Master's by dept. 7	
Teaching Assistantship (10)	3250-3350	9		20		
Research Assistantship (5)	4030-4540	9*	780-1310	20		
*Additional full-time summer compensation.						

SOUTH CAROLINA

Clemson University, Clemson 29631						
DEPARTMENT OF MATHEMATICAL SCIENCES J.V. Brawley, Acting Head			Applications due: 3/1/78		Bachelor's by inst. 1682 Bachelor's by dept. 47 Master's by dept. 23	
Teaching Assistantship (59)	4030-4290	12	14/hr.	3-6 ^C	Teaching	
Programming Assistantship (12)	4550-5200	12	14/hr.	20	Computer Program- ming	Ph.D. (1974-1977 incl.) A&NT 1, G&T 1, P 2, S 1, OR 1, CS 2. Total: 8
Medical University of South Carolina, Charleston 29401						
DEPARTMENT OF BIOMETRY M. Clinton Miller, Chairman			Applications due: 3/1/78		Bachelor's by inst. 164 Master's by dept. 3	
Fellowship (15)	3960	12	7/qtr. hr.			
Research Assistantship (4)	3960	12	7/qtr. hr.	20		

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For information and application forms write to:

J. V. Brawley, Acting Head
Department of Mathematical Sciences
CLEMSON UNIVERSITY
Clemson, SC 29631

*Program funded in part by National Science Foundation

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TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
Winthrop College, Rock Hill 29730						
DEPARTMENT OF MATHEMATICS Edward P. Guettler, Chairman				Applications due: 5/1/78		Bachelor's by inst. 560 Bachelor's by dept. 20 Master's by dept. 5
Lab Assistantship (1)	2500	9		20		
SOUTH DAKOTA						
South Dakota School of Mines & Technology, Rapid City 57701						
DEPARTMENT OF MATHEMATICS Dean C. Benson, Chairman				Applications due: 4/1/78		Bachelor's by inst. 206 Bachelor's by dept. 27 Master's by dept. 2
Teaching Fellowship (6)	2600-2700	9	9, 10/sem. hr.	4-5	Teaching	
University of South Dakota, Vermillion 57069						
DEPARTMENT OF MATHEMATICS Wayne W. Gutzman, Chairman				Applications due: 3/15/78		Bachelor's by inst. 805 Bachelor's by dept. 19 Master's by dept. 11
Teaching Assistantship (6)	2200	9	*	4 ^C	Teaching	
*Current rate of tuition is \$9.58 per credit hour. Out-of-state is \$55 per credit hour but teaching assistants pay 1/3 of in-state tuition.						
TENNESSEE						
East Tennessee State University, Johnson City 37601						
DEPARTMENT OF MATHEMATICS Lester C. Hartsell, Chairman				Applications due: 4/1/78		Bachelor's by inst. 1681 Bachelor's by dept. 14 Master's by dept. 4
Teaching Assistantship (4)	2097-2250	9	16/qtr. hr.	6		
Memphis State University, Memphis 38152						
DEPARTMENT OF MATHEMATICAL SCIENCES Stanley Franklin, Chairman				Applications due: 3/30/78		Bachelor's by inst. 2877 Bachelor's by dept. 19 Master's by dept. 25
Teaching Assistantship (38)	3050-4050	9		6 ^C	Teaching	
Middle Tennessee State University, Murfreesboro 37132						
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE Harold S. Spraker, Chairman				Applications due: 4/1/78		Bachelor's by inst. 2073 Bachelor's by dept. 23 Master's by dept. 10
Teaching Assistantship (6)	2290-2480	9			Teaching	
Tennessee Technological University, Cookeville 38501						
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE Ralph C. Boles, Chairman				Applications due: 4/1/78		Bachelor's by inst. 875 Bachelor's by dept. 10 Master's by dept. 4
Teaching Assistantship (7)	2385-2610	9		6		
University of Tennessee, Knoxville 37916						
DEPARTMENT OF MATHEMATICS Lida K. Barrett, Head				Applications due: 3/1/78		Bachelor's by inst. 3598 Bachelor's by dept. 34 Master's by dept. 10
Fellowship (1)	3000	12				
Teaching Assistantship (53)	3456-4122	9		6 ^C		
Research Assistantship (2)	5000	9	1400	20		Ph. D. (1974-1977 incl.) A&NT 1, G&T 1, A&FA 3, Other 1. Total: 6
DEPARTMENT OF COMPUTER SCIENCE Robert Todd Gregory, Head				Applications due: 3/1/78		Bachelor's by inst. 3598 Bachelor's by dept. 14 Master's by dept. 21
Fellowship (2)	3000-3500	9				
Teaching Assistantship (14)	3500-3700	9		6 ^C	Teaching	
DEPARTMENT OF STATISTICS Charles Thigpen, Head				Applications due: 3/15/78		Bachelor's by inst. 3598 Bachelor's by dept. 6 Master's by dept. 3
Teaching Assistantship (5)	1900-3800	9		3-6 ^C		
Graduate Assistantship (1)	1800	12		10		
Vanderbilt University, Nashville 37235						
DEPARTMENT OF MATHEMATICS Richard R. Goldberg, Chairman				Applications due: 2/15/78		Bachelor's by inst. 1010 Bachelor's by dept. 75 Master's by dept. 8
Teaching Assistantship (22)	3900			6 ^C	Teaching	Ph. D. (1974-1977 incl.) A&NT 5, G&T 2, A&FA 3, AM 1, Other 3. Total: 14

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION		SERVICE REQUIRED		DEGREES AWARDED	
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1976-1977		
DEPARTMENT OF COMPUTER SCIENCE				Applications due: 2/1/78		Bachelor's by inst. 1010		
Donald J. Rose, Chairman						Bachelor's by dept. 30		
Fellowship (1)				3000-6000	9			Master's by dept. 2
Teaching Assistantship (12)				1500-6000	9	10	Teaching	Ph.D. (1974-1977 incl.)
Scholarship (10)								CS 4. Total: 4

TEXAS

Baylor University, Waco 76703

DEPARTMENT OF MATHEMATICS				Applications due: 3/15/78		Bachelor's by inst. 1600		
Howard Roof, Chairman						Bachelor's by dept. 25		
Fellowship (2)				1500-2500	9	12		Master's by dept. 2
Teaching Assistantship (4)				1800-3000	9	3-6		
Research Assistantship (1)				2000-2500	9	12		

East Texas State University, Commerce 75428

DEPARTMENT OF MATHEMATICS				Applications due: 4/15/78		Bachelor's by inst. 1414			
Dale R. Bedgood, Head						Bachelor's by dept. 80			
Teaching Assistantship (12)				3366	9	130	6/sem. hrs.	Teaching	Master's by dept. 16

Lamar University, Beaumont 77710

DEPARTMENT OF MATHEMATICS				Applications due: 2/1/78		Bachelor's by inst. 1777			
Richard Alo, Head						Bachelor's by dept. 14			
Teaching Assistantship (5)				4000	9	150-600	6 ^c		Master's by dept. 6

Midwestern University, Wichita Falls 76308

DEPARTMENT OF MATHEMATICAL SCIENCES				Applications due: 5/1/78		Bachelor's by inst. 428			
Louie C. Huffman, Chairman						Bachelor's by dept. 3			
Teaching Assistantship (6)				3050	9	*	6 ^c	Teaching	Master's by dept. 3

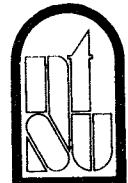
*\$101.50 for 6 hours.

North Texas State University, Denton 76203

DEPARTMENT OF MATHEMATICS				Applications due: 3/1/78		Bachelor's by inst. 2058			
John Ed Allen, Chairman						Bachelor's by dept. 21			
Teaching Fellowship (12)				3780-4800	9	50	6 ^c	Teaching	Master's by dept. 14
						Ph.D. (1974-1977 incl.)			
						G&T 1, A&FA 4. Total: 5			

THE DEPARTMENT OF MATHEMATICS OF NORTH TEXAS STATE UNIVERSITY

The Department of Mathematics, with a faculty of 17, offers graduate courses of instruction leading to the M.A., M.S., and Ph.D. degrees in mathematics. The department has positions for 24-30 teaching fellows who teach two three-hour classes each semester. The library currently subscribes to 572 mathematical journals, has 388 complete runs, and 729 journal titles represented. The research and teaching interests of the faculty are varied so that the students studying for a graduate degree are able to take substantial courses in core areas of mathematics as well as gain significant exposure to applied areas. The faculty establishes a close working relationship with the students in order to enhance the learning and doing of mathematics, and to lead the student to the frontier of important mathematical research.



North Texas
State
University
Denton, Texas
76203
AC817-788-2155

TEACHING FELLOWSHIP STIPEND: \$3780 FOR STUDENTS WITHOUT A
MASTER'S DEGREE

\$4200 FOR STUDENTS WITH A
MASTER'S DEGREE

THE DEPARTMENT WILL ALSO AWARD FOUR SPECIAL MERIT TEACHING FELLOWSHIPS
WHICH WILL PAY \$600 MORE THAN THE REGULAR TEACHING FELLOWSHIP.

COMMITTEE ON TEACHING FELLOWSHIPS: JOHN W. NEUBERGER, R. DANIEL MAULDIN,
DAVID F. DAWSON, W. D. L. APPLING,
PAUL W. LEWIS

WRITE TO: JOHN ED ALLEN, CHAIRMAN OF MATHEMATICS DEPARTMENT

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
Pan American University, Edinburg 78539						
DEPARTMENT OF MATHEMATICS John Spellmann, Head			Applications due: 5/1/78		Bachelor's by inst. 986 Bachelor's by dept. 12	
Teaching Assistantship (8)	3960	9	*	6 ^C		
*\$113 per semester for 12 hours.						
Rice University, Houston 77001						
DEPARTMENT OF MATHEMATICS R. O. Wells, Jr., Chairman			Applications due: 3/15/78		Bachelor's by inst. 641 Bachelor's by dept. 14 Master's by dept. 3	
Fellowship (20)	3000-5000	9		6		
Research Assistantship (3)	4000	12		6		
Scholarship (5)		9			Ph. D. (1974-1977 incl.) A&NT 1, G&T 3, A&FA 3. Total: 7	
Sam Houston State University, Huntsville 77340						
DEPARTMENT OF MATHEMATICS Glen E. Mattingly, Chairman					Bachelor's by inst. 1142 Bachelor's by dept. 17 Master's by dept. 7	
Teaching Assistantship (7)	3287	9	140/sem.	15 6 sem. hrs. teaching		
Southern Methodist University, Dallas 75275						
DEPARTMENT OF MATHEMATICS G. Milton Wing, Chairman			Applications due: 2/15/78		Bachelor's by inst. 1340 Bachelor's by dept. 12 Master's by dept. 1	
Teaching Fellowship (6)	2200*	9	131/sem. hr.	6 ^C Teaching		
*Plus tuition.						
DEPARTMENT OF COMPUTER SCIENCE David W. Matula, Head			Applications due: 4/1/78		Bachelor's by inst. 1340 Bachelor's by dept. 12 Master's by dept. 13	
Teaching Assistantship (7)	350-400/mo.	9	*	20		
Research Assistantship (8)	350-400/mo.	9	*	20	Ph. D. (1974-1977 incl.) CS 6. Total: 6	
*\$131.10 per semester hour or 1179.90 for 9 hours.						
DEPARTMENT OF STATISTICS D. B. Owen, Chairman			Applications due: 4/1/78		Bachelor's by inst. 1340 Master's by dept. 8	
Fellowship (12)	3500-6000	9		General	Ph. D. (1974-1977 incl.) S 9. Total: 9	
Teaching Assistantship (14)	3500-6000	9		3 Teaching		
Research Assistantship (5)	5000-7500	12		Research		
Scholarship (4)	3500	9		General		
Southwest Texas State University, San Marcos 78666						
DEPARTMENT OF MATHEMATICS Robert Northcutt, Chairman			Applications due: 3/1/78		Bachelor's by inst. 2291 Bachelor's by dept. 55 Master's by dept. 11	
Teaching Assistantship (8-10)	4302	9	198/sem.	9 Teaching, research		
Stephen F. Austin State University, Nacogdoches 75961						
DEPARTMENT OF MATHEMATICS AND STATISTICS W. I. Layton, Head			Applications due: *		Bachelor's by inst. 1176 Bachelor's by dept. 22 Master's by dept. 3	
Teaching Assistantship (17)	1650-3300	9	**	6 ^C		
*As early as possible.						
**\$145 per semester for 12 hours.						
Texas A & I University, Kingsville 78363						
DEPARTMENT OF MATHEMATICS Virgil C. Kowalik, Chairman			Applications due: 4/15/78		Bachelor's by inst. 734 Bachelor's by dept. 8 Master's by dept. 6	
Teaching Assistantship (8)	3888	9	*	20 Teaching		
*Resident: \$122.50 for nine hours; nonresident: increment is waived for those teaching six hours or more.						
Texas A & M University, College Station 77843						
DEPARTMENT OF MATHEMATICS G. R. Blakley, Head			Applications due: 3/1/78		Bachelor's by inst. 3209 Bachelor's by dept. 14 Master's by dept. 1	
Teaching Assistantship (105)	4050-4500	9	50	20 Teaching	Ph. D. (1974-1977 incl.) A&NT 1, G&T 1, Other 1. Total: 3	

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
INSTITUTE OF STATISTICS W. B. Smith, Director						Bachelor's by inst. 3209 Bachelor's by dept. 25
Graduate Assistantship (6)	4050-4500	9*	200/sem.	15-20	Teaching, non- contact	Ph.D. (1974-1977 incl.) S 25. Total: 25
Teaching Assistantship (23)	4050-4500	9*	200/sem.	15-20	Teaching	
Research Assistantship (6)	4050-4500	9*	200/sem.	15-20	Research	
*Continuation through summer normally available.						
Texas Christian University, Fort Worth 76129						
DEPARTMENT OF MATHEMATICS Landon A. Colquitt, Chairman			Applications due: 3/1/78			Bachelor's by inst. 951 Bachelor's by dept. 22 Master's by dept. 2
Fellowship (4)	3600-4200	12				
Teaching Assistantship (4)	2200-3000	9		4-6 ^C	Teaching	Ph.D. (1974-1977 incl.)
Scholarship (2)				4	Research	A&NT 3, A&FA 1. Total: 4
Computer Center Traineeship (3)	3000	9*		20	Computer Center	
*Summer appointments available at additional \$1000.						
Texas Tech University, Lubbock 79409						
DEPARTMENT OF MATHEMATICS J. D. Tarwater, Chairman			Applications due: *			Bachelor's by inst. 2401 Bachelor's by dept. 11 Master's by dept. 14
Teaching Assistantship (37)	3500-4300	9	**	6	Teaching	Ph.D. (1974-1977 incl.)
Part-Time Instructor with Master's Degree (15)	3700-4500	9	**	6	Teaching	A&NT 2, A&FA 2, S 7, AM 1. Total: 12
* No formal deadline. Desirable filing date for Fall is 4/1/78. **\$4.00 per semester hour or minimum of \$50.						
University of Houston, Houston 77089						
DEPARTMENT OF MATHEMATICS J. N. Younglove, Chairman			Applications due: 3/1/78*			Bachelor's by inst. 2868 Bachelor's by dept. 56 Master's by dept. 7
Teaching Fellowship (35)	3500-4100	9			Teaching 2 courses each semester	Ph.D. (1974-1977 incl.) A&NT 3, G&T 7, A&FA 5, P 1, AM 1. Total: 17
*Late applications considered if funds are available.						
University of Texas at Arlington 76019						
DEPARTMENT OF MATHEMATICS V. Lakshmikantham, Chairman			Applications due: 3/1/78			Bachelor's by inst. 2011 Bachelor's by dept. 50 Master's by dept. 6
Teaching Assistantship (30)	3060-4572	9	145/sem.	6	Teaching	Ph.D. (1974-1977 incl.) A&FA 3. Total: 3
University of Texas at Austin 78712						
DEPARTMENT OF MATHEMATICS James Daniel, Chairman			Applications due: 2/15/78			Bachelor's by inst. 7240 Bachelor's by dept. 76 Master's by dept. 18
Teaching Fellowship (2 or 3)	5000					
Teaching Assistantship (90)	3600-4500	9	150	4-6 ^C	Recitation section and related duties	Ph.D. (1974-1977 incl.) A&NT 2, G&T 2, L 1, A&FA 6, S 1, OR 2. Total: 14
DEPARTMENT OF COMPUTER SCIENCE Raymond T. Yeh, Chairman			Applications due: 2/1/78			Bachelor's by inst. 7240 Bachelor's by dept. 66 Master's by dept. 7
Fellowship (1-2)	3000	9				
Teaching Assistantship (12-15)	3500-4750	9	*	20	Teaching	Ph.D. (1974-1977 incl.)
Research Assistantship (12-15)	3500-4500	9	*	20	Research	CS 16. Total: 16
*Resident approximately \$175.						
University of Texas at Dallas, Richardson 75080						
DEPARTMENT OF MATHEMATICAL SCIENCES John W. Van Ness, Head			Applications due: Open			Bachelor's by inst. 314 Bachelor's by dept. 20 Master's by dept. 18
Teaching Assistantship (20)	402- 429.50/mo.	9*	50/sem.	20		
Research Assistantship (8)	363.50- 389/mo.	9*	50/sem.	20		
*12 months possible.						

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
				hours per week	type of service	
University of Texas at El Paso 79968						
DEPARTMENT OF MATHEMATICS John A. Narvarte, Chairman			Applications due: 4/1/78		Bachelor's by inst. 1351 Bachelor's by dept. 14 Master's by dept. 1	
Teaching Assistantship (4)	3600-3800	9		15		
West Texas State University, Canyon 79015						
DEPARTMENT OF MATHEMATICS Kenneth Van Doren, Head			Applications due: 4/1/78		Bachelor's by inst. 794 Bachelor's by dept. 12 Master's by dept. 4	
Teaching Assistantship (5)	3492-3600	9	60/sem.	6 ^C	Teaching	
UTAH						
Brigham Young University, Provo 84602						
DEPARTMENT OF MATHEMATICS Peter L. Crawley, Chairman			Applications due: 3/1/78		Bachelor's by inst. 2462 Bachelor's by dept. 27 Master's by dept. 3	
1/4 Teaching Assistantship } (38)	1700-3800	9	585-765/sem.	10		
1/2 Teaching Assistantship }						
Research Assistantship (3)		9	585-765/sem.	10		
Scholarship (22)	200-1000	9	585-765/sem.			
Supplementary Award (2)	585-765/sem.					
DEPARTMENT OF STATISTICS H. Gill Hilton, Chairman			Applications due: 3/15/78		Bachelor's by inst. 2462 Bachelor's by dept. 3 Master's by dept. 4	
Fellowship (1)	2400	10	645/sem.	10	Research	
Teaching Assistantship (9)	3700-5500	12	645/sem.	20	Teaching or research	
University of Utah, Salt Lake City 84112						
DEPARTMENT OF MATHEMATICS Hugo Rossi, Chairman			Applications due: 2/15/78		Bachelor's by inst. 2640 Bachelor's by dept. 48 Master's by dept. 10	
Teaching Fellowship (30)	4500-4950	9		6-7 ^C		
Teaching Assistantship (10)	4500-4950	9		6-7 ^C		Ph.D. (1974-1977 incl.) A&NT 1, G&T 5, A&FA 7, P 2, Other 4, Total: 19
Utah State University, Logan 84322						
DEPARTMENT OF MATHEMATICS L. O. Cannon, Chairman			Applications due: 3/15/78		Bachelor's by inst. 1376 Bachelor's by dept. 6 Master's by dept. 7	
Teaching Assistantship (15)	2850-4800	9	561/yr.	5-10 ^C		
VERMONT						
University of Vermont, Burlington 05401						
DEPARTMENT OF MATHEMATICS Donald E. Moser, Chairman			Applications due: 3/1/78		Bachelor's by inst. 1727 Bachelor's by dept. 43 Master's by dept. 4	
Teaching Fellowship (11)	3400	9		18	Teaching	Ph.D. (1974-1977 incl.) A&FA 1, AM 1, Other 1. Total: 3
DEPARTMENT OF STATISTICS David L. Sylwester, Director			Applications due: 3/1/78		Bachelor's by inst. 2000	
Teaching Fellowship (2)	1600-3200	9		10-20	Teaching	
Research Assistantship (4)	2500-5100	12	800	10-20	Research	
Scholarship (1)	3900	12				
Wages (1)	4/50/hr.		800			
VIRGINIA						
George Mason University, Fairfax 22030						
DEPARTMENT OF MATHEMATICS John A. Oppelt, Chairman			Applications due: 7/1/78		Bachelor's by inst. 993 Bachelor's by dept. 14 Master's by dept. 2	
Teaching Assistantship (2)	3400	9	*	20	Teaching	
*In-state: \$32 per credit hour; out-of-state: \$62 per credit hour.						
James Madison University, Harrisonburg 22801						
DEPARTMENT OF MATHEMATICS W. M. Sanders, Head			Applications due: 4/15/78		Bachelor's by inst. 1250 Bachelor's by dept. 25 Master's by dept. 7	
Teaching Assistantship (8)	3200	9		6	Teaching	

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	

University of Virginia, Charlottesville 22903

DEPARTMENT OF MATHEMATICS
Robert Stong, Chairman

Applications due: 2/1/78

Bachelor's by inst. 2261
Bachelor's by dept. 42
Master's by dept. 4
Ph.D., (1974-1977 incl.)
A&NT 5, G&T 5, A&FA 2,
Total: 12

Fellowship (5)	6000	9	*		
Teaching Fellowship (10)	4000-6000	9	*		
Teaching Assistantship (25)	4200-5174	9	*	3 ^C 6 ^C	

*In-state: \$864; out-of-state: \$1939.

DEPARTMENT OF APPLIED MATHEMATICS
AND COMPUTER SCIENCE

Applications due: 2/1/78

Bachelor's by inst. 2261
Bachelor's by dept. 14
Master's by dept. 11
Ph.D., (1974-1977 incl.)
CS 5, AM 4, Total: 9

J. E. Mann, Jr., Acting Chairman

Fellowship (4)	2700	9			
Teaching Assistantship (18)	3044-4059	9	*	15-20	
Research Assistantship (9)	2000-4400	9	*	15-20	

*Resident: \$874; Nonresidents \$1872.
Fellowships pay tuition and fees.

Virginia Commonwealth University, Richmond 23284

DEPARTMENT OF MATHEMATICAL SCIENCES
William Haver, Chairman

Bachelor's by inst. 1895
Bachelor's by dept. 19
Master's by dept. 9

Fellowship, Supplementary (3-5)	250-350				
Teaching Assistantship (10)	3500	9	*	6 ^C	
Supplementary Aid (4-7)	600-1000	9			

Teaching
Help sessions,
computer
labs,
statistics
labs

*Resident: \$831; nonresident: \$1151.

Virginia Commonwealth University, Medical College of Virginia, Richmond 23298

DEPARTMENT OF BIostatISTICS
S. James Kilpatrick, Chairman

Applications due: 4/1/78

Bachelor's by inst. 1800
Master's by dept. 1
Ph.D., (1974-1977 incl.)
S 6, Total: 6

Fellowship (1)	3000	12		20	
Teaching Assistantship (5)	3000-3900	12		20	

UNIVERSITY OF VIRGINIA
-GRADUATE STUDY IN MATHEMATICS-

PROGRAMS: The University of Virginia offers diverse courses of study leading to the M. A., M.S., or Ph.D. in pure and applied mathematics as well as computer science.

FINANCIAL AID: Both teaching assistantships and a substantial fellowship program are available.

LOCATION: The University, founded by Thomas Jefferson in 1819, is located about 100 miles southwest of Washington, D.C. in the foothills of the Blue Ridge Mountains.

J.E. Mann, Chairman
Department of Applied Mathematics
and Computer Science

For information write to:
University of Virginia
Charlottesville, Va. 22903

R.E. Stong, Chairman
Department of Mathematics

MASTERS IN THE MATHEMATICAL SCIENCES

MATHEMATICS, COMPUTER SCIENCE, STATISTICS

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The Department of Mathematical Sciences at Virginia Commonwealth University offers a flexible program tailored to the needs of individual students. Students may work toward the M.S. degree in mathematics with concentration in computer science, statistics, mathematics, applied mathematics or in combinations of these areas, or toward the M.Ed. degree in mathematics education.

For further information write:

Dr. James Deveney
Department of Mathematical Sciences
Virginia Commonwealth University
Richmond, Virginia 23284

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months		hours per week	type of service	
Virginia Polytechnic Institute and State University, Blacksburg 24061						
DEPARTMENT OF MATHEMATICS C. Wayne Patty, Head			Applications due: 4/1/78		Bachelor's by inst. 3211 Bachelor's by dept. 25 Master's by dept. 8	
Teaching Assistantship (37)	4005-4410	9	717	6 ^c	Teaching	Ph.D. (1974-1977 incl.) A&NT 1, G&T 4, AM 2. Total: 7
DEPARTMENT OF COMPUTER SCIENCE Richard E. Nance, Head			Applications due: 2/1/78		Bachelor's by inst. 3211 Bachelor's by dept. 53 Master's by dept. 22	
Teaching Assistantship (20)	4005-4455	9	239	20	Teaching	
Research Assistantship (4)	5350-6000	12	239	20	Research	
DEPARTMENT OF STATISTICS Jesse C. Arnold, Head			Applications due: 1/31/78		Bachelor's by inst. 3211 Bachelor's by dept. 11 Master's by dept. 13	
Teaching Assistantship (23)	445-490	9	254/qtr.	20	Teaching	
Research Assistantship (8)	445-490	12	254/qtr.	20	Research	Ph.D. (1974-1977 incl.) S 12. Total: 12
Virginia State College, Petersburg 23803						
DEPARTMENT OF MATHEMATICS Loretta M. Braxton, Chairperson			Applications due: 5/15/78		Bachelor's by inst. 638 Bachelor's by dept. 12 Master's by dept. 7	
General Assistantship (2 to 5)	2400-3600	9	*			
*In-state: \$800; out-of-state: \$1200.						
WASHINGTON						
Eastern Washington State College, Cheney 99004						
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE Donald R. Horner, Chairman			Applications due: 3/1/78		Bachelor's by inst. 1226 Bachelor's by dept. 27 Master's by dept. 2	
Teaching Assistantship (2)	3450*	9	651/yr. *	15		
*1977-78 figures.						
University of Washington, Seattle 98195						
DEPARTMENT OF MATHEMATICS J. Segal, Chairman			Applications due: 2/15/78		Bachelor's by inst. 5567 Bachelor's by dept. 143 Master's by dept. 12	
Teaching Fellowship (1)	5951	12	961	10	Teaching	
Teaching Assistantship (6)	4869-5431	9	741	20*	Teaching	Ph.D. (1974-1977 incl.)
Research Assistantship (2)	4410-4977	9	741		Research	A&NT 3, G&T 5, A&FA 3, P 1, S 4, CS 2. Total: 18
*4 to 6 hours in class plus office hours and preparation time.						
DEPARTMENT OF BIostatISTICS Donovan J. Thompson, Chairman			Applications due: 7/1/78		Bachelor's by inst. 5567 Master's by dept. 13	
THE BIOMATHEMATICS GROUP Richard A. Kronmal, Chairman					Ph.D. (1974-1977 incl.) Other 13. Total: 13	
Fellowship (17)	3900	12				
Teaching Assistantship (10)	4869-5481	9	247/qtr.	20	Teaching	
Research Assistantship (19)	5880-6636	12	247/qtr.	20	Research	
Postdoctoral Fellowship (5)	10000-14000	12				
Washington State University, Pullman 99164						
DEPARTMENT OF PURE AND APPLIED MATHEMATICS Calvin T. Long, Chairman			Applications due: 2/78		Bachelor's by inst. 2694 Bachelor's by dept. 21 Master's by dept. 8	
Teaching Assistantship (30)	4875-5175	9	741	20		Ph.D. (1974-1977 incl.)
Research Assistantship (1)	5625	12	741	20		A&NT 3, G&T 1, A&FA 1, AM 3. Total: 8
DEPARTMENT OF COMPUTER SCIENCE George Marsaglia, Chairman			Applications due: 3/1/78		Bachelor's by inst. 2694 Bachelor's by dept. 20 Master's by dept. 9	
Teaching Assistantship (14)	3656-5175	9	740	20	Teaching	
Staff Assistantship (6)		9	740	20	Consulting	Ph.D. (1974-1977 incl.) CS 7. Total: 7
Western Washington State University, Bellingham 98225						
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE R. W. Chaney, Chairman			Applications due: 4/1/78		Bachelor's by inst. 1487 Bachelor's by dept. 45 Master's by dept. 7	
Teaching Assistantship (4)	1131/qtr.	9	228/qtr.	10-15	Teaching	

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
				hours per week	type of service	

WEST VIRGINIA

Marshall University, Huntington 25701

DEPARTMENT OF MATHEMATICS Steven Hatfield, Acting Chairman			Applications due: 4/1/78		Bachelor's by inst.	1094
Teaching Assistantship (5-8)			1980-2430	9	Bachelor's by dept.	3
			6 ^c	Teaching	Master's by dept.	4

West Virginia University, Morgantown 26506

DEPARTMENT OF MATHEMATICS I.D. Peters, Chairman			Applications due: 3/1/78		Bachelor's by inst.	545
Teaching Assistantship (18)			2628-2844	9	Bachelor's by dept.	13
			10	Teaching	Master's by dept.	5

DEPARTMENT OF STATISTICS AND COMPUTER SCIENCE Donald F. Butcher, Chairman			Applications due: 3/15/78		Bachelor's by inst.	545
Teaching Assistantship (10)			2628-2844	9	Bachelor's by dept.	23
Research Assistantship (3)			3000-3600	12	Master's by dept.	7

12 Teaching
14 Statistical
Analysis,
Computer
Program-
ming

WISCONSIN

Marquette University, Milwaukee 53233

DEPARTMENT OF MATHEMATICS AND STATISTICS W. E. Lawrence, Chairman			Applications due: 2/15/78		Bachelor's by inst.	1266
Teaching Assistantship (10)			3200-3600	9	Bachelor's by dept.	18
Research Assistantship (2)			3200	9	Master's by dept.	7
Scholarship *			2280	9		
Tuition Scholarship**			95-570			

*Limited number available.
**A total of 24 hours available; usually given as 1-3 hours per student each semester and in the summer session.

University of Wisconsin-Eau Claire 54701

DEPARTMENT OF MATHEMATICS Lawrence Wahlstrom, Chairman			Applications due: 3/1/78		Bachelor's by inst.	1184
Fellowship (3)*			500	9	Bachelor's by dept.	27
Research Assistantship (20)*			3000-3500	9	Master's by dept.	5

*Total grants of 23 for School of Graduate Studies, any number of which may be awarded to mathematics students by the Dean.
**Resident: \$856 per year; nonresident: \$2554 per year for nine or more credits.

University of Wisconsin, Madison 53706

DEPARTMENT OF MATHEMATICS Joshua Chover, Chairman			Applications due: 12/15/77		Bachelor's by inst.	4834
Fellowship (10)			4284-5544	9-12	Bachelor's by dept.	44
Teaching Assistantship (150)			4322-6988	9	Master's by dept.	29
Research Assistantship (3)			4284-5232	9-12		

*NSF Fellows have this paid.

Ph.D. (1974-1977 incl.)
A&NT 15, G&T 12, L 9,
A&FA 17, P 6, AM 2,
Other 4. Total: 65

THE DEPARTMENT OF PURE AND APPLIED MATHEMATICS
WASHINGTON STATE UNIVERSITY

offers graduate degrees of three types:

1. M.A., Ph.D. (traditional);
2. M.A., Ph.D. (special preparation for nonacademic careers; curricula, featuring modeling seminars, interdisciplinary course work, internships, being developed in NSF-supported Service-Oriented Options [SOO] project);
3. D.A. (preparation for careers in undergraduate teaching; emphasis on breadth rather than research; teaching internships).

Teaching assistantships carry a stipend of \$4875 and up. Other awards available.
For further information, write:

Mathematics
Washington State University
Pullman, WA 99164

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	
DEPARTMENT OF STATISTICS G. Bhattacharyya, Chairman			Applications due: 1/15/78			Bachelor's by inst. 4834 Bachelor's by dept. 4 Master's by dept. 19
Teaching Assistantship (30)	5405-5990	9	1038	20	Teaching	Ph.D. (1974-1977 incl.) S 24. Total: 24
Research Assistantship (24)	4284	9	1038	20	Research	

University of Wisconsin-Milwaukee 53201

DEPARTMENT OF MATHEMATICS L.A. Skinner, Chairman			Applications due: 2/15/78			Bachelor's by inst. 2552 Bachelor's by dept. 15 Master's by dept. 9
Fellowship (2)	4200	9-12	*			Ph.D. (1974-1977 incl.) A&NT 6, A&FA 6, S 1, AM 1. Total: 14
Teaching Assistantship (40)	5800-6100	9	*	20	Teaching	
Advanced Opportunity Fellowship (2)	5500	12	*			

*Resident: \$526; nonresident: \$1643. Out-of-state tuition waived for out-of-state Teaching Assistants, Research Assistants and Fellows.

University of Wisconsin-River Falls 54022

DEPARTMENT OF MATHEMATICS Lillian Gough, Chairman			Applications due: 2/15/78			Bachelor's by inst. 484 Bachelor's by dept. 11 Master's by dept. 3
Teaching Assistantship (3)	2800-3000	9	1000	15	*	

*Freshman mathematics, help sessions or work in Computer Center.

WYOMING

University of Wyoming, Laramie 82071

DEPARTMENT OF MATHEMATICS Joseph Martin, Chairman			Applications due: 3/15/78			Bachelor's by inst. 1283 Bachelor's by dept. 8 Master's by dept. 4
Teaching Assistantship (18)	3600-4800	9	117	18		Ph.D. (1974-1977 incl.) A&NT 1, G&T 1, A&FA 1, AM 2, Other 1. Total: 6

DEPARTMENT OF COMPUTER SCIENCE J.H. Rowland, Head			Applications due: 3/1/78			Bachelor's by inst. 1283 Bachelor's by dept. 6
Teaching Assistantship (3)	3600	9	234	18		
Research Assistantship (1)	3600	9	234	18		

DEPARTMENT OF STATISTICS Donald A. Anderson, Acting Head			Applications due: 3/1/78			Bachelor's by inst. 1283 Bachelor's by dept. 4 Master's by dept. 2
Teaching Assistantship (7)	3600	9	117/sem.	18		Ph.D. (1974-1977 incl.) S 1. Total: 1
Research Assistantship (8)	3600	9*	117/sem.	18		

*Most of these carry summer wages also.

CANADA

Carleton University, Ottawa, Ontario K1S 5B6

DEPARTMENT OF MATHEMATICS Louis D. Nel, Chairman			Applications due: 3/15/78			Bachelor's by inst. 2021 Bachelor's by dept. 29 Master's by dept. 12
Scholarship and Teaching						
Assistantship (15)	5500-6500	12	2400	8-10	Teaching	Ph.D. (1974-1977 incl.) A&NT 5, G&T 1, A&FA 1, P 3, S 1. Total: 11
Combined Teaching Assistantship/ Research Assistantship (25)	3500-7500	12	997.50	10	Teaching, research	

CARLETON UNIVERSITY, OTTAWA, CANADA

The Department of Mathematics offers programmes leading to M.Sc. and Ph.D. degrees in Mathematics, Statistics or Probability Theory both on a part-time and full-time basis. A number of Scholarships and Teaching/Research Assistantships ranging in value from \$3500 to \$7500 are available for qualified applicants. The Department also offers a cooperative Master's Program in Statistics in collaboration with Agencies of the Federal Government of Canada. Carleton's presence in Canada's capital has permitted the department to maintain a close relationship with researchers in such Federal Government Agencies as Statistics Canada, National Research Council, Environment Canada and Agriculture Canada. Areas of concentration of the Graduate Program include Algebra and Number Theory, Analysis, Geometry and Topology, Applied Mathematics, Information Science, Pure and Applied Probability and Statistics. For additional information and application forms, write to:

Graduate Supervisor
Department of Mathematics
Carleton University
Ottawa, Ontario, Canada
K1S 5B6

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION		SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount	9 or 12	if not included	hours	type		
	in dollars	months	in stipend (dollars)	per week	of service		
Concordia University, Montreal, Quebec H3G 1M8							
DEPARTMENT OF MATHEMATICS W. P. Byers, Chairman			Applications due: 2/1/78			Bachelor's by inst. 2768 Bachelor's by dept. 65 Master's by dept. 21	
Fellowship (3)	5000-7000	12	600				
Teaching Fellowship (5)	5000-7000	12	600	5	Teaching		
Teaching Assistantship (8)	5000-5500	12	600	10	Teaching		
Research Assistantship (5)	4000-5000	12	600	10	Research		
Scholarship (5)	2000-4000	12	600				
Dalhousie University, Halifax, Nova Scotia B3H 4H8							
DEPARTMENT OF MATHEMATICS P. Stewart, Chairman			Applications due: 4/30/78			Bachelor's by inst. 812 Bachelor's by dept. 59 Master's by dept. 9	
Teaching Assistantship (15)	3000-5500	12	800	3 ^c	Teaching		
Scholarship (4)	4000-6500	12	800			Ph.D. (1974-1977 incl.) A&NT 3, G&T 1, S 2, OR 2. Total: 8	
Lakehead University, Thunder Bay, Ontario P7B 5E1							
DEPARTMENT OF MATHEMATICAL SCIENCES Clement F. Kent, Chairman			Applications due: 3/1/78			Bachelor's by inst. 877 Bachelor's by dept. 10 Master's by dept. 1	
Teaching Assistantship (6)	2000-3500	12	750	6-10	Tutoring, marking papers		
McGill University, Montréal, Québec H3C 3G1							
DEPARTMENT OF MATHEMATICS E. Rosenthal, Chairman			Applications due: 3/1/78			Bachelor's by inst. 1431 Bachelor's by dept. 85 Master's by dept. 7	
Fellowship (4)	2000-6500	9	678.50				
Teaching Assistantship (10)	4207-8414	9	678.50	3-6		Ph.D. (1974-1977 incl.) A&NT 3, A&FA 1, S 1, Total: 5	
Research Assistantship (15)	6000	12	678.50	6			
Demonstratorship (60)	725-2120	9	678.50	3-6			
McMaster University, Hamilton, Ontario L8S 4K1							
DEPARTMENT OF MATHEMATICS C. R. Riehm						Bachelor's by inst. 1682 Bachelor's by dept. 17 Master's by dept. 4	
Teaching Assistantship (23)	2600-3380	12	879	8-10	Tutoring, marking papers		
Scholarship (5)	6000-7000					Ph.D. (1974-1977 incl.) A&NT 1, G&T 5, A&FA 7, P 2. Total: 15	
Queen's University at Kingston, Kingston, Ontario K7L 3N6							
DEPARTMENT OF MATHEMATICS A. J. Coleman, Head			Applications due: 3/1/78			Bachelor's by inst. 1416 Bachelor's by dept. 20 Master's by dept. 7	
Fellowship (10)	4500-5400	12	750-1950	10	Teaching		
Teaching Fellowship (20)	1800-3000	12	750-1950	10	Teaching	Ph.D. (1974-1977 incl.) A&NT 4, L 1, A&FA 5, S 1. Total: 11	
Teaching Assistantship (10)	1200-1800	12	750-1950	10	Teaching		
Scholarship (6)	2500-3800	12	750-1950	10	Teaching		
Simon Fraser University, Burnaby, British Columbia V5A 1S6							
DEPARTMENT OF MATHEMATICS N. R. Reilly, Chairman			Applications due: 5/1/78			Bachelor's by inst. 815 Bachelor's by dept. 24 Master's by dept. 8	
Teaching Assistantship (25)	4370-5320	8*	**	15	Teaching		
Research Assistantship (5)	5400	12	**		Research	Ph.D. (1974-1977 incl.) L 2, AM 4. Total: 6	
Scholarship (2)	5000	12	**				
*Financial support extendable to 12 months with research assistantship (an additional \$1800). **Raised by \$60 per semester during either the 4th, 6th or 9th semester depending on the programme.							
Université de Moncton, Moncton, New Brunswick E1A 3E9							
DEPARTMENT OF PHYSICS AND MATHEMATICS Francis Weil, Chairman			Applications due: 7/78			Bachelor's by inst. 500 Bachelor's by dept. 4 Master's by dept. 1	
Teaching Assistantship (2)	3500-4500	12	600	6 ^c	Teaching		
University of Alberta, Edmonton, Alberta T6E 2H1							
DEPARTMENT OF MATHEMATICS M. S. Klamkin, Chairman			Applications due: Open			Bachelor's by inst. 3507 Master's by dept. 2	
Teaching Assistantship (20)	4500-5500	9	625	12	Labs	Ph.D. (1974-1977 incl.) A&NT 1, G&T 3, A&FA 4, Total: 8	

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	
DEPARTMENT OF COMPUTING SCIENCE			Applications due: 4/30/78			Bachelor's by inst. 3507
J. Tartar, Chairman						
Teaching Assistantship (30)	4140-6270	8		12	Teaching	Bachelor's by dept. 34
Research Assistantship (3)	4030-5300	8		12	Research	Master's by dept. 3
Summer Research Assistantship (11)	1550					Ph.D. (1974-1977 incl.) CS 12. Total: 12
University of British Columbia, Vancouver, British Columbia V6T 1W5						
DEPARTMENT OF MATHEMATICS			Applications due: 5/31/78			Bachelor's by inst. 3055
Donald Bures, Head						
Teaching Assistantship (30)	4200-4500	9	660	12	Teaching, marking	Bachelor's by dept. 41 Master's by dept. 4
Ph.D. (1974-1977 incl.) A&NT 1, L 1, A&FA 2, S 1, AM 5. Total: 10						
DEPARTMENT OF COMPUTER SCIENCE			Applications due: 4/1/78			Bachelor's by inst. 3055
Paul Gilmore, Head						
Teaching Assistantship (14)	4280	8		12	Teaching	Bachelor's by dept. 39
Research Assistantship (5)	3360-3600	8		12	Research	Master's by dept. 2
Ph.D. (1974-1977 incl.) CS 3. Total: 3						
University of Calgary, Calgary, Alberta T2N 1N4						
DEPARTMENT OF MATHEMATICS AND STATISTICS						Bachelor's by inst. 1922
E. C. Milner, Head						
Teaching Assistantship (36)	2050-2600	4		12		Bachelor's by dept. 23
Research Assistantship (18)	1625	4		12		Master's by dept. 3
Scholarship (6)						Ph.D. (1974-1977 incl.) G&T 2, A&FA 2, AM 4, Other 3. Total: 11
DEPARTMENT OF COMPUTER SCIENCE			Applications due: 7/2/78			Bachelor's by inst. 1922
A. W. Colijn, Head						
Teaching Assistantship (10)	4100-5200	8		12	Teaching	Bachelor's by dept. 15
Research Assistantship (8)	1700	4			Research	Master's by dept. 2
Scholarship *						
*No departmental scholarships, but a number of University-wide scholarships with closing dates mainly in early February.						
University of Guelph, Guelph, Ontario N1G 2W1						
DEPARTMENT OF MATHEMATICS AND STATISTICS						Bachelor's by inst. 2000
J. A. R. Holbrook, Chairman						
Teaching Assistantship (6-12)	4950	12	250/sem.	10	Teaching	Bachelor's by dept. 10
Research Assistantship (2-4)	1700	3	250/sem.	10	Research	Master's by dept. 6
Sessional Lecturer (2-4)	8400	9	250/sem.	37	Teaching	
University of Manitoba, Winnipeg, Manitoba R3T 2N2						
DEPARTMENT OF MATHEMATICS			Applications due: 10/13/78			Bachelor's by inst. 3845
N. S. Mendelsohn, Chairman						
Teaching Assistantship (5)	4000-4500	9		3	Tutorial	Bachelor's by dept. 37
Research Assistantship (5)	4000-4500	9		3	Grading	Master's by dept. 2
Ph.D. (1974-1977 incl.) A&NT 5, G&T 2, A&FA 1, Other 1. Total: 9						
University of Ottawa, Ottawa, Ontario K1N 6N5						
DEPARTMENT OF MATHEMATICS			Applications due: 8/12/78			Bachelor's by inst. 700
W. D. Burgess, Chairman						
Fellowship (8)	4000-4500	12	315/trimester	10	Teaching or demon- strating	Bachelor's by dept. 10
Teaching Assistantship (2)	3300	9	315/trimester	10	Teaching	Master's by dept. 5
University of Regina, Regina, Saskatchewan S4S 0A2						
DEPARTMENT OF MATHEMATICS			Applications due: 6/30/78			Bachelor's by inst. 650
E. L. Koh, Head						
Teaching Assistantship (2)	3700*	8	584	10	Teaching or equivalent	Bachelor's by dept. 40
*Plus up to \$1650 if research is continued to summer months.						
University of Saskatchewan, Saskatoon, Saskatchewan S7N 0W0						
DEPARTMENT OF MATHEMATICS			Applications due: 3/1/78			Bachelor's by inst. 2100
B. S. Lalli, Head						
Teaching Fellowship (10)	3900	8*	520	5-10	Teaching (or equivalent)	Bachelor's by dept. 100
Ph.D. (1974-1977 incl.) G&T 1, A&FA 1. Total: 2						
*Plus up to \$1650 if research is continued throughout summer months.						

TYPE of financial assistance (with number anticipated 1978-1979)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED Academic year 1976-1977
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	
University of Toronto, Toronto, Ontario M5S 1A4						
DEPARTMENT OF MATHEMATICS F.V. Atkinson, Chairman			Applications due: 2/1/78		Master's by dept. 10	
Research Assistantship (40)	5500-6500	12	750*	5	Tutoring	Ph.D. (1974-1977 incl.) A&NT 1, G&T 4, L 1, A&FA 6, P 1, S 7, AM 4.
Scholarship (15)	6000	12	750*			Total: 24
*\$1950 for foreign students.						
DEPARTMENT OF COMPUTER SCIENCE J.N.P. Hume, Chairman			Applications due: 2/1/78		Bachelor's by dept. 46 Master's by dept. 21	
Fellowship (7)	2900-4800	12				Ph.D. (1974-1977 incl.)
Teaching Assistantship (120)	540-621/mo.	9	*	4		CS 25. Total: 25
Research Assistantship (20)	4500-5040	12	*			
Scholarship (8)	3750-6000	12	*			
*Tuition fees not included in any Fellowship, Scholarship or Assistantship listed above. Canadian resident: \$879.50 per year; visa student: \$2029.50 per year.						

University of Waterloo, Waterloo, Ontario N2L 3G1

FACULTY OF MATHEMATICS W.F. Forbes, Dean			Applications due: 4/15/78		Bachelor's by inst. 3632 Bachelor's by dept. 505 Master's by dept. 101	
Teaching Assistantship (200)	860-3648	12	*	10		Ph.D. (1974-1977 incl.)
Research Assistantship (125)	200-5400	12	*		Teaching	A&NT 3, G&T 4, A&FA 4,
Scholarship (41)	500-2000	12	*		Research	P 3, S 8, CS 26, AM 4, Other 12. Total: 64
National Research Council Scholarship (15)	6000-7500	12	*			
Ontario Graduate Scholarship (10)	2900-4350	12	*			
*Canadian: \$800 per year, Visa: \$2000.						

University of Western Ontario, London, Ontario N6A 5B9

DEPARTMENT OF MATHEMATICS D. Borwein, Head			Applications due: 8/15/78		Bachelor's by inst. 4742 Bachelor's by dept. 65 Master's by dept. 4	
Teaching/Research Assistantship (14)	5000-6000	12	680*	0-6	**	Ph.D. (1974-1977 incl.) A&FA 1, S 2, CS 1, Other 2. Total: 6
*\$2250 for visa students, who may compete for a bursary to defray the additional fees.						
**Tutoring, proctoring, marking, research						

University of Windsor, Windsor, Ontario N9B 3P4

DEPARTMENT OF MATHEMATICS Harold R. Atkinson, Chairman					Master's by dept. 5	
Teaching Assistantship (20-25)	2900	9	370/term*	10	Teaching	Ph.D. (1974-1977 incl.) A&FA 1, S 1, AM 3, Total: 5
Research Assistantship (4-5)	varies					
*Foreign students \$777.50 in fees for fall and winter terms and \$450 for summer term.						

York University, Downsview, Ontario M3J 1P3

DEPARTMENT OF MATHEMATICS Martin E. Muldoon, Chairman			Applications due: 3/15/78		Bachelor's by inst. 2422 Bachelor's by dept. 35 Master's by dept. 16	
Teaching Assistantship (25)	2700	9	*	10	Teaching	
*Landed immigrant or Canadian: \$765; foreign: \$1950.						

UNIVERSIDAD DE LOS ANDES
Facultad de Ciencias—Departamento de Matematicas
Merida—Venezuela

The Department of Mathematics of the Universidad de Los Andes, Merida, Venezuela, requires the services of able Mathematicians who can enhance the knowledge and research abilities of our working groups in the fields of:

DIFFERENTIAL EQUATIONS — TOPOLOGY — ALGEBRA
FUNCTIONAL ANALYSIS — PROBABILITY THEORY

Some knowledge of Spanish is desirable but not essential. Send Curriculum Vitae to the above mentioned address.

II. Stipends for Study and Travel

GRADUATE SUPPORT

American Association for the Advancement of Science. *Summer Employment.* Provides support for up to twenty outstanding graduate students in the social and natural sciences as intern reporters, researchers and production assistants in the mass media for 10-12 weeks during the summer of 1978. (Exceptional undergraduate or postdoctoral students will also be considered.) Interns will work for radio and television stations, newspapers and magazines and will have their travel expenses and stipends paid by the AAAS. Interns will have the opportunity to: observe and participate in the process by which events and ideas become news items; improve their communication skills by describing, within the constraints of a particular medium, complex technical subjects in a manner understandable by lay people; and, increase their understanding of editorial decision-making and the manner in which information is effectively disseminated. Each intern will: attend an orientation and evaluation session in Washington, D.C.; normally begin the 10-12 week internship in mid-June; and, submit an interim and final report to AAAS to help evaluate the program. Interested students should write for more information and application procedures to: Coordinator, Mass Media Intern Program, American Association for the Advancement of Science, 1776 Massachusetts Avenue, N.W., Washington, D.C. 20036.

American Indian Scholarships. A program for native Americans enrolled in a graduate or professional program in the fields of law, medicine, business, engineering, forestry, or a field related to one of these five areas. Write to Indian Fellowship Program, U.S. Office of Education, Office of Indian Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202.

Ames Laboratory. *Graduate assistantships.* Areas of interest include computer languages, programming systems for command and control, adaptive and self-organizing logic systems with application to control processes, numerical analysis, differential and integral equations, special function theory, and applied mathematics. Direct inquiries to Dr. R. S. Hansen, Director, Ames Laboratory, Iowa State University, Ames, Iowa 50011.

Battelle Memorial Institute, Pacific Northwest Laboratory. Mathematics efforts in support of a number of on-going Department of Energy programs include neutron transport and radiative transfer, plasma dynamics, electromagnetic theory, applied statistics, diffusion processes, two-phase fluid flow, stochastic processes, and economic modelling. A limited number of summer appointments are available to faculty members, graduate students, and undergraduates through the NORCUS Program. Appointments also available at other DOE contractor sites. Inquiries should be directed to NORCUS Office, Joint Center for Graduate Study, 100 Sprout Road, Richland, Washington 99352.

California State Graduate Fellowships. The state offers fellowships to cover tuition and fees only, for residents of California who attend accredited graduate or professional schools located in California. Write to Director, California Student Aid Commission, 1410 Fifth Street, Sacramento, California 95814. The 1978 deadline to apply is February 6, 1978.

Center for Naval Analyses. *Summer Employment.* CNA, operated under contract with the University of Rochester, is engaged in a broad spectrum of operations research and systems analysis studies for the U.S. Navy, Marine Corps, and other government agencies. Opportunities are available for graduate students in operations research, economics, engineering, mathematics, physics, and statistics. Assignments include analysis related to force level planning, manpower, logistics, and operational effectiveness. U.S. citizenship required. Information may be obtained from Mr. P. D. Moke, Employment Manager, Center for Naval Analyses, 1401 Wilson Boulevard, Arlington, Virginia 22209.

Danforth Foundation. *Danforth Graduate Fellowships.* One hundred fellowships awarded annually to U.S. citizens committed to careers in college and university teaching, and dedicated to a life of service guided by moral or ethical values; in subject-matter specializations likely to be taught in the undergraduate liberal arts curriculum, and for pursuit of the Ph.D. or other appropriate terminal degree at an accredited university of the Fellow's choice in the U.S. Fellowships are for one year,

with the possibility of renewal for a total of four years, and include tuition and fees plus a modest living stipend. Twenty-five fellowships are expected to be awarded to Blacks, Mexican-Americans, Native Americans (including American Indians, Eskimos, Aleuts, and Native Hawaiians), and Puerto Ricans. Open to college seniors (who must be nominated by campus Liaison Officers), and to postbaccalaureate applicants. Deadline for completed applications is December 9, 1977. Detailed information is available from the Director, Danforth Graduate Fellowships, 222 South Central Avenue, St. Louis, Missouri 63105.

Daniel and Florence Guggenheim Foundation. Fellowships for U.S. and Canadian residents interested in jet propulsion, energy conversion, fluid mechanics and flight structures. For information on flight structures, write to the Department of Civil Engineering and Engineering Mechanics, Columbia University. For information on jet propulsion and fluid mechanics, write to the Director of Graduate Studies, Aerospace and Mechanical Sciences, Princeton University. Those interested in elasticity, fluid mechanics and thermodynamics in the engineering field, can write for information from the California Institute of Technology.

Fannie and John Hertz Foundation Fellowships. Offered on the basis of academic and research performance, recommendations, and personal interview, for the support of personal and institutional expenses during graduate education directed toward the Ph.D. degree in applied physical sciences. Tenable at the Department of Applied Science of the Davis Campus, and at all campuses of the University of California; California Institute of Technology; Carnegie-Mellon University; The University of Chicago; Courant Institute of Mathematical Sciences, New York University; Georgia Institute of Technology; Massachusetts Institute of Technology; Polytechnic Institute of New York; Rensselaer Polytechnic Institute; Rice University; University of Rochester; Stanford University; Texas A & M University; and Vanderbilt University. Application deadline is November 1. Applicants should contact the Office of the Graduate Dean at these institutions, or write directly to the Hertz Foundation, 1281 Westwood Boulevard, Los Angeles, California 90024.

The Ford Foundation. Graduate Fellowships for Mexican Americans, Native Americans, and Puerto Ricans. Applicants must be U.S. citizens who have completed at least two years of graduate study, who plan a career in higher education, and plan to earn the doctoral degree in a U.S. graduate school. Write to Graduate Fellowships for Mexican Americans, Native Americans and Puerto Ricans, Educational Testing Service, Box 200, Berkeley, California 94704.

General Electric Foundation. Provides research and study grants to selected institutions on a programmed, rotational basis, to be used by the graduate departments as they deem appropriate, which includes fellowships and teaching assistantships in some cases. The Foundation *does not* grant fellowships or other awards to individuals. For specific information regarding institutions to which grants have been made, write to Richard E. Kramer, Jr., 1285 Boston Avenue, Bridgeport, Connecticut 06602.

Graduate Women in Science. See Sigma Delta Epsilon.

Hughes Aircraft Company Fellowships. Master's and Doctoral Fellowships are awarded on a nationwide competitive basis to highly qualified individuals for study at selected universities. The Master's Fellowships are mostly of the work-study type. Deadline for applications is February 1. Write to Hughes Aircraft Company, Centinela and Teale Streets, Culver City, California 90230.

Johns Hopkins University. School scholarships are available to students seeking the Sc.M. or Ph.D. in biostatistics. Applicants should have one year of biological, physical, or social science in addition to preparation in mathematics. Address inquiries to Chairman, Department of Biostatistics, School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, Maryland 21205.

Kappa Kappa Gamma Fraternity. Fellowships. Awards of \$1,000 for graduate study in all fields. These are open to women who are citizens of the United States or Canada and who have received a Bachelor's degree or will obtain it prior to July 1 of the year in which the awards are made. This degree *must be from an institution where a chapter of Kappa Kappa Gamma is located or graduate work must be taken on a campus where a chapter is located.* Awards are made entirely on a competitive basis without regard to fraternity affiliation. A candidate must be a person with high scholastic standing who is outstanding in some form of activity and who has made a real contribution to the life of her alma mater. She should have a well-outlined plan for graduate activity, have a definite goal in prospect, and know what use she expects to make of her work in the future. Applications must be completed before February 15. Forms are available from Dr. Miriam Locke, Chairman of Fellowships, Kappa Kappa Gamma Fraternity, Box 1484, University, Alabama 35486.

Kosciuszko Foundation. Scholarships and grants for Americans of Polish background. Application deadline in January 15. For information write to Scholarship and Exchange Programs, The Kosciuszko Foundation, 15 East 65th Street, New York, New York 10021.

Laboratory Graduate Participation. Opportunity for graduate students working toward master's and doctoral degrees in scientific fields, including mathematics, to use ERDA installations at Oak Ridge, Center for Energy & Environment Research, Puerto Rico, Savannah River Laboratory, and Savannah River Ecology Laboratory for thesis research. The annual stipend payment, applicable for all levels, is \$4,000, with allowances: \$1,100 for spouse and child, \$1,500 for spouse and 2 or more children. An additional \$1,000 allowance for unusual situations of urgent need is available. U.S. citizenship is required. About twenty-five appointments are awarded annually. Inquiries may be addressed to University Programs, Oak Ridge Associated Universities, P. O. Box 117, Oak Ridge, Tennessee 37830.

The National Fellowships Fund. Graduate Fellowships for Black Americans. Limited to black Americans who wish to study full time for the doctoral degree and intend to enter into academic careers in the U.S. Write to The National Fellowships Fund, Suite 484, 795 Peachtree Street, N.E., Atlanta, Georgia 30308.

National Science Foundation. Graduate Fellowships. Three-year awards available to citizens or nationals of the U.S. for full-time study leading to master's or doctoral degrees in science (including mathematics). Awards made only to students who have completed not more than one year of graduate study. Stipends of \$3,900 for a 12-month tenure (\$325 per month), regardless of level of study. No dependency allowances. Education allowance paid to U.S. fellowship institution; tuition and fees to foreign fellowship. Scores attained on the Graduate Record Examinations (GRE) are used in evaluation of applicants. Application deadline December 1, 1977. Further information and application materials may be obtained from the Fellowship Office, National Research Council, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.

National Science Foundation. Science Faculty Professional Development Program. See description in Postgraduate Support section.

Office of Naval Research. Supports research over a wide range of areas including mathematics, operations research, statistics and probability, information systems, and fluid dynamics. For information write: The Director, Mathematical and Information Sciences Division, Office of Naval Research, Arlington, Virginia 22217.

RCA Fellowships. Grants are limited to graduate study in electrical engineering, electronics, engineering physics, journalism and physics. Candidates are selected by appropriate officials in designated continental U.S. universities. Although appointments are for one year, RCA Fellows are eligible for reappointment. Grants include payment of full tuition costs, stipend, and an unrestricted grant to the university department in which the Fellow is studying. For further information, write to the Educational Aid Committee, RCA Corporation, Cherry Hill, New Jersey 08101.

Sigma Delta Epsilon, Graduate Women in Science, Inc. Awards are available on a competitive basis to women who hold a degree from a recognized institution of higher learning in one of the mathematical, physical or biological sciences and are currently involved in research or have an approved research proposal. Appointments will be made irrespective of race, nationality, creed or marital status. Two types of awards are available: *Eloise Gerry Fellowship* (\$2,000 to \$8,000, not to be used for a degree program; deadline for applications and credentials, December 1), and *Grants-in-Aid* (\$750; deadline, February 1). Announcement of awards will be made by the following May 1. Further information and application forms may be obtained from: Sigma Delta Epsilon, Graduate Women in Science, Inc., 1346 Connecticut Avenue, N.W., Room 1102, Washington, D.C. 20036. An individual may apply for only one of the two awards. The applicant should indicate to which type of award her inquiry is addressed.

Smithsonian Institution. Predoctoral Fellowships. Appointments to students recommended by universities where they have substantially completed formal course requirements for the doctorate or its equivalent, to conduct research for the dissertation. Offered annually in the history of mathematics, for a period from six months to one year. \$5,000 stipend, plus research expense allowance. The proposed project must be approved in advance by appointee's advisor, conducted within Smithsonian facilities, and must be related to research and interests of the Institution. Deadline for application is January 15th yearly for the following academic year. Further information and application forms may be obtained from the Office of Academic Studies, Smithsonian Institution, SI 356, Washington, D.C. 20560.

University of Massachusetts. *Sabbatical Lectureships.* Available in the Department of Mathematics and Statistics, these lectureships are open to faculty members of colleges or universities without a Ph.D. program in mathematics and/or statistics, who wish to spend their sabbatical leaves at the University of Massachusetts. Applicants should generally have a master's degree, but not a Ph.D.; will be required to teach one course per semester and will be expected to enroll in one or two courses and a seminar. Stipends are available; tuition will be waived. For further information, write to Professor E. A. Connors, Head, Department of Mathematics and Statistics, University of Massachusetts, Amherst, Massachusetts 01003.

Woodrow Wilson Women's Studies Research Grants. Grants of up to \$1,000 are available for students at graduate schools in the United States who have completed all pre-dissertation requirements. These grants are designed to encourage original and significant research about women on such topics as the evolution of women's role in society and particularly contemporary America, women in history, the psychology of women, and women as seen in literature. Forms and further information are available from the Woodrow Wilson National Fellowship Foundation, Women's Studies Program, Box 642, Princeton, New Jersey 08540. The deadline for receipt of applications is November 1.

Zonta International. *Amelia Earhart Fellowship Awards.* For women holding a bachelor's degree in a science accepted as preparatory for advanced study in an aerospace-related science or engineering. Recipients will be granted \$4,000, and past recipients may apply for renewed grants. Applications must be filed by January 1, 1978 for the 1979-1980 awards. Write to Zonta International, 59 East Van Buren Street, Chicago, Illinois 60605.

POSTDOCTORAL SUPPORT

Air Force Office of Scientific Research. *Research Contracts and Grants.* Mathematicians and scientists in the information or mathematical sciences are encouraged to submit proposals through their organizations, for research support. It would be helpful if proposals to be considered for a given fiscal year, which begins on October 1, were submitted six months prior to that date. Recipients of support are not required to be U.S. citizens. Research areas of interest include physical mathematics, probability, statistics, and logistics, numerical analysis, system science, control theory, and information science. Research proposals should be forwarded to the Director of Mathematical and Information Sciences, Air Force Office of Scientific Research, Building 410, Bolling AFB, Washington, D.C. 20332.

American Association of University Women. *American Fellowships.* Awards dissertation and postdoctoral fellowships to women who are U.S. citizens and who have achieved distinction or promise of distinction in their fields of scholarly work. Grants are for a twelve-month duration with stipends varying from \$3,500 to \$9,000. Fellowships at the dissertation level are to be used for the final year of doctoral work, while those at the postdoctoral level are for a full-time postdoctoral research project. The application deadline is December 15. Forms may be obtained from the Educational Foundation Programs Office, AAUW Educational Foundation, 2401 Virginia Avenue, N.W., Washington, D.C. 20037.

American Mathematical Society Research Fellowship. *Postdoctoral Fellowships.* Open to citizens or permanent residents of a country in North America. Intended to support Research Fellows for one year and awarded on the basis of mathematical merit. Awards for 1978-1979 are to be approximately \$11,000 each; application deadline for 1978-1979 awards is January 31, 1978. For further information and application forms write to Dr. William J. LeVeque, Executive Director, American Mathematical Society, P. O. Box 6248, Providence, Rhode Island 02940.

American Philosophical Society. Postdoctoral research grants of small amounts according to need, for candidates with Ph.D. or equivalent to aid specific research projects. Tenable abroad and in U.S. An application must reach the Society's office at least *eight weeks* in advance of the meeting at which it is to be considered. The Committee on Research meets on the first Friday of February, April, June, October, and December. For information write to the American Philosophical Society, 104 South Fifth Street, Philadelphia, Pennsylvania 19106.

American Society for Engineering Education. *USAF-ASEE Summer Faculty Research Programs.* Programs at various U.S. Air Force bases in which the Faculty Research Associate is assigned to an ongoing research team and/or activity. Participants must be U.S. citizens with two years of teaching

or research experience, and be eligible for a Department of Defense security clearance. Stipends are \$400/week plus travel allowance. Application deadline is February 1. For information write to USAF-ASEE Summer Faculty Research Program, American Society for Engineering Education, Suite 400, One Dupont Circle, N.W., Washington, D.C. 20036.

American Society for Engineering Education. NASA-ASEE Summer Faculty Fellowships. Engineering programs in research and design in collaboration with the National Aeronautics and Space Administration; for U.S. citizens who are faculty or research members, preferably with two years of teaching experience. Stipends are \$400/week for ten or eleven weeks, plus travel allowance. Application deadline is February 1. For information write to NASA-ASEE Summer Faculty Fellowships, American Society for Engineering Education, Suite 400, One Dupont Circle, N.W., Washington, D.C. 20036.

Andrew Mellon Postdoctoral Fellowships. Intended to support the research and foster the professional development of scholars who give promise of achieving distinction in their fields. Applicants should submit a completed application form, a research proposal, a list of publications, and three letters of recommendation. The Fellows are expected to be in residence at the University of Pittsburgh and to engage in research during their period of appointment; they have no other formal responsibilities. A basic stipend of \$10,000 for eleven months, plus an allowance for traveling expenses (up to \$200) and incidental costs (not to exceed \$200), make up the award. Nine-month appointments are available for a stipend of \$8,200. Applications may be obtained from the Director of Graduate Programs, Faculty of Arts and Sciences, University of Pittsburgh, Pittsburgh, Pennsylvania 15260.

Argonne National Laboratory. Predoctoral, postdoctoral, and visiting scientist appointments in mathematics and computer science with an emphasis on applied analysis and numerical mathematics. Summer appointments available at undergraduate through visiting scientist levels. Contact: Richard J. Royston, Director, Applied Mathematics Division, Argonne National Laboratory, Argonne, Illinois 60439.

Army Research Office. Research grants and contracts for research in mathematics, information and computer sciences, electronics, engineering, and physical geosciences and biological sciences. Write to Technical Director, U.S. Army Research Office, P. O. Box 12211, Research Triangle Park, North Carolina 27709.

Benjamin Peirce Lectureships. Harvard University. Rank of Assistant Professor. The appointments are for three years with a starting salary of \$14,000 (for the nine-month academic year) and can be augmented during the summer by teaching at summer school or by work on a research contract if funds are available. The teaching commitment is six hours a week, including a graduate course on a subject of the lecturer's choice, if desired. Application forms may be obtained by writing to the Chairman, Benjamin Peirce Lectureships, Department of Mathematics, Harvard University, 1 Oxford Street, Cambridge, Massachusetts 02138. Applications must be filed by January 9, 1978. Harvard is an Equal Opportunity/Affirmative Action Employer.

C.L.E. Moore Instructorships in Mathematics. Offered by the Department of Mathematics at the Massachusetts Institute of Technology. Open to mathematicians with doctorates who show definite promise in research. The base salary will be at least \$15,500, and the teaching load is six hours per week in one semester and three hours per week in the other. The appointments are annual but renewable for one additional year. Applications should be filed not later than December 30 on forms obtained from the Department of Mathematics, 2-263, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139. M.I.T. is an Equal Opportunity Employer.

Congressional Science Fellowship. Sponsored jointly by the AMS-MAA-SIAM in cooperation with the AAAS, the fellowship offers a stipend of \$17,000 for one year spent working on the staff of a congressman, a congressional committee or in the congressional Office of Technology Assessment. The applicant should be at the postdoctoral to mid-career level, have a broad scientific and technical background, and have a strong interest in the uses of the mathematical and other sciences in the solution of societal problems. A more detailed announcement appears in the October 1977 *AMS Notices*, page 390. Further information on the general program can be obtained on request from Dr. Richard Scribner, Director, AAAS Congressional Science Fellow Program, 1776 Massachusetts Avenue, N.W., Washington, D.C. 20036. Applications with three letters of recommendation should be received by 15 February 1978 by the Conference Board of the Mathematical Sciences, 2100 Pennsylvania Avenue, N.W., #832, Washington, D.C. 20037.

Cottrell Research Grants. Awarded to help faculty members in the early years of their professional careers at degree-granting institutions conduct basic research of importance in the physical sciences and engineering. Support is normally given for items of direct expense to help initiate research. Although grants are usually made on a one-year basis, consideration may be given in certain circumstances to reapplication for additional support. Further information may be obtained from Research Corporation, Cottrell Research Grant Program, 405 Lexington Avenue, New York, New York 10017.

Courant Institute. *Instructorships in Mathematics.* Open to mathematicians (of any age) who are recent recipients of doctor's degrees who show strong promise in research. The teaching duty will consist of one course each term. Appointments are for two years. The academic salary for nine months will be \$15,000. In addition, the Courant Institute may be able to offer support for research in residence during two summer months. (When longer term faculty positions are available, applicants for Instructorships will also be considered for them.) Inquiries and requests for application forms should be addressed to the Committee on Instructorships and Visiting Memberships, Courant Institute of Mathematical Sciences, New York University, 251 Mercer Street, New York, New York 10012. Applications should be filed no later than January 1, 1978, N.Y.U. is an Equal Opportunity Affirmative Action Employer.

Courant Institute. *Postdoctoral Visiting Memberships.* The Courant Institute of Mathematical Sciences of New York University offers postdoctoral Visiting Memberships to mathematicians, scientists and engineers who are interested in its program of training and research in a broad range of pure and applied mathematics. Applications for the academic year 1978-1979 must be submitted before January 1, 1978. Inquiries and requests for application forms should be addressed to the Committee on Instructorships and Visiting Memberships, Courant Institute of Mathematical Sciences, New York University, 251 Mercer Street, New York, New York 10012. N.Y.U. is an Equal Opportunity Affirmative Action Employer.

Department of State, Agency for International Development. Research grants for research projects and analytical studies on development policy issues emphasizing food production, nutrition, health, education, population, socio-economic and related issues. Research groups are encouraged to propose research to the Agency within the above areas. For further information, write to Mr. John R. Eriksson, Policy Development and Analysis, Bureau for Program and Policy Coordination, Agency for International Development, Department of State, Washington, D.C. 20523.

E. R. Hedrick Assistant Professorships in Mathematics. Department of Mathematics, University of California, Los Angeles, will make two or three appointments for the year 1978-1979. These awards will be made to mathematicians with Ph.D.'s who show strong promise in research. The appointment will be for two years at an annual salary of \$17,900, plus a summer research supplement of \$2,500. The teaching load will be three hours per week for two quarters and six hours per week for one quarter. One course may be an advanced course in the candidate's research area. Requests for application forms should be sent to the Chairman, Department of Mathematics, University of California, 405 Hilgard Avenue, Los Angeles, California 90024. The deadline for applications is January 15, 1978. UCLA is an Equal Opportunity Employer.

G. C. Evans Instructorships. Postdoctoral appointments for two-three years for promising research mathematicians with research interests in common with the active research areas at Rice. Applications should be in by 15 January 1978. Rice University is an Equal Opportunity/Affirmative Action Employer. Inquiries and applications should be addressed to Professor R. O. Wells, Jr., Chairman, Department of Mathematics, Rice University, Houston, Texas 77001.

IBM Thomas J. Watson Research Center. *Mathematical Sciences Department Postdoctoral Fellowships.* These fellowships provide scientists of outstanding ability, at the beginning of their careers, an opportunity to pursue and broaden their scholarship while in residence at the Research Center. A candidate will be expected to have not more than five years professional experience between receipt of a doctorate and commencement of the fellowship. The duration of each fellowship will be eleven months. Generally the stipend will be in the range of \$20,000-\$25,000, depending on qualifications. Completed applications should be received by January 15, 1978. At most two fellowships will be awarded. Notification will be made by March 15, 1978. Write to Director, Mathematical Sciences Department, IBM Thomas J. Watson Research Center, P. O. Box 218, Yorktown Heights, New York 10598.

Institute for Advanced Study Memberships. The School of Mathematics will grant a limited number of memberships, some with financial support, for research in mathematics at the Institute during the academic year 1978–1979. Candidates must have given evidence of ability in research comparable at least with that expected for the Ph.D. degree. Application blanks may be obtained from the Administrative Officer of the School of Mathematics, Institute for Advanced Study, Princeton, New Jersey 08540, and should be returned (whether or not funds are expected from some other source) by January 15, 1978.

J. Willard Gibbs Instructorships. Offered by Yale University to men and women with the doctorate who show definite promise in research in pure mathematics. Applications from women and members of minority groups are welcome. Appointments are for two years. The 1977-1978 salary is \$14,500; an increase is expected for 1978-1979. Each recipient of a Gibbs Instructorship will be given an allowance of up to \$250 toward the actual expense of moving household possessions to the New Haven area. The teaching load is kept light so as to allow ample time for research. If desired, part of the teaching duties may consist of a one-semester course at the graduate level in the general area of the instructor's research. Inquiries and applications should be addressed to the Gibbs Committee, Department of Mathematics, Yale University, Box 2155 Yale Station, New Haven, Connecticut 06520. Preference will be given to applications received before February 1978.

Jacob David Tamarkin Instructorships. Offered by Brown University to promising mathematicians. Appointments are for three years, with a salary of \$13,000 for the academic year. Additional summer support can be arranged. Teaching load is six hours per week and consists of courses of more than routine interest. An applicant should have completed the doctorate by the time the appointment is to begin. In addition to a letter expressing interest in a Tamarkin Instructorship, the applicant should have three letters of recommendation sent to the Department of Mathematics by January 1, 1978. Women and members of minority groups are encouraged to apply. Applicants should write to the Chairman, Department of Mathematics, Brown University, Providence, Rhode Island 02912.

John Simon Guggenheim Memorial Foundation Fellowships. Applicant should be at least 30 years of age (exceptions are made) and engaged in scientific research. No academic degree is required, but the fellowships are on the advanced postdoctoral level. U.S. or Canadian citizenship or permanent residence is required. Fellowships are also offered to citizens or permanent residents of all countries and territories of the Western Hemisphere and of the Philippines. Nominations are made by the Committee of Selection. Application deadline: October 1. Approximately 300 awards are made, averaging approximately \$14,500 in 1977. For more information write to President, John Simon Guggenheim Memorial Foundation, 90 Park Avenue, New York, New York 10016.

John Wesley Young Research Instructorships. Two instructorships are normally awarded by Dartmouth College each year. Teaching duties average six hours per week and are of a varied and nonroutine nature. The academic-year stipend of \$13,500 is supplemented by a resident summer research fellowship of \$2,000. Appointments are for two years and are not renewable. Applicants should write to Richard H. Crowell, Chairman, Department of Mathematics, Dartmouth College, Hanover, New Hampshire 03755 (Attention: RECRUITING). The deadline for applications is October 1 for the following academic year.

Langley Research Center. A limited number of visiting appointments are available for both junior- and senior-level researchers at the Institute for Computer Applications in Science and Engineering (ICASE) which is operated by Universities Space Research Association. ICASE serves as a center for interaction between Langley staff and the academic community in the areas of applied and numerical mathematics, applied computer science, and development of mathematical models in a variety of application areas. Applications for partial support while on sabbatical leave are encouraged, as are applications from Ph.D.'s for two-year appointments. Inquiries should be addressed to the Director, ICASE, Mailstop 132C, NASA-Langley Research Center, Hampton, Virginia 23365.

Lawrence Berkeley Laboratory. Occasional postdoctoral research appointments. Topics of special interest include: numerical solution of partial differential equations, mathematical programming, energy system applications, environmental and economic modeling, analysis and computer graphic display of multidimensional data, and critical path methods. Inquiries should be directed to Dr. Paul Concus, Lawrence Berkeley Laboratory, Building 90, Room 3108, University of California, Berkeley, California 94720.

L. E. Dickson Instructorships in Mathematics. Intended for men or women completing the doctorate in mathematics during 1977-1978. Appointment is for two years with an annual salary of \$16,250; instruction averaging four hours a week; supplementary summer salary can usually be arranged. Application deadline is January 6, 1978. Further information may be obtained from the Chairman, Department of Mathematics, University of Chicago, Chicago, Illinois 60637.

Los Alamos Scientific Laboratory. Offered to U.S. citizens holding the Ph.D., with research opportunities in computer science, numerical science, and applied mathematics. A limited number of postdoctoral appointments are available for one year, subject to renewal for a second year. Los Alamos Scientific Laboratory is an equal opportunity employer. Write to Employment Office, Los Alamos Scientific Laboratory, University of California, P. O. Box 1663, Los Alamos, New Mexico 87545.

Los Alamos Scientific Laboratory. J. Robert Oppenheimer Research Fellowships. Candidates must be recipients of a doctorate in the physical sciences, natural sciences, mathematics or engineering. One-to three-year appointments; salary is \$22,500. For additional information write to Employment Office, Los Alamos Scientific Laboratory, P. O. Box 1663, Los Alamos, New Mexico 87545.

Mathematics Research Center. A limited number of visiting research appointments at all levels from postdoctoral up, in areas of applicable or applied mathematics interpreted in a broad sense, but including analysis, numerical analysis and computing, probability and statistics, and operations research. The postdoctoral appointments offer Ph.D.'s working in areas of applicable mathematics an opportunity to broaden their contact with applications. Qualifications include outstanding research ability or potential, as attested to by leading mathematicians in the candidate's field. The University of Wisconsin is an equal employment opportunity institution (Title IX/Title VI). For information write Professor Ben Noble, Director, Mathematics Research Center, University of Wisconsin—Madison, Madison, Wisconsin 53706.

National Aeronautics and Space Administration. Research Grants. Through grants and contracts to educational and nonprofit institutions and industries, NASA sponsors research in fundamental and applied mathematics related to space science and engineering problems. Unsolicited proposals should be submitted to the Office of University Affairs, Code PY, National Aeronautics and Space Administration, Washington, D.C. 20546.

National Research Council. Research Associateship Programs. These programs provide scientists and engineers opportunities for postdoctoral research on problems in a variety of scientific disciplines and fields of specialization. The programs are conducted in cooperation with selected Federal organizations with laboratories at approximately sixty-five geographic locations in the United States. Applications for these competitive awards will be received by the National Research Council until January 15, 1978. Appointments will be made in the spring. Stipends, which are subject to income tax, will vary according to the type of appointment, but will not be less than \$17,000. Further information and application materials can be obtained from the Associateship Office (JH 606-D), National Research Council, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.

National Science Foundation. National Needs Postdoctoral Fellowships. Approximately 100 fellowships for postdoctoral research and study concerned with national needs. Open to U.S. citizens or nationals with doctorates in science. The \$12,000 stipend (\$1,000 per month) provides for twelve months of study and research at any appropriate U.S. or foreign institution. Deadline for filing applications is December 5, 1977. Applications may be obtained by writing the Fellowship Office, National Research Council, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.

National Science Foundation. Computer Science Research. Grants support research concerned with such topics as theoretical foundations of computer science; software systems science, software engineering, intelligent systems, and computer systems design. Guidelines on eligibility and proposal preparation are available in "Grants for Scientific Research." For this brochure and additional information contact: Computer Science Section, Division of Mathematical and Computer Sciences, National Science Foundation, 1800 G Street, N.W., Washington, D.C. 20550.

National Science Foundation. Research and Travel Grants. Proposals are accepted at any time, but in order to insure full consideration, proposals requesting research support which is to begin prior to September 1, 1978, should be in the hands of the Foundation six months prior to the desired starting date of such support, but not later than November 1, 1977. Application for travel assistance should be made well in advance (at least five months) of the time of the scheduled travel. Instructions for the preparation of proposals, contained in a booklet entitled "Grants for Scientific Research" may be obtained upon request from the Mathematical Sciences Section, National Science Foundation, Washington, D.C. 20550.

National Science Foundation. *Science Faculty Professional Development Program.* Training opportunities for from three–twelve month tenures in academic or nonacademic organizations for teachers of science, mathematics, or engineering in universities, colleges, or junior and community colleges. Approximately 150 awards will be made to faculty who are citizens or nationals of the United States, have at least a baccalaureate, have had five or more years of full-time teaching experience, and hold an academic appointment in a United States college or university. Support includes stipend, travel allowance, and an assistance allowance to the tenure organization. The application deadline is December 16, 1977. Application materials can be obtained from the Faculty-Oriented Programs, Division of Scientific Personnel Improvement, National Science Foundation, Washington, D.C. 20550.

Office of Naval Research. Supports research over a wide range of areas including mathematics, operations research, statistics and probability, information systems, and fluid dynamics. Proposals for research contracts and requests for information on ONR Programs should be addressed to: The Director, Mathematical and Information Sciences Division, Office of Naval Research, Arlington, Virginia 22217.

Oskar Morgenstern Distinguished Fellowship at Mathematica. The grant enables a member of the academic or research staff of a university, an official of the U.S. government, or a researcher elsewhere, to spend sabbatical leave at Mathematica. Applicants are expected to have achieved significant accomplishments in at least one of several areas, including computer programming languages, information management, operations research methods and applications, economic theory, economic and social policy analysis, survey research methodology, arms control, and national defense policy. Information may be obtained from President Tibor Fabian, Mathematica, Inc., P. O. Box 2392, Princeton, New Jersey 08540.

Sloan Foundation. Unrestricted grants made to selected university scientists in the physical sciences (including mathematics) and in neuroscience. Candidates in the physical sciences must be members of the regular faculty, though not necessarily in a tenured position, at a recognized college or university in the United States or Canada. In neuroscience, postdoctoral fellows as well as those in junior faculty positions will be considered. Candidates do not apply but are nominated by their department chairmen or other scientists. For information write to the Alfred P. Sloan Foundation, 630 Fifth Avenue, New York, New York 10020.

Smithsonian Institution. Postdoctoral Fellowships. Appointments to individuals possessing the Ph.D. or equivalent degree, generally limited to those having received the degree within five years of commencing tenure at the Smithsonian and in all cases limited to individuals requiring research training in association with a member of the Institution's professional staff. Offered annually in the history of mathematics, usually for a period of from six months to one year. Ten thousand dollars stipend, plus research expense allowance. Deadline for application is January 15th yearly for the following academic year. Further information and application forms may be obtained from the Office of Academic Studies, Smithsonian Institution, Washington, D.C. 20560.

State University of New York at Buffalo. *George William Hill and Emmy Noether Research Instructorships for 1978-1980.* Applicants should be Ph.D.'s whose degrees will be completed by September 1, 1978. One Research Instructorship is in Applied Mathematics and one in Pure Mathematics, with each appointment being for two years. The twelve-month stipend, beginning September 1978, is \$16,200 including generous staff benefits. Teaching load will total two one-semester courses during the twelve-month period. Upon expiration of the two-year appointment, priority consideration for a two-year appointment as assistant professor will be given and will be based upon success and potential in both research and teaching. Each applicant should prepare a summary of his or her post-high school educational background, as well as a sketch of past and projected research activity, and should request at least three mathematicians to send letters of recommendation. Application forms are available upon request. No one holding academic rank at SUNY at Buffalo is eligible to apply. Applications and supporting letters should be sent to the Chairman, Department of Mathematics, SUNY at Buffalo, 106 Diefendorf Hall, Buffalo, New York 14214, so as to arrive by January 20, 1978. SUNY at Buffalo is an Equal Opportunity/Affirmative Action Employer. We are interested in identifying prospective minority and woman candidates. No person in whatever relation with SUNYAB shall be subject to discrimination on the basis of age, color, national origin, race, religion, or sex.

T. H. Hildebrandt Research Assistant Professorships. Designed to provide mathematicians with favorable circumstances for the development of their research talents. Preference given to persons of any age having their Ph.D. less than two years. At least one appointment is expected to be available for the coming academic year. Teaching load averages one and one-half courses per semester; part of teaching load consists of an advanced course. Stipend at least \$14,500 for academic year 1978-1979 with good possibility of additional income during the summer. Appointment is for at least two years. Applicants should submit completed application form and request at least three letters of recommendation. Letter should contain comments on applicant's mathematical promise, teaching ability, and personality. First preference will be given to applications completed, and supported by three or more letters, prior to January 3. Appointments will be announced by the end of January. Applications should be made to Professor F. W. Gehring, Chairman, Department of Mathematics, The University of Michigan, Ann Arbor, Michigan 48109. Affirmative Action Employer.

U.S. Army Research Office. The primary mission of the U.S. Army Research Office is the support of unclassified basic research in the mathematical, physical, engineering, environmental, and life sciences in the United States. Proposals for support are made by individual scientists or groups of scientists through their institutions or business offices. Support is given primarily through contracts or grants at educational institutions, research institutes, and industrial laboratories. For further information write to the Commanding Officer, U.S. Army Research Office, Box 12211, Research Triangle Park, North Carolina 27709.

U.S. Department of Health, Education, and Welfare, National Institutes of Health. Supports postdoctoral training in specified areas of biomedical and behavioral research. Applicant must have earned an appropriate degree and arranged for appointment to an institution and acceptance by a sponsor who will supervise his training research experience. U.S. citizenship or lawful admittance to the U.S. for permanent residence is required. Announcements and application kits available from Office of Grants Inquiries, Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014. An enclosed self-addressed gummed mailing label will expedite handling.

Václav Hlavatý Research Assistant Professorships. Offered by the Department of Mathematics at Indiana University to mathematicians with doctorates who show definite promise in research. The appointment is for three years with an academic-year salary of at least \$14,000. The teaching duties during the first academic year will involve three hours per week and during the next two academic years will involve six hours per week. The salary may be supplemented by either teaching or research contracts during the summer months. There will also be an amount of \$400 available for professional expenses, such as travel to meetings, supplies, publication costs, etc. Inquiries or requests for application forms should be addressed to Professor Morton Lowengrub, Chairman, Department of Mathematics, Swain Hall East, Indiana University, Bloomington, Indiana 47401. Preference will be given to applications received before January 1, 1978. Affirmative Action Employer.

TRAVEL AND STUDY ABROAD

Alexander von Humboldt Foundation. *Research Fellowships.* Provides postdoctoral scholars with the opportunity of carrying out a research project at a university or other research institute within the Federal Republic of Germany and Berlin (West). Scholars of all nationalities and disciplines may apply. Selection is based exclusively on academic merit. Applicants must have completed their academic studies, have evidence of a degree equivalent to the German doctorate, and have adequate knowledge of German, especially for research in the humanities. Applications may be obtained from and returned directly to the Alexander von Humboldt Foundation, Jean-Paul-Strasse (Schillerstrasse) 12, D-5300 Bonn-Bad Godesberg, Federal Republic of Germany.

Alliance Française de New York. For U.S. Nationals, a limited number of scholarships for graduate study in France. Fields unrestricted. Scholarships are in the amount of \$1,500 to \$3,000. Applicants must have a working knowledge of French. For further information American students should write to Institute of International Education, Division of Study Abroad Program, 809 United Nations Plaza, New York, New York 10017.

American-Scandinavian Foundation. Fellowships for study in Scandinavia (Denmark, Finland, Iceland, Norway, and Sweden). Applicants must have completed their undergraduate education. Necessary language competence, financial need, and merit in pursuing the study program in Scandinavia are considered in making these awards. Completed application deadline is December 1 (November 1 for Marshall Fellowships for Denmark). Write to the Educational Services Division, The American-Scandinavian Foundation, 127 East 73rd Street, New York, New York 10021.

E. D. Bergmann Memorial Research Grants. Two grants awarded annually by the United States-Israel Binational Science Foundation to one American and one Israeli scientist, for research to be conducted in Israel. Support will be for a two-year period. Applicants must have completed their doctoral degrees within the past five years and cannot be on the paid staff of any institution. Application forms and guidelines are available from the National Science Foundation, Division of International Programs (United States-Israel Binational Science Foundation), Washington, D.C. 20550, or from the United States-Israel Binational Science Foundation, P. O. Box 7677, Jerusalem. Application deadline is November 1 each year.

Fulbright-Hays Program. Grants for Graduate Study Abroad. For graduate study or research in any field in which the project can be profitably undertaken abroad. Applicant must be a U.S. citizen and have language proficiency sufficient to carry out the proposed study and to communicate with the host country. If an applicant is already enrolled in a U.S. university, he must apply directly to the Fulbright Program Advisor on his campus. Unenrolled students may apply to the Institute of International Education. Further details may be obtained from the Correspondence Unit, Institute of International Education, 809 United Nations Plaza, New York, New York 10017.

Fulbright-Hays Program. Postdoctoral Awards. United States Government grants available annually in all fields for university lecturing and postdoctoral research abroad. Eligibility requirements include U.S. citizenship; for lecturing, college teaching experience; for research, a doctoral degree or recognized professional standing at the time of application. In certain cases a knowledge of the language of the host country is required. Grants are generally tenable for one academic year in one designated country and include round-trip transportation for the grantee, maintenance allowance to cover living expenses of grantee and family, and a small incidental allowance to cover supplies and services essential to the project. Subject to the availability of funds, a supplemental dollar grant for lecturers in most non-European countries may be given. Scholars are invited to register for annual announcements published in March. Application deadlines are June 1 for Australia, New Zealand, and American Republics; July 1 for Africa, Asia, and Europe for grant periods twelve-eighteen months later. Write to Council for International Exchange of Scholars, Suite 300, 11 Dupont Circle, Washington, D.C. 20036.

Indo-American Fellowship Program. Ten grants to be awarded to U.S. citizens for advanced research in India, for six- to ten-month periods during the academic year 1978-1979. In addition to a basic grant there are travel, dependent and research allowances. Also up to nine shorter grants (one- to six-months) for research and/or professional activity. Applications are encouraged for projects which include collaboration with Indian colleagues. Deadline for applications is November 15. For details contact the Council for International Exchange of Scholars, Eleven Dupont Circle, Washington, D.C. 20036.

International Research and Exchanges Board (IREX). This board administers academic exchange programs, open to advanced graduate students, postdoctoral scholars, and faculty members in all fields of study who are United States citizens, and who are affiliated with a North American college or university. Exchange agreements are in effect with Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania, Yugoslavia, and the USSR. Placements are usually made for a semester or an academic year, but longer or shorter stays are possible by special arrangement. In addition to exchange fellowships, IREX offers ad hoc grants to promote new exchanges; grants for collaborative projects involving American scholars and their counterparts in Eastern Europe and the USSR; and fellowships for preparatory area studies in the United States and Canada. For more detailed information, write to the International Research and Exchanges Board, 110 East 59th Street, New York, New York 10022.

Italian National Research Council Fellowships for Foreign Citizens. The Italian National Research Council announces five fellowships (maximum period one year) for foreign mathematicians. The gross stipend is 280,000 Italian Lire per month, plus travel expenses to and from the country of residence. Prospective applicants may write for details to: Alessandro Figà-Talamanca, C.N.R., via Santa Marta 13A, 50139 FIRENZE, Italy. In their letter they should include information concerning their curriculum, their research program, the names of the Italian mathematicians they would like to work with. They may also include a reference letter or have it sent directly.

Kosciuszko Foundation. *Graduate and Postgraduate Exchange with Poland.* Open to U.S. citizens. Candidates must have at least a master's degree and a knowledge of the Polish language. Apply by January 15 for the following academic year. Write to Scholarship and Exchange Programs, Kosciuszko Foundation, 15 East 65th Street, New York, New York 10021.

Lady Davis Fellowship Trust. Fellowships for study and/or research at graduate or postdoctoral levels at the Hebrew University of Jerusalem and the Technion – Israel Institute of Technology, Haifa. Lady Davis Fellows will be selected on the basis of demonstrated excellence in their studies, promise of distinction in their chosen fields of specialization and qualities of mind, intellect and character. The Fellowships are tenable for a period of one or two years, and are intended to defray travel and tuition fees and to meet reasonable living expenses. Deadline for completed applications is January 1, 1978. Application forms can be obtained from the Lady Davis Fellowship Trust, P. O. Box 1255, Jerusalem, Israel.

Lady Davis Visiting Professorships. Lady Davis Visiting Professorships, for periods from one trimester (or semester) to a full academic year, are intended for candidates with the rank of Full or Associate Professor at their own institution. Such Visiting Professors are appointed after consultation with the appropriate Faculties of the Hebrew University of Jerusalem or the Technion – Institute of Technology, Haifa. The grant includes a professorial salary and cost of travel. Deadline for completed applications is December 15, 1977. Application forms can be obtained from the Lady Davis Fellowship Trust, P. O. Box 1255, Jerusalem, Israel.

LATF—Latin America and Asia-Pacific. The Latin American Teaching Fellowships Program was established as a program of the Fletcher School of Tufts University in 1966 to provide Fellowships to North-American-trained professors, researchers and interns to spend one or two years teaching in Latin America. Since its inception the program has placed 483 Fellows in 126 universities in sixteen countries in South America, Central America, the Caribbean and Asia-Pacific. There are currently 164 LATF Fellows in the field. We now place a small number of especially qualified professors in selected positions. Inquiries should be addressed to the Director of Academic Affairs, Latin American Teaching Fellowships, Fletcher School of Law and Diplomacy, Tufts University, Medford, Massachusetts 02155.

Marshall Scholarships. Offered by the British Government to U.S. graduates; tenable at any university in the United Kingdom. Recipients of awards are required to take a degree at their British university. Fields unrestricted. Apply through British Consulates-General in the following regions (1) Northeast: Suite 4740 Prudential Tower, Prudential Center, Boston, Massachusetts 02199; (2) Mideast: 12 South 12th Street, Philadelphia, Pennsylvania 19107; (3) South: Suite 912, 225 Peachtree Street, N.W., Atlanta, Georgia 30303; (4) Midwest: 33 North Dearborn Street, Chicago, Illinois 60602; (5) Pacific: 9th Floor, 120 Montgomery Street, San Francisco, California 94104.

Middle East and Africa Field Research Fellowship Program for Black Americans. Applicant must be at dissertation level and have passed orals and comprehensives. The program provides opportunities for an extended research and training experience in the overseas setting. Write to Middle East and Africa Field Research Fellowship Program for Black Americans, National Fellowships Fund, Room 484, 795 Peachtree Street, N.E., Atlanta, Georgia 30308. The deadline for filing applications is January 5, 1978, for the 1978-1979 awards.

National Academy of Sciences. For U.S. scientists who wish to make visits beginning during the period September 1978 through August 1979 in the USSR, Bulgaria, Czechoslovakia, Hungary, Poland, Romania or Yugoslavia. Visits of five to twelve months' duration are encouraged; a limited number of openings for one-month visits is also available. Requirements are U.S. citizenship and a Ph.D. or its equivalent in the mathematical sciences. All necessary expenses will be met by the NAS and the foreign academy; salary reimbursement up to a predetermined maximum and paid expenses for accompanying family on visits of five months or more. Application deadline is in November. For further information, write to the National Academy of Sciences, Commission on International Relations, USSR/EE, 2101 Constitution Avenue, Washington, D.C. 20418.

National Research Council of Canada. Visiting Fellowships. These fellowships are tenable in the laboratories of the following government departments and agencies: Agriculture Canada; Department of Communications-Communications Research Centre; Department of Energy, Mines & Resources; Department of the Environment-Atmospheric Environment Service, Environmental Management Service, Fisheries and Marine Service; Health and Welfare Canada; National Museums of Canada-Museum of Natural Sciences; Atomic Energy of Canada Limited; National Research Council of

Canada. The closing date for applications is January 15. Write to the Office of Grants and Scholarships, National Research Council of Canada, Ottawa, Canada K1A 0R6.

National Science Foundation. Support for U.S. participation in seminars, research projects, and visiting scientist activities under bilateral programs with certain foreign countries. For brochure about these and other NSF international programs write: Division of International Programs, National Science Foundation, Washington, D.C. 20550.

National Science Foundation. *Scientists and Engineers in Economic Development (SEED) Program.* Specially funded by the Agency for International Development, the program will provide support for qualified U.S. scientists and engineers to apply their experience to specific problems of development in forty-one countries. Stipends of up to \$1,500 per month awarded with research/teaching grants. International travel grants also available. Limited to U.S. scientists and engineers with at least five years of postdoctoral or equivalent experience in teaching or research and who will return to their institutions on completion of the project. Proposals must be submitted before December 1, 1977. Awards will be announced during April 1978. For more information, write to the Division of International Programs, National Science Foundation, Washington, D.C. 20550.

National Science Foundation. Summer travel grants for U.S. citizens to attend North Atlantic Treaty Organization (NATO) Advanced Study Institutes in Europe. Applications are made to the appropriate NATO Institute Director. Information may be obtained by writing to NATO Travel Awards, Division of Scientific Personnel Improvement, National Science Foundation, Washington, D.C. 20550.

North Atlantic Treaty Organization. The NATO Science Committee has a Research Grants Programme which provides financial aid for research projects aimed at stimulating, encouraging and facilitating scientific research in collaboration between scientists working in different member countries of the Alliance, thus promoting the flow of ideas and of experimental and theoretical methods across frontiers. Projects are supported for a limited period usually not exceeding three years, covering mainly travel and living expenses abroad for principal investigators visiting partner laboratories or for staff members needing to acquire or provide expertise or special training in the partner laboratory(ies). Deadlines for applications are 15 January, 30 April and 15 September. The NATO Science Committee also makes a number of awards each year for training and education in fields in the systems science area. (1) Graduate Degree Apprenticeship in Systems Science. To enable beginning scientists to pursue graduate programmes leading to advanced degrees in fields in the systems science area (Systems Analysis, Operational Research, Management Science, Management Engineering, Systems Engineering, etc.) and also to obtain practical training in places where they will be exposed to real life problems. A normal grant is for three years, subject to satisfactory progress in each year, and is applicable to participating universities and institutions. Applicants should have first degree level of university education with very high scholastic achievement and a sound basic training in mathematics relevant to the systems field. The award is a yearly stipend to cover living expenses, tuition and other expenses, but not to exceed B.fr. 240,000 per year. (2) Study Visits. This programme is designed for scientists of NATO countries to make short visits to scientists and/or institutions in other NATO countries, with the objective of receiving expert advice in connection with a research project and a well-defined problem in the systems science area. (3) Visiting Experts. This programme is designed to help developing or newly formed systems science groups in NATO countries, which are active in fields in the systems science area and are in need of receiving advice or assistance from an expert in another country. It is applicable in cases where visiting scientists can make a substantial contribution to the work of the organization being visited. (4) Systems Science Prizes: The Systems Science Panel awards annual prizes for outstanding publications in systems science which have appeared in the preceding three-year period. Eligible publications must be proposed to the Scientific Affairs Division of NATO by editors or editorial boards of journals or by professional/scientific societies before 30 June of each year. Application forms and further details of these awards together with information about the Science Committee's other programmes in the systems science area can be obtained from: Scientific Affairs Division, NATO, 1110 Brussels, Belgium.

North Atlantic Treaty Organization. *Postdoctoral Fellowships.* Awarded for six- to twelve-month periods, for scientific study or work at appropriate nonprofit institutions in NATO countries, other than the U.S., or countries that cooperate with NATO. This program, for citizens or nationals of the U.S., is designed primarily for individuals who have received their doctorates within the past five years. Fellows receive a stipend of \$11,040 for twelve-month tenure, plus a dependency and travel allowance. Application deadline is November 28, 1977. For information and application material, write to Division of Scientific Personnel Improvement, National Science Foundation, Washington, D.C. 20550.

Organization of American States. See entry in section on Study in the U.S. for Foreign Nationals.

The Rhodes Scholarships. For U.S. citizens; tenable at Oxford University. Selection is made on four criteria: scholarship, character, leadership, and physical vigor. Information is available through the applicant's college or university, or from The Rhodes Scholarship Office, Wesleyan University, Middletown, Connecticut 06457.

Rotary Foundation. Graduate Fellowships and Undergraduate Scholarships. One academic year of study abroad for the 1979-1980 year is available to outstanding young men and women who are interested in world affairs and who can fulfill a dual role of scholar and "ambassador of good will." Graduate fellowships and undergraduate scholarships cover full transportation, education, living, and miscellaneous expenses for one academic year, plus, in certain cases, a period of intensive language training in the study country prior to the commencement of the regular academic year. Awards are made for study in any field and are tenable in more than 151 countries in which there are Rotary Clubs. An applicant for a graduate fellowship must have obtained a bachelor's degree or equivalent prior to the beginning of his fellowship year. An applicant for an undergraduate scholarship must have completed two years of university level work but not have obtained a bachelor's degree prior to the beginning of his scholarship year. Application must be made through the Rotary Club nearest to the applicant's permanent residence not later than March 1, 1978.

Royal Norwegian Council for Scientific and Industrial Research. Postdoctorate Fellowships. Fields: engineering and applied sciences. Studies can be carried out at the Universities of Oslo and Bergen, the Technical University of Norway, and at different institutes for applied research in Oslo, Bergen, and Trondheim. English may be used at all institutes; German and French at some institutes. Deadline each year is December 1. Write to Royal Norwegian Council for Scientific and Industrial Research, Gaustadalleen 30, Oslo, Norway.

Social Science Research Council. International Doctoral Research Fellowship Program. The program provides support to advanced doctoral candidates at U.S. and Canadian universities for dissertation research in Africa; the Near and Middle East; East, South and Southeast Asia; Western Europe; Latin America, and the Caribbean. Full information on this program may be obtained by writing to the Social Science Research Council, Fellowships and Grants, 605 Third Avenue, New York, New York 10016.

Solomon Lefschetz Research Instructorships. Offered to mathematicians with doctorates who show definite promise in research. Appointments are for one year, with possibility of renewal for a second year, with salary equivalent to that of an Assistant Professor at the Mathematics Department. An allowance for moving expenses is also made. A knowledge of Spanish is desirable, but not necessary. Deadline for applications is January 30. Inquiries or requests for applications should be addressed to: Lefschetz Instructorships, Mathematics Department, Centro de Investigacion del IPN, Apartado Postal 14-740, Mexico, D.F. Mexico.

United States-India Exchange. Grants travel support to senior mathematicians of the United States for periods from two weeks to a few months, for work in India with Indian colleagues on projects of mutual interest. Applications should be submitted before March 15 for visits commencing after November 15 of the same year. For information and application forms write to: U.S.-India Exchange of Scientists, Division of International Programs, National Science Foundation, Washington, D.C. 20550.

Weizmann Institute of Science. Feinberg Graduate School Postdoctoral Fellowships. The Fellowships provide a twelve-month stipend of approximately IL 78,000 per annum, a small relocation allowance and one-way economy class air fare. There is a possibility of renewal for a second year. The main areas of research are pure and applied mathematics; computer science and engineering; geophysics; and systems theory. Applications are considered twice a year, deadlines being November 15 and May 15. Application forms and additional information may be obtained from the Feinberg Graduate School, The Weizmann Institute of Science, Rehovot, Israel.

STUDY IN THE U.S. FOR FOREIGN NATIONALS

Many of the programs in the Graduate Support and Postgraduate Support sections are also applicable to Foreign Nationals.

Alliance Française de New York. For French students, a limited number of scholarships for graduate study in the U.S. Fields unrestricted. Scholarships are in the amount of \$1,500 to \$3,000. Applicants must have a working knowledge of English. For further information, write to Commission Franco-Américaine d'Échanges Universitaires et Culturels, 9, rue Chardin, Paris, 75016, France.

American Association of University Women. *International Fellowships.* Approximately thirty-five awards made to women of countries other than the U.S. for advanced study. An applicant must hold the equivalent of a bachelor's degree, be proficient in English and intend to return to her own country to pursue her professional career. Forms may be obtained from the University Women's Association or Federation in the applicant's country or the Cultural Affairs Officer of the U.S. Embassy. (U.S. address, Educational Foundation Programs Office, AAUW Educational Foundation, 2401 Virginia Avenue, N.W., Washington, D.C. 20037.) Application deadline is December 1 for subsequent academic year.

American-Scandinavian Foundation. Scandinavian scholars are awarded graduate fellowships to study in the U.S. For information write to the Educational Services Division, The American-Scandinavian Foundation, 127 East 73rd Street, New York, New York 10021.

Fulbright-Hays Program. Grants under the Fulbright-Hays Act for study, research, teaching and lecturing in the United States are available to nationals of many countries. Information regarding these opportunities may be secured from the Cultural Affairs Officer of the United States Embassy or from the binational Educational Commission or Foundation if there is one in the inquirer's own country. (U.S. address: Correspondence Division, Institute of International Education, 809 United Nations Plaza, New York, New York 10017.) The number of grants for each academic year will depend on funds available.

Institute of International Education. Open to nationals of most countries. Develops and administers exchange programs for a number of organizations and corporations, and administers U.S. Government grants under the Fulbright-Hays Act under the educational exchange program of the Department of State. For information contact the Selection Committee in the candidate's *own country* (address may be obtained from the United States Embassy or Consulate).

International Research and Exchanges Board (IREX). Provides opportunities for foreign scholars and students to receive training and to conduct research at academic institutions in the United States. The sending country nominates its own participants to the exchanges, while the receiving country undertakes to place the nominees at appropriate institutions of higher learning, normally for periods of a semester or an academic year. Soviet and East European scholars interested in the various exchange programs administered by IREX should consult the agencies in their own countries which administer the exchanges. These are: Bulgarian Academy of Sciences, ul. "7 Noemvri", 1 Sofia, Bulgaria; Ministry of Education of the Czech Republic (Ministerstvo Skolstvi), Foreign Department, Karmelitska 7, Prague 1, Czechoslovakia; Ministry of Higher and Technical Education, Marx-Engels Platz 2, 102 Berlin, German Democratic Republic; Institute for Cultural Relations with Foreign Countries, V. Dorottya utca 8, Budapest, Hungary; Ministry of Science, Higher Education, and Technology, ul. Miodowa 6/8, Warsaw, Poland; National Council for Science and Technology, str. Roma 32-34, Bucharest, Romania; Federal Administration for International Scientific, Educational, Cultural, and Technical Cooperation, Kosancicev Venac 29, 11000 Belgrade, Yugoslavia; Ministry of Higher and Specialized Secondary Education, Department of Foreign Relations, 11 Zhdanov Street, Moscow, USSR; Academy of Sciences, Leninskii Prospekt, 14, Moscow, V-17, USSR.

Kennedy Scholarships. For citizens of the United Kingdom and Colonies, these grants are for graduate study at Harvard University or the Massachusetts Institute of Technology. Application deadline is early November. Write to Secretary, Kennedy Memorial Trust, Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, England.

Kosciuszko Foundation. One-year grants to doctoral and postdoctoral students. Applicants must be Polish citizens and have excellent command of English. Apply by January 15 for the following academic year. Write to Scholarship and Exchange Programs, The Kosciuszko Foundation, 15 East 65th Street, New York, New York 10021.

Latin American Scholarship Program of American Universities (LASPAU). Participating countries: Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad, Tobago, and Venezuela. Scholarships are awarded for study in the United States at more than 200 participating U.S. colleges and universities, and recipients include those seeking both the Master's and Ph.D. degrees. A candidate must be nominated by his or her Latin American university, have completed a university degree, preferably have had some teaching experience, present evidence of financial need, and sign a contract with the nominating institution agreeing to teach at that university upon receipt of the master's degree. Knowledge of English is not a prerequisite for selection as a LASPAU Scholar. For those Scholars not proficient in English, a special program in English language training lasting up to six months is offered prior to the student's enrollment in the U.S. university. Potential candidates desiring further information should contact the LASPAU Coordinator in the Latin American university by which they are employed, or the LASPAU offices at 25 Mt. Auburn Street, Cambridge, Massachusetts 02138, U.S.A.

Organization of American States (OAS). Fellowships, and Special Training Programs are available to permanent residents of OAS member countries for advanced study or research in another member state. Candidates must be sponsored by the appropriate governmental agency in the home country. For information write to Chief, Trainee Selection Unit, Organization of American States, Washington, D.C. 20006, U.S.A.

U.S.-India Exchange. Grants for Indian scientists invited to the U.S. by U.S. institutions. Information can be obtained from the Council of Scientific and Industrial Research (CSIR), New Delhi, India.

SOURCES OF FELLOWSHIP INFORMATION

Many of the publications listed below are probably available at school, or college and university libraries, or in the Reference Room of a good public library.

Annual Directory of Engineering College Research and Graduate Study. American Society of Engineering Education, One Dupont Circle, N.W., Washington, D.C. 20036.

Annual Register of Grant Support 1977-1978. Academic Media, Marquis Who's Who, Inc., Chicago, Illinois 60611. Comprehensive directory of fellowships, grant support programs of government agencies, foundations, and business and professional organizations. Annual.

Basic Facts on Foreign Study. A fact sheet on what to expect on a study-abroad program and where to find pertinent information; 1976, 4 pp., single copies free. Institute of International Education, 809 United Nations Plaza, New York, New York 10017.

Council on International Educational Exchange. Opportunities for travel and study abroad for undergraduate and graduate students, including language programs at Leningrad State University. Write to the Council on International Educational Exchange, 777 United Nations Plaza, New York, New York 10017.

Directory of Financial Aid in Higher Education-Africa, available from the African Studies Association, 218 Shiffman Center, Brandeis University, Waltham, Massachusetts 02154, U.S.A. \$14.00 prepaid.

The Directory of Special Programs for Minority Group Members. Career Information Services, Employment Skills Banks, Financial Aid Sources (2nd Edition, 1975) Garrett Park Press, Garrett Park, Maryland 20766. \$9.75.

Exchange Programs with Eastern Europe and the Soviet Union for 1977-1978. International Research and Exchanges Board (IREX), 110 East 59th Street, New York, New York 10022. Gives details on the programs administered by IREX which include exchanges for a semester or an academic year, short term grants to promote new exchanges and awards for support of collaborative projects.

Fellowships Offered by Foreign Governments, Universities, and Private Donors, Institute of International Education, 809 United Nations Plaza, New York, New York 10017.

Fulbright-Hays Program. Information on grants for teaching in Elementary and Secondary Schools, and for Summer Seminars, may be obtained from the International Exchange Branch, Division of International Education, U.S. Office of Education, Department of Health, Education and Welfare, Washington, D.C. 20202. Information on grants for Foreign Language Training and Area Studies may be obtained from the International Studies Branch, Division of International Education, U.S. Office of Education, Department of Health, Education, and Welfare, Washington, D.C. 20202.

Graduate and Professional School Opportunities for Minority Students (1975-1977). Educational Testing Service, P. O. Box 2606, Princeton, New Jersey 08540. \$3. Available in public libraries.

Graduate Programs and Admission Manual (Published Annually). Educational Testing Service, P. O. Box 2606, Princeton, New Jersey 08540. Four volumes, \$12.00 per set.

Grant and Award Programs of the Public Health Service. U.S. Public Health Service, U.S. Department of Health, Education, and Welfare. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Grants for Graduate Study Abroad. List of grants for graduate study and research abroad, administered by the I.I.E. for U.S. citizens. Request copy of brochure from Correspondence Unit, Institute of International Education, 809 United Nations Plaza, New York, New York 10017.

Grants for Scientific Research. Brochure gives guidelines on eligibility and proposal preparation. Available from the National Science Foundation, 1800 G Street, N.W., Washington, D.C. 20550.

The Grants Register. Roland W. Turner (ed.), St. Martin's Press, 175 Fifth Avenue, New York, New York 10010. Lists scholarships, fellowships, and grants at all levels of graduate study, all over the world, available from government agencies and international, national and private organizations. The 1977-1979 edition, published in November 1976, \$25.00. The 1979-1981 edition is expected to be published in January 1979.

Guide to financial aids for students in Arts and Sciences. For Graduate and Professional Study. Aysel Searles, Jr., (ed.) and Anne Scott (ed.), \$3.95 (paper). Arco Publishing Company, 219 Park Avenue South, New York, New York 10003.

A Guide to Graduate Study: Programs Leading to the Ph.D. Degree. Fourth Edition. American Council on Education, Washington, D.C.

Guide to Programs, National Science Foundation. Order #038-000-002945, \$1.35 each, from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Handbook on International Study for U.S. Nationals. The 5th edition, 1970, covering countries on all continents, \$7.00; the 6th edition, 1976, Vol. I: *Study in Europe*, and Vol. II: *Study in the American Republics Area*, \$6.95 each, are available from the Institute of International Education, 809 United Nations Plaza, New York, New York 10017. Vols. III and IV are in preparation.

Minority Graduate Student Locator Service. Information for minority students interested in attending graduate school. Write to Educational Testing Service, P. O. Box 2615, Princeton, New Jersey, 08540.

National Endowment for the Humanities. The Endowment operates through four programs. Information about the Endowment's fellowship programs which may be of particular interest may be obtained from Dr. James H. Blessing, Division of Fellowships, National Endowment for the Humanities, 806 15th Street, N.W., Washington, D.C. 20506.

National Register of Scholarships and Fellowships. Two volumes: Volume I lists national scholarships and loans; Volume II lists fellowships and loans. World Trade Academy Press, 50 East 42nd Street, New York, New York.

S. Norman Feingold Scholarships, Fellowships, and Loans. Volume V, 1972: \$17.00; Volume VI, 1977: \$45.00 by S. Norman Feingold and Marie Feingold. Bellman Publishing Company, P. O. Box 164, Arlington, Massachusetts 02174. Detailed list of financial aid sources. Volume V has an improved index which facilitates finding awards. Volume VI follows the same format, but does not duplicate the earlier volume.

Scholarships, Fellowships and Loans News Service. The Staff, Bellman Publishing Company, P. O. Box 164, Arlington, Massachusetts 02174, published quarterly, \$24.00 per year. Up-to-date information regarding student financial aid. Annotated bibliography of books and professional journals.

Selected List of Major Fellowship Opportunities and Aids to Advanced Education for United States Citizens. Publications Office, National Science Foundation, 1800 G. Street, N.W., Washington, D.C. 20550. Contains a list of fellowships available on the undergraduate, graduate, and postdoctoral levels plus a bibliography giving other sources of information on fellowships, scholarships, and loans.

Selected List of Major Fellowship Opportunities and Aids to Advanced Education for Foreign Nationals. Publications Office, National Science Foundation, 1800 G Street, N.W., Washington, D.C. 20550. Contains a list of financial aid sources plus a bibliography listing other sources of financial aid information.

Student Aid Manual. 1977-1978, \$10.00 cash with order or formal purchase order. Chronicle Guidance Publications, Inc., Moravia, New York 13118. Lists primarily noncollegiate sources of financial aid for undergraduate, graduate, and postgraduate study.

Study Abroad. \$7.50. Write UNESCO, UNIPUB, P. O. Box 433, Murray Hill Station, New York, New York 10016; in Europe, Place de Fontenoy, Paris 7^e, France.

Summer Study Abroad. Gail A. Cohen, (ed.). A guide to over 700 summer-study programs around the world. Lists programs sponsored by U.S. colleges and universities and those sponsored by foreign institutions and private organizations. Contains information on courses, costs, scholarships, and accommodations. 1977. 130 pp. Annual. \$4.00 (1978 edition available in February). Institute of International Education, 809 United Nations Plaza, New York, New York 10017.

U.S. College-Sponsored Programs Abroad: Academic Year. Gail A. Cohen, (ed.). Describes over 700 study-abroad programs, both undergraduate and graduate, conducted during the academic year by U.S. colleges and universities in countries around the world. Information on courses, costs, credits, housing, scholarships, and language of instruction. 1977. 140 pp. Annual. \$4.50 (1978 edition available in March). Institute of International Education, 809 United Nations Plaza, New York, New York 10017.

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INDEX OF ABSTRACTS

Volume 24 (1977)

- ABATZOGLOU, Theagenis. On the smoothness of the metric projection and C^2 manifolds, A-481.
- ABDELKADER, Mostafa A. Indefinite-integral equations, A-236.
- ABELES, Francine F. Bounds on simplicial volumes. Preliminary report, A-315.
- ABERTH, Oliver. A method for exact computation with rational numbers, A-168.
- ABIAN, Alexander. A new construction of free groups, A-225; Conditionally compact rings of functions and their compactification, A-396; Compactification of the domains of certain rings of functions, A-444; Compact partially ordered sets and compactification of partially ordered sets, A-530.
- ABIAN, Alexander and SALBANY, Sergio. Wallman and other compactifications and matrices of zeros and ones, A-261.
- ABLOW, C. M. Self-similar response of a thick-walled elastic-plastic pipe. Preliminary report, A-639.
- ABLOW, C. M. and SCHECHTER, S. Campylotropic coordinates, A-349.
- ABORN, Bruce J. and SHANKAR, Hari. Generalised growth of analytic functions, A-82; Generalised growth for functions of several complex variables analytic in a polydisc. Preliminary report, A-431; Generalised growth and convergence of analytic functions. Preliminary report, A-542; Generalised growth and convergence for analytic functions of several complex variables. Preliminary report, A-613.
- ABRAHAM, Ralph H. Electro-optical exploration of forced Navier-Stokes bifurcations, A-331; Experimental dynamics with interactive computer graphics, A-637.
- ABRAHAMSE, M. B. and DOUGLAS, R. G. Examples of the central decomposition for an analytic Toeplitz operator, A-578.
- ABRAMOVICH, S. See STRELITZ, Sh.
- ACCOLA, Robert D. M. Plane models for Riemann surfaces admitting certain half-canonical linear series (part 1), A-430; On generalized Weierstrass points on Riemann surfaces. Preliminary report, A-539.
- ACKER, Andrew F. An isoperimetric inequality involving conformal mappings, A-12; Free boundary optimization problems involving geometric constraints, A-242; An inequality involving capacitance, A-424; A free boundary optimization problem involving weighted areas, A-539; Another free boundary optimization problem involving weighted areas, A-612.
- ACKER, Andrew and WALTER, Wolfgang. On the global existence of solutions of parabolic differential equations with a singular nonlinear term, A-424.
- ADAMOWICZ, Zofia. Constructible semilattices of degrees of constructibility, A-300.
- AHMAD, Shair and LAZER, Alan. A new comparison theorem, A-94.
- AIZLEY, Paul and SELFRIDGE, J. L. A lower bound for $m(4)$, A-452.
- AKBULUT, Selman and KIRBY, Robion. An exotic involution on S^4 , A-353.
- AKBULUT, Selman and KING, Henry. Realizing spaces by real algebraic varieties. Preliminary report, A-623.
- AKCOGLU, M. A. and SUCHESTON, L. A ratio ergodic theorem for superadditive processes, A-554.
- AKIBA, Tadatoshi. Local triviality in codimension one, A-570.
- AKYILDIZ, Ersan. On the Bruhat decomposition. Preliminary report, A-418.
- ALBERT, Jeffrey H. Generic bifurcation in the Taylor Problem. Preliminary report, A-158.
- ALBERTSON, Michael O. and HUTCHINSON, Joan P. On six-chromatic toroidal graphs, A-451.
- ALEX, Leo J. Index two simple groups. II, A-564.
- ALEXANDER, Charles C. See KINNEY, James.
- ALEXANDER, H. Explicit imbedding of the (punctured) disc into C^2 , A-472.
- ALEXANDER, Roger K. Diagonally-implicit Runge-Kutta methods with error estimates for stiff O.D.E.'s. Preliminary report, A-170.
- ALEXANDERSON, G. L. and WETZEL, John E. Lamination identities. Preliminary report, A-571.
- ALEXIADES, Vasilios. Generalized solution for an initial-boundary value problem for a class of singular parabolic equations in a non-cylindrical domain. Preliminary report, A-97.
- ALF, Carol. See O'CONNOR, Thomas A.
- ALI, Mir M. See BOOKMYER, Lloyd D.
- ALI, Mir M. and BOOKMYER, Lloyd D. A note on complete sufficient statistics, A-439.
- ALIPRANTIS, C. D. and BURKINSHAW, O. On locally solid topologies on Riesz spaces, A-119.
- ALLAN, Robert B. and LASKAR, Renu. On dominating and independent dominating numbers of a graph, A-417.
- ALLEN, G. D. Duals of Lorentz spaces. Preliminary report, A-381.
- ALLEN, Harry P. The octonians and exceptional simple Lie algebras over the real and complex fields, A-572.
- ALLEN, Harry P. and TRUSHIN, David S. Coproper coalgebras, A-59; A generalization of the Frobenius structure of associative algebras. Preliminary report, A-222.
- ALLEN, Richard J. Equivariant embeddings of finite abelian group actions. Preliminary report, A-339.
- ALLINGER, Deborah. Characterization of (p, q, r) -absolutely summing operators on Hilbert space, A-486.
- ALMGREN, F. J., Jr. Mass minimizing integral currents in R^n are almost everywhere regular. Preliminary report, A-541; Multiple valued solutions to variational problems and the regularity of mass minimizing integral currents, A-565.
- ALMGREN, F. J., Jr. and SIMON, L. Existence of embedded solutions of Plateau's problem. Preliminary report, A-13.
- ALPERIN, J. L. Invertible modules for groups, A-64.
- ALSON, Pedro. Convexoid compact perturbations of operators. Preliminary report, A-380.
- ALSPACH, Brian and PARSONS, T. D. Isomorphism of circulant graphs, A-624.
- ALTMAN, Mieczyslaw. A strategy theory of solving equations. Preliminary report, A-169.
- ALVES, Mauriso. Bieberbach's conjecture with $|a_3|$ restricted. Preliminary report, A-615.
- ANACKER, Steven E. Reducible partitions. Preliminary report, A-521.
- ANANTHARAMAN, R. Compact measures. Preliminary report, A-76.
- ANDERSON, C. L. Random visibility models, A-166.
- ANDERSON, Clifford H. Extending stability with Lyapunov techniques. Preliminary report, A-641.
- ANDERSON, D. D. and HUCKABA, James. Integral closure in Noetherian rings, A-51.
- ANDERSON, David F. Projective modules over subrings of $k[x, y]$, A-51; Graded Krull domains, A-529.
- ANDERSON, David F. and DOBBS, David E. Pairs of rings with the same prime ideals. Preliminary report, A-628.
- ANDERSON, Douglas R. A triangulable space which possesses no natural PL structure, A-151.
- ANDERSON, J. Milne and RUBEL, L. A. A characterization of hypernormal meromorphic functions in the unit disc, A-77.
- ANDERSON, J. Milne, RUBEL, L. A., SQUIRES, W. A.

- and TAYLOR, B. A. Convolution irreducibility in Euclidean space. Preliminary report, A-12; Irreducibility of certain entire functions. Preliminary report, A-323.
- ANDERSON, James A. and HEAD, Tom. Pure diagrams of abelian groups. Preliminary report, A-345.
- ANDERSON, Patricia and FREY, G. Thomas. Precalculus computer assisted statistics with parametric, nonparametric, and Bayesian integration. Preliminary report, A-188.
- ANDERSON, Robert F. and FRIEDMAN, Avner. Quality control problems and quasi variational inequalities, A-162.
- ANDERSON, William N., Jr. and TRAPP, George E. Properties of the pseudopowers of discrete analytic functions, A-99.
- ANDREWS, George E. Partitions, q-series and the Lusztig-MacDonald-Wall conjectures, A-454.
- ANDREWS, P. and ARKOWITZ, M. Sullivan's minimal model and higher order Whitehead products, A-147.
- ANICHINI, Guiseppe and SCHUUR, Jerry D. Disconjugacy and growth estimates for solutions of a class of nonlinear differential equations, A-617.
- ANSARI, M. S. and KHAN, R. S. Integrability of shifted trigonometric series, A-242.
- ANSELONE, P. M. and LEE, J. W. A unified approach to the approximate solution of linear integral equations, A-171.
- APPLING, William D. L. An integrability approximation representation theorem, A-10; A characterization of uniform absolute continuity, A-430.
- ARGYROS, S. Applications of isomorphic embeddings of $\ell^1(\Gamma)$, A-539.
- ARGYROS, S. and NEGREPONTIS, S. Isomorphic embedding of $\ell^1(\Gamma)$, A-538.
- ARKIN, Joseph. Magic squares in motion with equal sums of like powers, A-448.
- ARKOWITZ, M. See ANDREWS, P.
- ARMENDARIZ, Efraim P. On fixed rings of automorphisms. Preliminary report, A-57.
- ARMENDARIZ, Efraim P., FISHER, J. W. and SNIDER, R. L. On injective and surjective endomorphisms of finitely generated modules, A-56.
- ARMSTRONG, Alan. Central Fourier-Stieltjes transforms with an isolated value, A-110.
- ARNOW, Barry J. Dedekind completions of lattices by ends, A-377.
- ARONSON, D. G. and WEINBERGER, H. F. Travelling wave solutions for a class of translation invariant recursions, A-122.
- ARSOVE, Maynard and JOHNSON, Guy, Jr. Green's lines methods in the theory of H^p spaces. Preliminary report, A-470.
- ASH, Chris and ROSENTHAL, John W. On the lattice of algebraically closed subfields of an algebraically closed field of characteristic 0, A-50.
- ASH, J. Marshall. On strong restricted (2,2) convolution operators. Preliminary report, A-112.
- ASHKENAZI, Max. On periodic solutions of functional differential equations. Preliminary report, A-383.
- ASIMOV, Daniel. Product measures and random integers. Preliminary report, A-554.
- ASKEY, Richard. Historical remarks on orthogonal polynomials. Preliminary report, A-26; The q-gamma function, A-566.
- ASKEY, Richard and WILSON, James A. A new set of basic hypergeometric orthogonal polynomials. Preliminary report, A-325.
- ASSA, Steven B. Contributions to the classification of finite groups by standard subgroups, A-71.
- ASSMUS, E. F., Jr. and MATTSON, H. F., Jr. A combinatorial lemma and the exactness of the BCH bound, A-34.
- ASTBURY, Ken. Amarts indexed by directed sets, A-160.
- ATALLA, Robert. On joint ergodicity of T and T^* , A-236.
- AUBIN, Jean-Pierre. Monotone trajectories of differential equations, A-97.
- AUCHMUTY, Giles. Axisymmetric figures of equilibrium of rotating self-gravitating liquids, A-576.
- AULL, C. E. Absolute z and C -embedding. Preliminary report, A-141; Absolute C -embedding in P - and Z -spaces, A-301; Absolute C^* -embedding of P -spaces, A-495.
- AUPETIT, B. Capacity and uniform algebras. Preliminary report, A-15.
- AUSTIN, Bill R. Generalized quasi Stieltjes integral. Preliminary report, A-75.
- AXLER, Sheldon, CHANG, Sun-Yung A. and SARASON, Donald. Products of Toeplitz operators. II. Preliminary report, A-640.
- AZARNIA, Nazanin. Center-valued weights on von Neumann algebras. Preliminary report, A-127.
- AZPEITIA, Alfonso G. On entire functions of bounded index defined by Dirichlet expansions, A-614.
- AZUMAYA, Goro. Dense embedding for locally projective modules, A-460.
- BAERNSTEIN, Albert II. Maximal functions in complex analysis, A-576.
- BAGGETT, Larry and TAYLOR, Keith. A sufficient condition for the complete reducibility of the regular representation, A-556.
- BAGLIVO, Jenny A. An equivariant Wall obstruction theory, A-147.
- BAILEY, David H. Sequential schemes for classifying and predicting ergodic processes, A-256.
- BAILEY, James L. A characterization of Alexander invariants of links. Preliminary report, A-396.
- BAILLIEUL, John B. Control problems associated to singular Riemannian metrics, A-568.
- BAILLON, J.-B., BRUCK, R. E. and REICH, S. Asymptotic behavior of nonexpansive mappings and semigroups in Banach spaces, A-427; Asymptotic behavior of nonexpansive mappings and semigroups in Banach spaces, A-586.
- BAIRD, Bridget B. Inverse semigroups of homeomorphisms between open subsets. Preliminary report, A-70.
- BAJAJ, Prem N. Some constructions in semidynamical systems, A-475.
- BAKER, Daniel. Differential characters and Borel cohomology, A-633.
- BAKKE, Vernon L. Optimal control problems involving integral equations with delays. Preliminary report, A-132.
- BALCAR, B. and HÁJEK, P. A sequence of degrees of constructibility, A-251.
- BALDWIN, John T. Some universal Horn logic. Preliminary report, A-437.
- BALL, J. A., OLIN, R. F. and THOMSON, J. E. Weakly closed algebras of subnormal operators, A-125.
- BALL, Richard N. and KENNY, G. Otis. Uniform completions of a lattice ordered group. Preliminary report, A-41.
- BALLEW, David and THOLEN, Ronald. On $\pi(x+y) \leq \pi(x) + \pi(y)$, A-521.
- BANCHOFF, Thomas F. and McCRORY, Clint. A combinatorial formula for normal Stiefel-Whitney classes. Preliminary report, A-154.
- BANCHOFF, Thomas F. and STRAUSS, Charles M. A reinvestigation of the centro-surface of the ellipsoid, A-334.
- BANERJI, Ranan. Some results on games graphs, A-31.
- BANK, Steven B. Some results on the Gamma function and other hypertranscendental functions, A-380.
- BANKS, H. T. Approximation methods for control of hereditary systems, A-308.
- BANKSTON, Paul. On the ultrapower theorem, A-391; The infinite distributivity of some regular open algebras, A-556; Resolvability of topological ultraproducts. Preliminary report, A-621.
- BARBACK, Joseph. Regressive isols and series over their finite sums, A-399.
- BARNARD, Roger W. and KELLOGG, Charles N. On generalized convolution operators applied to majorization and subordination problems, A-83.
- BARRAR, Richard B. Uniqueness of monosplines with odd multiplicity of least norm, A-480.
- BARRATT, Michael and HANKS, Christopher. On the structure of Thom spaces. Preliminary report, A-339.
- BARRIA, Jose and HERRERO, Domingo. Closure of similarity orbits of nilpotent operators. Preliminary report, A-240; The similarity orbit of a biquasitriangular operator, A-292.
- BARRODALE, Ian. Best approximation of complex-valued data, A-505.
- BARROW, David L. On multiple node Gaussian quadrature

- formulae, A-104.
- BARROW, David L. and SMITH, Philip W. Asymptotic properties of best $L_2[0,1]$ approximation by splines with variable knots. Preliminary report, A-480.
- BARTH, Karl F. Generalizations of Iversen's theorem, A-307.
- BARTH, Karl F., BRANNAN, D. A. and HAYMAN, W. K. The growth of plane harmonic functions along an asymptotic path, A-84.
- BARWISE, Jon. Beyond first-order logic, A-28.
- BASTIAN, Joseph J. Transitive algebras and bundle shifts, A-130.
- BATEMAN, Paul T. Showing that two polynomials are relatively prime, A-459.
- BATES, Peter W. Nonlinear nodal problems and approximation by projection methods, A-90.
- BATESON, Ann. Groupoids in a variety. Preliminary report, A-374.
- BATIGNE, Daniel. Integral generalized inverses of integral matrices. Preliminary report, A-234; Note on integral $\{1\}$ -inverses of integral matrices, A-370.
- BAUDISCH, Andreas. The theory of abelian p-groups with the quantifier \exists is decidable, A-254.
- BAUMGARTNER, James E. and TAYLOR, Alan D. Partition theorems and ultrafilters, A-36.
- BAUMSLAG, Gilbert, CANNONITO, Frank B. and MILLER, Charles F. III. Infinitely generated subgroups of finitely presented groups. II. Preliminary report, A-233.
- BAXTER, David K. The existence of matrices with prescribed characteristic and permanent polynomials, A-625.
- BAXTER, J. R. Recurrent potentials and random times, A-160.
- BAXTER, Willard E. A condition of Brauer-Cartan-Hua type, A-57.
- BAXTER, Willard E. and MARTINDALE, Wallace S. III. Jordan automorphisms of semiprime rings. Preliminary report, A-375.
- BAYBARS, Ilker. See NISHIZEKI, Takao.
- BAZELOW, Alexander R. and BRICKLE, Frank. A partition problem posed by Milton Babbitt (Part I). Preliminary report, A-372.
- BAZLEY, Norman W. and LEHNIGK, Siegfried H. Faedo-Galerkin approximations for evolution equations with reproducing nonlinearities. Preliminary report, A-241.
- BEACHY, John A. Inversive localization at prime Goldie ideals. Preliminary report, A-463.
- BEAM, Richard M. See WARMING, R. F.
- BEAR, H. S. and HILE, G. N. Algebras which satisfy a second order linear P. D. E., A-113.
- BEARD, Jacob T. B., Jr., BULLOCK, Alice T. and HARBIN, Mickie S. Infinitely many perfect and unitary perfect polynomials over some GF(q), A-624.
- BEASLEY, Leroy B. Linear transformations on matrices: The invariance of commuting pairs of matrices, A-561.
- BEASLEY, LeRoy B. and CUMMINGS, Larry J. Permanent semigroups, A-54.
- BEAVER, O. R. and COOK, T. A. States on quantum logics and their connection with a theorem of Alexandroff, A-568.
- BECK, Anatole. Conditional independence, A-336.
- BECK, Robert E. and KOLMAN, Bernard. Random methods for constructing Cartan subalgebras of Lie algebras. Preliminary report, A-62.
- BECK, Walter E. and NAJAR, Rudolph M. More reduced amicable pairs. Preliminary report, A-47.
- BECKENBACH, E. F. Topology of the fundamental theorem of algebra for minimal surfaces, A-495.
- BECKER, Joseph, HENSON, C. Ward and RUBEL, Lee A. The problem of moduli for plane domains is undecidable. Preliminary report, A-580.
- BECKNER, William. Inequalities in Fourier analysis, A-108; Convolution inequalities and Fourier analysis, A-331.
- BEDDINGTON, John R. On the characteristics of successful biological control, A-508.
- BEDFORD, Eric and FORNAESS, John Erik. Complex manifolds in pseudoconvex boundaries, A-471.
- BEEM, John K. A metric topology for causally continuous completions, A-177.
- BEER, Gerald. Tax structures whose progressivity is inflation neutral, A-178.
- BEINEKE, L. W. and RINGEISEN, R. D. On crossing numbers of certain products of graphs. Preliminary report, A-39.
- BELEGRADEK, O. V. An algebraic characterization of groups with solvable occurrence problem, A-393; An algebraic characterization of groups with solvable decision problems, A-436.
- BELL, Gregory W. Cohomology of degree 1 and 2 of the Suzuki groups, A-67.
- BELL, Harold. See DICKMAN, R. F., Jr.
- BELL, Murray G. A cellular constraint in supercompact Hausdorff spaces, A-394.
- BELL, Murray G. and van MILL, Jan. The compactness number of a topological space, A-444.
- BELL, Wayne C. A decomposition of additive set functions, A-75; On the subdivision norm infimum function, A-238; Commutativity and representability properties of decompositions of additive set functions, A-542.
- BELLENOT, Steven F. Factorization of compact operators and finite representability of Banach spaces, A-119; Every Schwartz Fréchet space is a subspace of a Schwartz Fréchet space with an unconditional basis, A-630.
- BELLMAN, Richard. Generalizations of the Pade approximation. Preliminary report, A-384.
- BELNA, C., BONAR, D., CARROLL, F., COLWELL, P. and PIRANIAN, G. An annular Tsuji function, and its Julia points, A-385.
- BENABDALLAH, K., BRADLEY, R. and LAROCHE, A. Quasi p-neat injective and projective groups. Preliminary report, A-4.
- BENDERSKY, Martin. The unstable Novikov spectral sequence for the spheres, A-498.
- BENHAM, Craig. Catastrophes and protein conformation, A-190.
- BENKOSKI, Stanley J. The probability that k polynomials are relatively r-prime. Preliminary report, A-343.
- BENNETT, Colin, RUDNICK, Karl and VAALER, Jeffrey D. Best uniform approximation by linear fractional transformations, A-105.
- BENNETT, D. E. Mappings that preserve certain non-separating subcontinua. Preliminary report, A-144; Mappings that preserve certain nonseparating subcontinua. Preliminary report, A-357.
- BENNETT, Grahame. An extension of the Riesz-Thorin theorem, A-125.
- BENNETT, H. R. and BERNEY, E. S. Spaces with σ -minimal bases. Preliminary report, A-259.
- BENSON, Donald C. A Riccati-like equation: Principal solutions for Liénard's equation, A-640.
- BERENSTEIN, Carlos A. On the converse to Pompeiu's problem, A-243.
- BERGER, Alan E. See CIMENT, Melvyn.
- BERGER, Marc A. Stochastic Ito-Volterra equations, A-256.
- BERGER, Mel S. On the singularities of nonlinear Fredholm operators and their applications, A-130.
- BERKEY, Dennis D. and FREEDMAN, Marvin I. Buckled elastica at contact: A perturbation analysis. Preliminary report, A-567.
- BERKEY, Dennis, FREEDMAN, Marvin, and GRANOFF, Barry. Bifurcation analysis in systems with switch-type coefficient functions, A-91.
- BERKOVICS, Carlos M. Optimal linear programming modeling given well known circumstances and a finite capability of perturbation, A-246.
- BERKSON, A. J. and McCONNELL, Alan. Using categorical constructions in the category of algebraic function fields, A-49.
- BERMAN, David M. Critical graphs for acyclic colorings. Preliminary report, A-36.
- BERMAN, Elizabeth. Logic and intuition in basic mathematics, A-188.
- BERNER, Andrew J. Spaces with dense conditionally compact subsets. Preliminary report, A-142.
- BERNEY, E. S. See BENNETT, H. R.
- BERNEY, E. S. and NYIKOS, P. J. Length, width and breadth of Boolean algebras, A-42.
- BERNFELD, Stephen R. and LAKSHMIKANTHAM, V. Generalized finite time stability and Liapunov functions, A-92.

- BERRY, J. W. Representation of e-degrees. Preliminary report, A-299.
- BERS, Lipman. Quasiconformal mappings with applications to ordinary differential equations, complex analysis and topology. Retiring Presidential Address, A-79.
- BERSTEIN, Israel and EDMONDS, Allan L. Branched coverings of 3-manifolds. Preliminary report, A-261.
- BERSTEIN, Israel, COHEN, M. and CONNELLY, R. Contractible, noncollapsible products with cubes, A-445.
- BERTHOLF, Dennis and WALLS, Gary. Properties of finite quasi-injective groups, A-224.
- BERTIGER, William. Maximum principles for weakly coupled elliptic systems, A-96.
- BERTSEKAS, Dimitri P. See SHREVE, Steven E.
- BERZSENYI, George. Methods for constructing linear difference operators which simulate analyticity, A-78.
- BEYER, W. A. See McCALL, J. D.
- BHASKARAN, M. On a norm theorem. Preliminary report, A-4; On a norm theorem. Preliminary report, A-278.
- BHASKARAN, R. and NAIK-NIMBALKAR, U. Banach algebras of Lipschitz functions over valued fields. Preliminary report, A-294.
- BICKNELL-JOHNSON, M. See HOGGATT, V. E., Jr.
- BILYEU, Russell G. A metric inequality for barycenters in weakly compact sets, A-119.
- BILYEU, Russell G. and LEWIS, Paul W. Compact and weakly compact operators on $C(H)$. Preliminary report, A-382.
- BINDSCHADLER, David E. Examples of singular solutions to the oriented Plateau problem. Preliminary report, A-11.
- BIRKENMEIER, Gary F. Ker-injective modules. Preliminary report, A-60.
- BISHOP, Wayne. How to construct a regular polygon. Preliminary report, A-133.
- BITTMAN, Richard M. and LEVY, Lawrence S. Idempotent artinian rings and unitary modules, A-464.
- BIX, Robert. Separable Jordan algebras over commutative rings. Preliminary report, A-419.
- BLACKMAN, Jerome. Geometric quantization and the Feynman path integral, A-18.
- BLACKMORE, Denis. On local normal forms for diffeomorphisms and flows. Preliminary report, A-313; A class of pathological diffeomorphisms, A-502.
- BLAIR, Charles E. Approximate fixed points in rectangular arrays, A-387; Convex optimization and Lagrange multipliers, A-434.
- BLAIR, David E., LEDGER, Arthur J. and SHOWERS, Donald K. 4-symmetric spaces. Preliminary report, A-138.
- BLAKE, Ian F. and DEZA, M. Coding with permutations. Preliminary report, A-416.
- BLAKE, Louis H. Approximate martingales plus uniform integrability conditions are equivalent to games which become fairer with time, A-165.
- BLASS, Josef and STEINER, Ray. The diophantine equation $y^2 + k = x^7$, A-228.
- BLASS, Piotr. A class of surfaces introduced by O. Zariski. Preliminary report, A-322.
- BLATTNER, Meera and HEAD, Tom. Free monoids and transducers, A-646.
- BLEICK, Willard E. and WANG, Peter C. C. Asymptotic representation of Stirling numbers of the second kind, A-374.
- BLOCK, Louis. Continuous maps of the interval with finite nonwandering set, A-139.
- BLOK, W. J. The lattice of varieties of modal algebras, A-532.
- BLOOM, Frederick. Stability and growth estimates for electric fields in nonconducting material dielectrics, A-306.
- BLUM, Edward K. Numerical solution of eigentuple-eigenvector problems in Hilbert spaces, A-173.
- BLUM, Manuel. Toward a mathematical theory of inductive inference, A-645.
- BLYTH, T. S. Baer semigroup coordinatisations of modular lattices, A-609.
- BOAS, R. P. The Jensen-Steffensen inequality, A-324.
- BODY, Richard. See DOUGLAS, Roy.
- BOGART, Kenneth. See GORDON, Jean.
- BOGART, Kenneth, GOLDBERG, Don and GORDON, Jean. An elementary proof of the MacWilliams theorem on equivalence of codes, A-184.
- BOLLOBAS, B., CHUNG, F. R. K. and GRAHAM, R. L. On complete bipartite subgraphs contained in spanning tree complements, A-627.
- BONAR, D. See BELNA, C.
- BONDARENKO, B. A., LEUNG, K. V., MANGERON, D. J. and OGUZTORELI, M. N. Operational representation of solutions of a class of polylinear equations, A-244.
- BOOKMYER, Lloyd D. See ALI, Mir, M.
- BOOKMYER, Lloyd D. and ALI, Mir M. Partition approach to sufficiency, A-553.
- BOONE, James R., DAVIS, Sheldon W. and GRUENHAGE, Gary. Cardinal functions for k -spaces, A-442.
- BORDIN, Benjamin. "Weakly strongly" singular integral operators on atomic Hardy spaces. Preliminary report, A-616.
- BORGES, Carlos R. Blumberg's theorem holds for stratifiable spaces. Preliminary report, A-260.
- BOROSH, I. and TREYBIG, L. B. Bounds on positive integral solutions of linear diophantine equations II. Preliminary report, A-422.
- BOROSH, I., CHUI, C. K. and ERDOS, P. Change of signs in infinite series. Preliminary report, A-477.
- BORWEIN, D. and JAKIMOVSKI, A. Generalized weighted Hausdorff matrices as bounded operators over ℓ^p . Preliminary report, A-101.
- BOWNDS, John M. A modified Galerkin approximation method for Volterra equations with smooth kernels. Preliminary report, A-237.
- BOYD, J. N. and RAYCHOWDHURY, P. N. Finite group representation techniques in Lagrangian mechanics, A-567.
- BOYLAN, Stanley L. Abstract Wiener spaces for non-Gaussian measures, A-311.
- BOYLE, Ann K. and FELLER, E. H. Semicritical modules and k -primitive rings, A-462.
- BRACE, J. W. and TOMSISON, J. D. Uniform filter convergence and pointwise filter convergence for function spaces, A-118.
- BRADLEY, J. Scott. Generalized Hardy's inequalities with weights, A-615.
- BRADLEY, R. See BENABDALLAH, K.
- BRAKKE, Kenneth A. The motion of a surface by its mean curvature, A-574.
- BRAMBLE, James H. Finite element methods for elliptic and parabolic problems, A-172.
- BRAMSON, Maury D. Maximal displacement of branching Brownian motion, A-614.
- BRANDAL, Willy. Domains whose finitely generated modules decompose. Preliminary report, A-50.
- BRANNAN, D. A. See BARTH, Karl F.
- BRANNIGAN, M. Generalised Remez algorithm, A-168.
- BRAUDE, Eric John. Some topological implications of cocontinuity, A-140; Rings of cocontinuous functions on a lattice. Preliminary report, A-317.
- BRAUDE, Eric John and KWAN-YUK, Claire Sit. A homotopy theory for posets, A-494.
- BRAUER, Fred. Periodic solutions of some ecological models, A-509.
- BRECKENRIDGE, J. C. and NISHIURA, T. L^1 -convergence of the Jacobians of uniformly convergent sequence of smooth maps. Preliminary report, A-73.
- BREMERMANN, Hans J. Algorithms and optimization in biology. Survey, A-351.
- BRENNAN, James E. Invariant subspaces and subnormal operators, A-574.
- BRENNER, J. L. A unified treatment of some means of classical analysis. Preliminary report, A-346; Covering theorems for finisigs. IX. How the square of a class with two nontrivial orbits in S_n covers A_n , A-609.
- BRENT, Richard P. The first 40,000,000 zeros of $\zeta(s)$ lie on the critical line. Preliminary report, A-417.
- BRENTON, Lawrence J. On rational Gorenstein singularities in dimension greater than two, A-472.
- BRESSOUD, David M. Generalization of the Rogers-Ramanujan identities for all moduli, A-520.
- BREWER, J. W. and COSTA, D. L. Projective modules over some nonnoetherian rings. Preliminary report, A-233.
- BREWER, J. W., RUTTER, E. A. and WATKINS, J. J. Coherence of $R[[X]]$ when R is von Neumann regular, A-52.

- BREWSTER, Ben and OTTAWAY, Malcolm. The super-solvable residual of an L_1 -group. Preliminary report, A-68.
- BREZIN, Jonathan. Solvable Lie groups as a source of problems in analysis, A-635.
- BRICKLE, Frank. See BAZELOW, Alexander R.
- BRILLHART, John, ERDÖS, Paul and MORTON, Patrick. The cumulative distribution of the sequence $\{s(n)/\sqrt{n}\}$ associated with the Rudin-Shapiro sequence, A-456.
- BROM, James D. Almost periodic functions in constructive mathematics, A-107.
- BRONSON, E. Existence of weak solutions of differential equations in arbitrary Banach space, A-92.
- BRONSON, Richard and JONES, Alan. Differential equations with a minicomputer, A-89.
- BROOKS, James K. and DINCULEANU, Nicolae. Weakly compact operators on $L^1(\mu, E)$. Preliminary report, A-114.
- BROVERMAN, Samuel. N -compact spaces, A-142; Another realcompact, 0-dimensional, non- N -compact space. Preliminary report, A-441.
- BROVERMAN, Samuel, GINSBURG, J., KUNEN, K. and TALL, F. D. Topologies determined by σ -ideals on ω_1 , A-558.
- BROWN, Gerald G. and GRAVES, Glenn W. Use of simple algebraic structures for implementing algorithms in large scale mathematical programming. Preliminary report, A-351.
- BROWN, H. I. and ROBINSON, I. J. W. On isomorphisms between certain subalgebras of $B(X)$, A-125.
- BROWN, James Ward. A new generating function for Laguerre polynomials. Preliminary report, A-536.
- BROWN, Johnny M. and LEE, Ken W. The distance set of $C_\lambda \times C_\lambda$. Preliminary report, A-30.
- BROWN, R. and HIGGINS, P. J. On homotopy excision. Preliminary report, A-559.
- BROWN, R. C. Selfadjoint subspace extensions of symmetric differential operators defined on closed subspaces of infinite codimension. Preliminary report, A-236.
- BROWN, R. C. and TVRDY, M. Generalized boundary value problems and variational analysis. Preliminary report, A-132.
- BROWN, Robert D. Construction of elementary divisors for finitely perturbed Banach systems, A-129.
- BROWN, Robert F. Cohomology of homomorphisms of Lie algebras and Lie groups. Preliminary report, A-151; Equations on manifolds, A-497.
- BROWN, William C. Differentially simple rings, A-376.
- BROWNELL, F. H. Indefinite metric, quantum axiomatics, and the Markov property. Preliminary report, A-506.
- BROWNING, Wesley J. A relative Nielsen theorem. Preliminary report, A-289; The homotopy classification of nonminimal 2-complexes with given finite fundamental group. Preliminary report, A-559.
- BRUCE, Kim B. Forcing in stationary logic. Preliminary report, A-21.
- BRUCK, Ronald E. Construction of periodic solutions of periodic contractive evolution systems. Preliminary report, A-474.
- . See BAILLON, J.-B.
- BRUCK, Ronald E. and REICH, Simeon. Nonexpansive projections and resolvents of accretive operators in Banach spaces, A-428; Nonexpansive projections and resolvents of accretive operators in Banach spaces, A-586.
- BRUEN, Aiden A. Families of skew lines in $PG(3, q)$, A-134.
- BRYANT, J. L. and LACHER, R. C. Resolving 0-dimensional singularities in generalized manifolds. Preliminary report, A-396.
- BRYANT, Paul. See MACON, Nathaniel.
- BRUDGES, David. An application of functional integration to the Coulomb gas. Debye screening. Preliminary report, A-313.
- BUCK, R. C. Applications of dispersion mapping theorems, A-482.
- BUCKHOLTZ, J. D. Uniqueness theorems for entire functions, A-327.
- BUCKLEY, James J. Arrow's impossibility theorem for societal choice functions. Preliminary report, A-544.
- BULLOCK, Alice T. See BEARD, Jacob T. B., Jr.
- BULMAN-FLEMING, Sydney and McDOWELL, Kenneth. The category of mono-unary algebras, A-528; Absolutely flat commutative semigroups, A-608.
- BUMBY, Richard T. Continued fractions in the real and 2-adic fields, A-456.
- BUMILLER, Carl. Pointwise products of incidence matrices of subgraphs. Preliminary report, A-305.
- BUNTINAS, Martin. Cesàro summability methods of negative order, A-101.
- BUONOMANO, Vincent. A limitation on Bell's inequality, A-433; Low-intensity interference effects and local hidden variable theories, A-542.
- BURBEA, Jacob. The curvatures of the analytic capacity, A-307.
- BURCHARD, H. G. Least total variation data smoothing. Preliminary report, A-481.
- BURKE, Dennis K. Pseudo-open mappings from topological sums. Preliminary report, A-558.
- BURKINSHAW, O. See ALIPRANTIS, C. D.
- BURNS, David and SCHUSTER, S. Every $(p, p-2)$ -graph is contained in its complement, A-34; Embedding $(p, p-1)$ graphs in their complements, A-625.
- BURNS, T. J. and KYNER, W. T. Nonlinear resonance in celestial mechanics with applications to the rotation of Mercury, A-637.
- BURR, Stefan A. On the computational complexity of Ramsey-type problems. Preliminary report, A-627.
- BURR, Stefan A., ERDÖS, P., GRAHAM, R. L. and LIN, S. Sums involving reciprocals of least common multiples. Preliminary report, A-458.
- BURRIS, Stanley N. Two results using B-separating algebras. Preliminary report, A-452.
- BURTON, Robert P. See ROCKWOOD, Alyn P.
- BUSBY, Robert C. and SMITH, Harvey A. Compactness of product-convolution operators, A-123.
- BUTTON, Lillian and WILKER, John B. Cutting exponents, A-493.
- BUTTON, Robert Warren. A note on the Q -topology, A-142.
- BYRD, Richard D., LLOYD, Justin T. and STEPP, James W. Representability of groups of complexes of a lattice-ordered group. Preliminary report, A-41.
- BYRD, Richard D., LLOYD, Justin T., STEPP, James W. and PEDERSEN, F. D. The automorphism group of the semigroup of complexes of a dihedral group. Preliminary report, A-65.
- CAFFARELLI, Luis. Further regularity for the n -dimensional Signorini problem, A-575.
- CAFFARELLI, Luis A. and RIVIERE, N. M. Existence and uniqueness for the problem of filtration through a porous medium, A-576.
- CAHILL, Rotraut G. A boundary value problem for $H^{\infty}(D)$. Preliminary report, A-9.
- CAICEDO, Xavier. On extensions of $L(Q_1)$. Preliminary report, A-437; A-586.
- CAIRNS, Stewart S. Canonical knot projections and double point structures, A-395.
- CALDERÓN, A. P. and TORCHINSKY, A. $H^p(\mathbb{R}^n)$ multipliers, $0 < p < \infty$, A-106.
- CALLAHAN, James. Sketching umbilics. Preliminary report, A-332.
- CAMILLO, Victor P. and ZELMANOWITZ, J. On the Goldie dimension of a sum of two modules. Preliminary report, A-465.
- CAMPBELL, Douglas M. and LAMOREAUX, Jack. Necessary and sufficient conditions for a plane continua with weak limit directions to be a line segment, A-82.
- CAMPBELL, Paul J. A short history of Zorn's lemma, A-26.
- CAMPBELL, Stephen L. and GELLAR, Ralph. On asymptotic properties of several classes of operators, A-126.
- CAMPBELL, Stephen L. and ROSE, Nicholas J. Singular perturbation of autonomous linear systems, A-475.
- CANNON, James W. Constructing and shrinking cell-like decompositions of manifolds, A-153; What is a topological manifold? The characterization problem, A-501.
- CANNON, James W. and WRIGHT, David G. Slippery Cantor sets in E^p , A-153.
- CANNON, John R. Galerkin procedures for systems of

- parabolic partial differential equations related to the transmission of nerve impulses. Preliminary report, A-190.
- CANNONITO, Frank B. See BAUMSLAG, Gilbert.
- CANTOR, Murray. The York decomposition, conformal metrics on \mathbb{R}^n and initial data sets for general relativity, A-156.
- CANTWELL, John and CONLON, Lawrence. Leaves with polynomial growth, A-151.
- CARGO, Gerald T. A zero-one law for orthogonal complements of invariant subspaces, A-83.
- CARLITZ, L. Multiple power series with zero-one coefficients, A-449.
- CARLSON, B. C. Error bounds for an asymptotic expansion of a confluent hypergeometric function, A-85.
- CARLSON, Jon F. Restriction of modules over modular group algebras, A-68.
- CARLSON, Timothy. On the complexity of ω_1 -saturated ideals on ω . Preliminary report, A-253.
- CARMICHAEL, Richard D. Distributional boundary values in K_p ; The boundary value results. Preliminary report, A-122.
- CARPENTER, Ronn L. Accessible points in the spectrum of a Fréchet algebra, A-117.
- CARROLL, F. See BELNA, C.
- CARROLL, Robert W. The group theoretic nature of certain recursion relations for singular Cauchy problems, A-12; Some remarks on degenerate Cauchy problems in general spaces, A-235; Uniqueness theorems for abstract differential equations, A-294.
- CARTER, James W. A remark on the complex exponential function. Preliminary report, A-429.
- CASSON, Andrew J. and HARER, John L. Some Brieskorn homology 3-spheres which bound contractible manifolds. Preliminary report, A-398.
- CASTRO, Alfonso. Hammerstein integral equations with indefinite kernel, A-425.
- CASTRO, Alfonso and LAZER, Alan C. On the number of solutions of a nonlinear Dirichlet problem, A-98.
- CATER, F. S. On absolutely continuous functions, A-426; On desarguesian projective planes, A-548.
- CENZER, Douglas. Ordinal recursion over the continuum, A-29.
- CENZER, Douglas and MAULDIN, R. Daniel. On a theorem of Wesley, A-383.
- CESARI, Lamberto. Nonlinear differential equations in the frame of functional analysis and bifurcation theory with applications to a boundary value problem for quasi linear hyperbolic systems, A-124.
- CHACON, R. Generalizations of martingales and of Markov processes, A-76.
- CHALMERS, Bruce L. and METCALF, Frederic T. There exists a minimal projection from C onto V_{n+1} which is either singular or has finite carrier, A-479.
- CHAN, Agnes H. Embedding of a pseudo-point-residual design into a Möbius plane, A-564.
- CHANDRA, Jagdish, LAKSHMIKANTHAM, V. and LEELA, S. A monotone method for infinite systems of nonlinear boundary value problems, A-92.
- CHANDRAN, V. R. On two analogues of Cohen's theorem to join semilattices. Preliminary report, A-230; A note on Padmanabhan's paper, A-373.
- CHANEY, Robin and GOLDSTEIN, Alan A. An extension of the method of subgradients, A-482.
- CHANG, K. On the number of nonisomorphic group divisible designs. Preliminary report, A-222; On handcuffed designs. Preliminary report, A-368; On the existence of handcuffed designs. Preliminary report, A-414.
- CHANG, Mou-Hsiung. Local asymptotic behavior for Brownian motion in Banach spaces. Preliminary report, A-276.
- CHANG, Sun-Yung A. See AXLER, Sheldon.
- CHAO, J.-A. Conjugate systems of Martingales. Preliminary report, A-162.
- CHARLESWORTH, Arthur. On the cardinality of a topological space. Preliminary report, A-259.
- CHARTRAND, Gary, GOLDSMITH, Donald L. and SCHUSTER, Seymour. A result on 1-factors. I, A-35; A result on 1-factors. II, A-35.
- CHASTKOPFSKY, Leonard. Cartan invariants of finite groups of Lie type. Preliminary report, A-609.
- CHATFIELD, J. A. A representation theorem for operators on a space of interval functions, A-75.
- CHATTERJEE, Anadi Kumar. See DEBNATH, Lokenath.
- CHATTERJEE, Anadi K. and DEBNATH, Lokenath. Non-linear model of wave propagation in interlacing tidal channels, A-619.
- CHAWLA, L. M. and GIRSE, Robert D. An additive arithmetic function and its inversely associated partition function over the Gaussian integers, A-44.
- CHEN, Bang-yen. Complex submanifolds in Hermitian symmetric spaces. Preliminary report, A-302; Non-immersion theorems for nonlinear algebraic hypersurfaces, A-395; Reduction theorems for extrinsic spheres in symmetric spaces, A-620.
- CHEN, Jau-D. and SHIEH, Narn-R. On a sufficient condition for the convergence of multiple Fourier series. Preliminary report, A-241.
- CHENEY, E. W. See FRANCHETTI, C.
- CHENG, Charles Ching-An and WU, Yel-Chiang. Second cohomology groups of monoids. Preliminary report, A-63.
- CHENG, P. Y. Introducing a sest—its properties and applications, A-462.
- CHERNOFF, Paul R. Remarks on convergence and approximation of operator semigroups. Preliminary report, A-641.
- CHEROWITZO, William. On the extension of pseudo-oval configurations. Preliminary report, A-37.
- CHILANA, Ajit K. and ROSS, Kenneth A. Spectral synthesis in hypergroups, A-484.
- CHIN, Raymond C. Y. Computational aspects of chemically reacting porous medium flows, A-644.
- CHIOU, Kuo-Liang. The geometry of indefinite J -spaces and stability behavior of linear systems, A-94.
- CHIRIACESCU, S. T., LEUNG, K. V., MANGERON, D. J. and OGUZTORELI, M. N. Stability of nonlinear dynamic machining systems with time-lags, A-297.
- CHIVUKULA, R. Rao and SARMA, I. Ramabhadra. Tensor products of subspaces of continuous function spaces. Preliminary report, A-120.
- CHOE, Tae Ho. Congruence weak regularity and a concept of ideal for universal algebras, A-271.
- CHONG, C. T. Generic sets and minimal α -degrees. Preliminary report, A-391.
- CHOODNOVSKY, D. V. Infinite chains of nonlinear equations of evolution associated with one-dimensional many-body problems. I. Preliminary report, A-387.
- CHOODNOVSKY, D. V. and CHOODNOVSKY, G. V. Normal form of infinite system of ordinary differential equations, A-239; The law of addition for elliptic curve and Korteweg-de Vries equation, A-295.
- CHOODNOVSKY, G. V. Many body problem with elliptic potentials and Burgers-Hopf equation, A-297.
- . See CHOODNOVSKY, D. V.
- CHOW, Yutze. On algebras, manifolds and fibre-bundles in physics, A-572.
- CHRISTENSEN, Mark J. and SHONKWILER, R. An age-dependent branching process of Waugh type with two phases, A-163; Lag time in microbe growth, A-189.
- CHUAQUI, Rolando. Measures on qualitative probability σ -algebras, A-440.
- CHUI, C. K. See BOROSH, I.
- CHUKWU, Ethelbert Nwaku. Absolute controllability of linear functional differential games of pursuit, A-247; Absolute controllability of nonlinear pursuit games. Preliminary report, A-296; On the boundedness of ordinary and hereditary systems of Lurie type, A-540; Controllability of delay systems with restrained controls, A-618.
- CHUNG, F. R. K. On the decomposition of graphs. Preliminary report, A-627.
- . See BOLLOBAS, B.
- CIBULSKIS, John M. Whitney numbers for $FD(6)$. Preliminary report, A-42.
- CIMA, Joseph A. and ROBERTS, James. Denting points in BP , A-573.
- CIMA, Joseph A. and WOGEN, Warren R. The extreme points of the unit ball of \mathcal{S}_0 . Preliminary report, A-80.
- CIMENT, Melvyn, LEVENTHAL, Stephen H., WEINBERG, Bernard C., BERGER, Alan E. and SOLOMON, Jay M. Operator compact implicit schemes for parabolic equations. Preliminary report, A-505.
- CLANCEY, Kevin. Operators with one dimensional

- self-commutators, A-573.
- CLARK, Bradd. Knot theories of the lens spaces, A-150; Crosscaps and knots. Preliminary report, A-262; Surgery on torus and cable links, A-397.
- CLARK, Colin W. See MANGEL, Marc.
- CLARK, Colin W., CLARKE, Frank H. and MUNRO, Gordon R. Problems of irreversible investment in renewable resource management, A-506.
- CLARKE, Frank H. Two new methods in optimal control, A-489.
- . See CLARK, Colin W.
- CLEAVER, C. and GIEL, C. Packing spheres in C_p spaces. Preliminary report, A-119.
- COCHRAN, James A. and OEHRING, Charles. An analogue of the Hausdorff-Young theorem for integral operators, A-348.
- COHEN, Frederick R. and HANDEL, David. k -regular embeddings of the plane, A-498.
- COHEN, Gérard. See DEZA, Michel.
- COHEN, Jo-Ann D. Locally bounded topologies on algebraic function fields. Preliminary report, A-277.
- COHEN, M. See BERSTEIN, I.
- COHEN, Miriam and ROWEN, Louis Halle. Rings with finite grade, A-416.
- COHN, William S. Orthogonal complements to invariant subspaces of functions on multiply connected domains. Preliminary report, A-617.
- COHOON, David K. An analysis of a singular integral equation of electromagnetic scattering. Preliminary report, A-581.
- COLWELL, P. See BELNA, C.
- COMER, Stephen D. Quasigroup representable CA_3 's are not finitely axiomatizable, A-43.
- COMERFORD, Leo P., Jr. Subgroups of small cancellation groups. Preliminary report, A-67.
- COMSTOCK, Craig. See FAULKNER, Frank D.
- . See TAYLOR, James G.
- CONJURA, Edward J. Solvable extensions of operators of monotone type. Preliminary report, A-307.
- CONLAN, James Peter. Packing four-dimensional pennies using quaternions, A-491.
- CONLON, Lawrence. See CANTWELL, John.
- CONNELLY, Robert. A counterexample to the rigidity conjecture for polyhedra. Preliminary report, A-547.
- . See BERSTEIN, I.
- CONWAY, E. D., HOFF, D. and SMOLLER, J. A. Asymptotic behavior of nonlinear reaction-diffusion systems, A-190.
- CONWAY, John B. Which compressions of the shift are reflexive?, A-241; Every spectral picture is possible, A-431.
- COOK, Thurlow A. Convergence of states on quantum logics. Preliminary report, A-314.
- . See BEAVER, O. R.
- COOPER, Jeffery and STRAUSS, Walter. Scattering theory for a moving obstacle. Preliminary report, A-379.
- COOTNER, Paul H. Stochastic optimization of natural resource use, A-489.
- CORDOBA, Antonio. The multiplier problem for the polygon. Preliminary report, A-107.
- CORDOBA, Antonio and FEFFERMAN, Robert. Some remarks about maximal theorems and multipliers, A-106.
- CORWIN, Edward M. Rings of Euclidean type, A-46.
- CORWIN, Lawrence. See GREENLEAF, F. P.
- CORWIN, Lawrence and GREENLEAF, Frederick P. The Fourier transforms of certain distributions given by graphs of polynomials, A-483.
- COSTA, D. L. See BREWER, J. W.
- COSTELLO, Daniel J., Jr. Probabilistic decoding of convolutional codes. Preliminary report, A-184.
- COX, J. Theodore. On one-dimensional diffusions ξ_s , $-\infty < s < \infty$, A-160.
- COXETER, H. S. M. Tilings related to the quaternion group and the configuration 8_3 , A-448.
- CRANDALL, Michael G. and PAZY, A. On ranges of accretive operators, A-131.
- CRANWELL, Robert M. and WEISS, Neil A. Limit theorems involving mixing stochastic point processes, A-165.
- CRUSE, Allan B. Some analogues of the assignment polytope. Preliminary report, A-345.
- CRYER, Colin W. and FETTER, Hans L. Numerical solution of the axisymmetric free boundary problem for a fully penetrating well, A-432.
- CUADRADO, John L. Rational iterated integrals and formal power series connections. Preliminary report, A-138.
- CUMMINGS, Larry J. See BEASLEY, LeRoy B.
- CURRY, James H. Transition to turbulence in finite-dimensional approximations to the Boussinesq equations. Preliminary report, A-246.
- CUSHING, J. M. Stability and instability criteria for Volterra integrodifferential systems. Preliminary report, A-637.
- CUSHMAN, Richard and KELLEY, Al. Resonant Hamiltonian systems in Birkhoff normal form, A-639.
- CUSICK, T. W. Integer multiples of periodic continued fractions. Preliminary report, A-290; Continuants with bounded digits, A-456.
- DAFERMOS, C. M. Characteristics in hyperbolic conservation laws, A-98.
- DAI, Taen-Yu. Exponential functions on partially ordered linear algebra, A-73.
- DAILY, John D. Distribution of sequences of n -tuples modulo 1. Preliminary report, A-224.
- DALE, Louis. The k -closure of monic and monic free ideals in a polynomial semiring, A-266.
- DALEY, Robert P. Busy beaver sets and the degrees of unsolvability. Preliminary report, A-392.
- DANKNER, Alan. Hyperbolic nonwandering sets in which the periodic points are not dense. Preliminary report, A-157.
- D'ARCHANGELO, James. On the Whittaker differential equation and Laplace transforms, A-308.
- DATTA, B. N. Matrix equation, polynomial matrix and the stability problem of discrete time system, A-181.
- DAUBEN, Joseph W. Definition, consistency and ontology: The foundations of transfinite set theory, A-26.
- DAUNS, John. Generalized moniform and quasi-injective modules, A-267.
- DAVEY, B. A. and GOLDBERG, M. S. Varieties of p -algebras and double p -algebras as reflective subcategories of distributive lattices. Preliminary report, A-373.
- DAVEY, B. A. and WERNER, H. Injectivity and Boolean powers, A-521.
- DAVID, John E. On the valuations of a factor ring of a graded domain. Preliminary report, A-50.
- DAVIDSON, Kenneth R. Commutative subspace lattices, A-534.
- DAVIS, Burgess. On stopping times for n dimensional Brownian motion, A-336.
- DAVIS, E. D. and MCADAM, S. Prime divisors and saturated chains, A-318.
- DAVIS, Joel. Strong unicity using norm derivatives, A-482.
- DAVIS, Martin and SCHWARTZ, J. T. Metamathematical extensibility for theorem verifiers, A-644.
- DAVIS, S. W. On \mathfrak{F}_r -spaces. Preliminary report, A-140.
- DAVIS, Sheldon W. See BOONE, James R.
- DAWSON, David F. Cesàro maps of variation spaces, A-101; Cesàro summability factors and a comparison of convergence rates, A-429; An addendum to "Matrix maps of null sequences", A-541.
- DAY, Brian J. Note on linear monads, A-289; Note on Pontryagin duality, A-371.
- DAY, Jane M. Compact semigroups with semilattice quotients that separate regular \mathcal{B} classes, A-270.
- DEBNATH, Lokenath. See CHATTERJEE, A. K.
- DEBNATH, Lokenath, CHATTERJEE, Anadi Kumar and RAY, Sukomal Chandra. On the capillary-gravity wave problem in a running stream, A-176.
- DE BOOR, Carl. Splines as linear combinations of B -splines, A-330; The approximation of functions and linear functionals: Best vs. good approximation, A-584.
- deCESARE, Kenneth M. A codimension-two version of Novikov's theorem on foliations without limit cycles, A-353.
- DEDDENS, James A. Subnormal operators and C^* -algebras, A-577.
- DeGRYSE, Donald D. On the genus of a knot. Preliminary report, A-149.

- de GUZMAN, Miguel. A method for the study of convolution operators. Preliminary report, A-533.
- DEKKER, J. C. E. Sharply two-transitive families of permutations on an immune set, A-254.
- de KORVIN, Andre. Convergence theorems for an integral on measures, A-14.
- de KORVIN, Andre and THO, Vo Van. A Hellinger-Hahn decomposition theorem, A-14.
- DE LUCA, Aldo. A property of finite prefix codes, A-247.
- DEMARR, Ralph. A property related to ordered group algebras. Preliminary report, A-347.
- DEMKO, Stephen. Interpolation by quadratic splines, A-104.
- DENNIS, J. E. Nonlinear optimization, A-584.
- DENNIS, R. K. See FULLER, R. J.
- de PILLIS, John. Faster convergence for iterative solutions to systems via three-part splittings. Preliminary report, A-171; An inequality on ranks in sums of decomposable tensors, A-344.
- DE ROOIJ, Alfred. Torus degree of symmetry of exotic spheres. Preliminary report, A-258.
- DERR, Leroy. See SARAFYAN, Diran.
- DERSHEM, H. L., McLAUGHLIN, D. E., SMITH, D. A. and ZIEBUR, A. D. A report on mathematics instruction and computing, A-186.
- DESHPANDE, Vithal K. Semilocal rings and the Noetherian condition. Preliminary report, A-5.
- DEUTSCH, Emeric. Diagonal dominance for partitioned matrices. Preliminary report, A-222.
- DEVENEY, James K. and MORDESON, John. Inseparable field extensions. Preliminary report, A-626.
- DEVORE, Ronald A., RIEMENSCHNEIDER, S. and SHARPLEY, R. Weak interpolation in Banach spaces, A-244.
- DEVOS, Robert. Category of sequences of 0's and 1's in certain FK spaces, A-102.
- DEZA, M. Perfect generalized packing as a common generalization of simple t-design and matroid-design, A-2. ---. See BLAKE, Ian F.
- DEZA, Michel and COHEN, Gérard. On coding with permutation groups, A-420.
- DIAMOND, Harold G. and ESSÉN, Mattis. One-sided Tauberian theorems for kernels which change sign, A-103.
- DIBNER, Steve. Genus-2 Heegaard splittings for certain 3-manifolds, A-150; An alternate method of finding certain link groups, A-338; Machine computation of certain link groups, A-501.
- DICKMAN, R. F., Jr. and BELL, Harold. A counterexample to a conjecture of A. H. Stone, A-494.
- DICKMAN, R. F., Jr., RUBIN, L. R. and PORTER, J. R. Projective spaces in the category of H-closed spaces and θ -continuous maps. Preliminary report, A-144.
- DIEDERICH, James R. Uniqueness for the Neumann problem. Preliminary report, A-96.
- DIESTEL, J. and SEIFERT, C. Operators with the Banach-Saks property, A-323.
- DIMINNIE, C. and WHITE, A. Strict convexity in topological vector spaces. Preliminary report, A-121.
- DINCULEANU, Nicolae. See BROOKS, James K.
- DIXON, P. G. A lower bound for the L^1 -norm of certain exponential sums, A-8.
- DLAB, V. and RINGEL, C. M. The structure of tame hereditary algebras, A-58.
- DOBBS, David E. Coherence, ascent of going-down, and pseudo-valuation domains, A-266; Weak global dimension of pseudo-valuation domains, A-372. ---. See ANDERSON, David F.
- DOBBS, David E. and PAPICK, Ira J. Flat or open implies going down, A-226.
- DOLAN, J. Michael. See KLAASEN, Gene A.
- DOLAN, Kevin. See JONES, John, Jr.
- DOMBROSKI, Michael. Finite analogues of trigonometric functions, A-533; An algebraic trigonometry, A-641.
- DOMOKOS, G. On some algebraic problems in the theory of elementary particles, A-572.
- DONAGHEY, Robert. Automorphisms on Catalan trees and bracketings, A-32.
- DONALD, J. D. and FLANIGAN, F. J. The geometry of Rep(A, V) for a square-zero algebra. Preliminary report, A-416.
- DOUGLAS, R. G. See ABRAHAMSE, M. B.
- DOUGLAS, Robert J. Bounds on the number of Hamiltonian circuits in the n-cube, A-346.
- DOUGLAS, Roy and BODY, Richard. Unique factorization for rational homotopy types and graded algebras, A-499.
- DOWNES, Virginia L. Green polynomials of the finite symplectic group Sp(6, q), q odd. Preliminary report, A-422.
- DOWNING, David and KIRK, W. A. Fixed point theorem for set-valued mappings in metric and Banach spaces, A-237.
- DRAKE, David A. Constructions of Hjelmslev planes, A-31.
- DRASIN, David. Two examples, A-579.
- DUCHARME, Robert G. Elementary linear algebra for those who use a computer and for those who do not, A-186.
- DUFF, G. F. D. Variation of a maximal function, A-332.
- DUFFIN, R. J. The generalizations of analytic functions, A-99.
- DUFFIN, R. J. and MORLEY, T. D. Almost definite operators and electro-mechanical systems, A-265; Inequalities induced by network connections, A-370.
- DUFFUS, Dwight and RIVAL, Ivan. Decomposition and structure results for function lattices, A-40.
- DUKARM, J. J. Weakly monadic Boolean extension functors. Preliminary report, A-419; Morita equivalence of algebraic theories. Preliminary report, A-611.
- DUNKL, Charles F. Series of Hahn polynomials and their q-analogues, A-86.
- DULA, Giora and KATZ, Elyahu. Computation of the homology of $\Omega(X_1 \vee X_2)$. Preliminary report, A-496.
- DUPRE, Maurice J. The classification of C^* -algebra bundles, A-311.
- DURBIN, John R. Automorphisms and equivalence of functions over finite fields, A-458.
- DUREN, Peter and SCHÖBER, Glenn. Nonvanishing univalent functions. Preliminary report, A-579.
- DURHAM, Stephen. See PEARCE, Lynn.
- DURIS, C. S. Discrete spline approximations by summation matching. Preliminary report, A-103.
- DURRETT, Richard. An infinite particle system with additive interactions, A-647.
- DWYER, Thomas A. W. III. Fourier-Borel duality and bilinear realizations of control systems, A-182.
- EAKIN, Paul, SHANNON, David and HEINZER, William. Ideal transforms of Noetherian integral domains. Preliminary report, A-321.
- EARNEST, Andrew G. and ESTES, Dennis. Lifting spinor genera of binary quadratic lattices. Preliminary report, A-457.
- EATON, William T., PIXLEY, Carl P. and VENEMA, Gerard A. A topological embedding which cannot be approximated by a piecewise linear embedding. Preliminary report, A-302.
- EBERHART, Carl and WILLIAMS, Wiley. Semi-modularity in lattices of congruences, A-65.
- EBERLEIN, W. F. Solution of the first digit problem. I: Continuous case, A-504.
- EBERT, Gary L. Maximal strictly partial spreads of PG(3, q). Preliminary report, A-37.
- EDGAR, G. A. Measurability in a Banach space, A-116; Vector-valued amarts, A-324.
- EDGAR, G. A. and SUCHESTON, L. Martingales in the limit and amarts, A-393.
- EDGAR, Hugh M. Relative integral bases and class numbers. Preliminary report, A-8; Relative integral bases for algebraic number fields. Preliminary report, A-400.
- EDMONDS, Allan L. See BERSTEIN, Israel.
- EDREI, Albert. Distribution of the zeros of Padé polynomials of an entire function, A-328; The Padé tables of entire functions, A-579.
- EDWARDS, Bruce H. The eigenvalues of four-dimensional rotations, A-227.
- EDWARDS, Constance C. The structure of \mathcal{L} -unipotent semigroups, A-189; The greatest idempotent separating congruence on an \mathcal{L} -unipotent semigroup. Preliminary report, A-467.
- EDWARDS, David A. Toward nonabelian algebraic topology, A-24.

- EDWARDS, Robert D. Giffen's quick proof of the double suspension conjecture for certain homology 3-spheres, A-154; An amusing reformulation of the four color problem, A-257; Approximating certain cell-like maps by homeomorphisms, A-649.
- EFROYMSON, Gus. Factorization of Nash functions on certain planar domains, A-53.
- EHRENFEUCHT, A. and FABER, V. Proper embeddings. Preliminary report, A-40.
- EHRlich, Paul E. Stability subgroups for surfaces without conjugate points, A-298.
- EHRlich, Paul E. and HOF, H. C. Im. The geometry of the Dirichlet fundamental region, A-137.
- EHRMANN, Rita M. (Sister). Two contemporary applications of finite geometries, A-187.
- EHRIG, Bernd. Atoms of time and extensive physical quantities. Preliminary report, A-535.
- EISENBERG, S. Approximation by discrete Jackson-type operators. Preliminary report, A-306.
- EISENBUD, David. An algebraic approach to the topological degree of a C^∞ map, A-149.
- EKLUND, Neil. Generalized parabolic functions using the Perron-Wiener-Brelot method. Preliminary report, A-94.
- ELLENTUCK, Erik. Hyper-Torre isols. Preliminary report, A-253; Isolated fields. Preliminary report, A-390.
- ELLIOTT, D. L. See KALOUPSIDIS, N.
- ELLIS, Martin H. Matching with Markov processes, A-164.
- ELLIS, Richard S. Ferromagnetic measures and limit theorems for generalized Ising models, A-21.
- ELOSSER, P. Douglas. Least-first-power (L-F-P) approximation by polynomials, A-10.
- ENGL, Heinz W. A general stochastic fixed point theorem for continuous random operators on stochastic domains, A-273; A random fixed point theorem for non-expansive mappings with stochastic domain, A-335; Random fixed point theorems for multivalued mappings, A-428.
- ENGLAND, James W. Calculus/linear algebra in A. P. L., A-187.
- ENRIGHT, Thomas J. On the construction and classification of Harish-Chandra modules. Preliminary report, A-648.
- ENTRINGER, R. C. and SLATER, Peter J. k -critically n -connected graphs. Preliminary report, A-35.
- EPHRAIM, Robert. Iso-singular loci and the cartesian product structure of complex analytic singularities, A-326.
- EPP, Robert J. and FERGUSON, Thomas S. Remarks on take-away games and Dawson's game. Preliminary report, A-179.
- ERDELYI, I. Operator-valued analytic functions with spectral decomposition properties, A-128.
- ERDŐS, Paul. Recent problems and results in combinatorics and graph theory, A-625.
- . See BOROSH, I.
- . See BRILLHART, John.
- . See BURR, S. A.
- ERDŐS, Paul and HOBBS, Arthur M. Hamiltonian regular graphs of moderate degree, A-39; Disjoint maximal independent sets of vertices in graphs, A-630.
- ERDŐS, Paul, GALVIN, F. and KRIEGER, M. Factoring complete hypergraphs into factors with few cliques. Preliminary report, A-629.
- ERNEST, John. The C^* -algebra approach to the unitary equivalence problem for Hilbert space operators, A-129; Generalized spectra for Teoplitz operators, A-641.
- ERNI, Wilhelm. On the time and tape complexity of hyper (1)-AFL's. Preliminary report, A-248.
- ESSÉN, Matts. Slowly growing subharmonic functions, A-576.
- . See DIAMOND, Harold G.
- ESTES, Dennis. See EARNEST, Andrew G.
- ESTES, Dennis R. and MATIJEVIC, Jacob R. Matrix factorization, A-53.
- ETGEN, Garret J. and LEWIS, Roger T. Oscillation of differential systems in Banach spaces, A-90.
- EVANS, Benny and MAXWELL, Jim. Quaternion actions on S^3 . Preliminary report, A-441.
- EVANS, E. Graham, Jr. and GRIFFITH, Philip A. The Syzygy problem, A-320.
- EVANS, Elliott L. The lattice of cosets of a tree. Preliminary report, A-234; Midpoint lattices. Preliminary report, A-421; Median algebras and lattices, a duality, A-526.
- EVANS, Ronald J. Sixteenth power residue difference sets. Preliminary report, A-7.
- EVERETT, D. L. Embedding theorems for decomposition spaces. Preliminary report, A-152.
- EWING, John H. The image of the Atiyah-Bott map, A-633.
- EZELL, Cloyd L. Normal extensions of curves in orientable surfaces. Preliminary report, A-150.
- FABER, V. See EHRENFEUCHT, A.
- FABOZZI, Frank J. See HASTINGS, Harold M.
- FABREY, James D. Boolean matrices and a committee problem. Preliminary report, A-439.
- FAITH, Carl. The injective local ring of a complete local ring, A-459.
- FAJTLowicz, S. Independence ratio for cubic graphs, A-289.
- FALKENBERG, Bernhard. Representing many-one degrees by monogenic Post normal systems. Preliminary report, A-251; Halting problems of tag-systems with arbitrary deletion number. Preliminary report, A-392.
- FARMER, K. Bolling. On faithful irreducible projective representations. Preliminary report, A-304.
- FARRELL, F. T. and HSIANG, W. C. Homotopy flat manifolds. Preliminary report, A-444.
- FAULKNER, Frank D. and COMSTOCK, Craig. Statistical corrections to improve weather prediction, A-351.
- FAULKNER, Gary D. and HUNEYCUTT, James E. Orthogonal decomposition of isometries in a Banach space, A-274; Translation invariant vector measures, A-534.
- FAY, Temple H. and THOMAS, Barbara V. Smith. Graev free topological groups. Preliminary report, A-72.
- FEFFERMAN, Robert. See CORDOBA, Antonio.
- FEINBERG, Jerry M. The isoperimetric inequality for doubly-connected minimal surfaces in R^n , A-493.
- FELDMAN, W. A. See PORTER, J. F.
- FELDMAN, W. A. and PORTER, J. F. Generalized realcompactness, A-120.
- FELLER, E. H. See BOYLE, Ann K.
- FERGUSON, H. R. P. The arithmetic of the Khintchine map, A-46.
- FERGUSON, Le Baron O. A problem in interpolation by integral polynomials. Preliminary report, A-105.
- FERGUSON, Pamela A. On a problem of Frobenius. Preliminary report, A-369.
- FERGUSON, Thomas S. See EPP, Robert J.
- FESHBACH, Mark. The transfer and characteristic classes. Preliminary report, A-339.
- FETTER, Hans L. See CRYER, Colin W.
- FIALKOW, Lawrence A. Solving the operator equation $AX - XB = Y$, A-130; Unitary cross sections for Hilbert space operators. Preliminary report, A-423.
- FIEDLER, M. and PTÁK, V. Diagonals of convex sets. Preliminary report, A-231; The rank of extreme positive operators on polyhedral cones. Preliminary report, A-288.
- FIFE, James H. Triple products in the Steenrod algebra. Preliminary report, A-445.
- FIFE, Paul C. The equations of reaction and diffusion, A-348.
- FIGA'-TALAMANCA, Alessandro and PICARDELLO, Massimo A. Functions that operate on $B_0(G)$. Preliminary report, A-239.
- FILIPPENKO, Ivan. See MARCUS, Marvin.
- FINDLEY, David F. A time series has a (tenuously) convergent $AR(\infty)$ representation if and only if it has an $MA(\infty)$ representation, A-166.
- FINE, Benjamin. Principal congruence subgroups of the Picard group, A-563.
- FINK, John Frederick and STRAIGHT, H. Joseph. Path-perfect graphs, A-38.
- FINKELSTEIN, Larry. See FROHARDT, Daniel.
- FINN, Robert. Existence and nonexistence of capillary surfaces, A-581.
- FINTUSHEL, Ronald and PAO, Peter. Identification of certain 4-manifolds with group actions, A-276.
- FISHER, Edward R. Vopenka's principle, category theory, and universal algebra, A-44.
- FISHER, J. C. A proof of Orr's theorem on the partition

- of a sphere by plane sections. Preliminary report, A-135.
- FISHER, Joe W. Finiteness conditions for rings with finite group actions. Preliminary report, A-377.
- . See ARMENDARIZ, E. P.
- FISHER, Joe W. and MONTGOMERY, Susan. Semiprime skew group rings. Preliminary report, A-525.
- FISK, Steve. Four colorings: Their existence and non-existence, A-562.
- FITTING, Melvin. A model theoretic characterization of the Π_1^1 and the r. e. relations, A-390.
- FITZGIBBON, William E., III. Abstract semilinear functional differential equations, A-88.
- FITZPATRICK, William J. and GRIMM, Louis J. Convergent factorial series solutions of difference systems. Preliminary report, A-100.
- FIX, George J. Variational methods for elliptic boundary value problems, A-585.
- FLAHERTY, Frank. Wave surfaces in Lorentz-Minkowski space, A-138.
- FLANGAN, F. J. On an exponential diophantine equation in seven unknowns which reduces to the Catalan equation, A-229; Extreme ideal and radical embeddings, A-418.
- . See DONALD, J. D.
- FLEISCHER, Isidore. The "word problem" for the semilattice tensor product of locally finite lattices. Preliminary report, A-421.
- FLEISCHNER, Herbert. Compatible Euler trails and cycle coverings, A-626.
- FLEISHMAN, B. A. and GINGRICH, Ross. Perturbation solution of a steady-state Stefan problem, A-98.
- FLEURY, Patrick. On a class of idealizer rings. Preliminary report, A-526.
- FOLDES, Stephane. The Chinese remainder theorem in automorphism groups of directed graphs, A-415.
- FOLDES, Stephane and SINGHI, N. M. Regular representation of groups by hypergraphs, A-5.
- FONG, Humphrey. Weak and strong convergence in L_p : A survey, A-74.
- FORD, Jo and ROGERS, J. W., Jr. Refinable maps, A-23.
- FORD, William F. See SMITH, David A.
- FORNAESS, John Erik. See BEDFORD, Eric.
- FORNBERG, Bengt. Pseudospectral calculations on nonlinear waves, A-643.
- FORREST, Williams K. On the open topology, A-232; Mappings and correspondences of open formulas over integral domains, A-289; Upper and lower integration on algebraic manifolds in characteristic p. Preliminary report, A-377; The content of varieties, A-530; The topological and linear structure of the n-dimensional stone space of a field, A-608.
- FOULSER, David A. and KALLAHER, Michael J. Solvable, flag transitive affine planes of low rank, A-134.
- FOURMAN, Michael P. Approximation sheaves as internal Banach spaces. Preliminary report, A-244; A representation for internal sober spaces. Preliminary report, A-301.
- FOX, David W. Bounds for perturbations of eigenvalues of relative hermitian matrix problems, A-322; The convexity of the range of three hermitian forms, A-462.
- FRAENKEL, A. S. and YESHA, Y. Some NP-hard problems in combinatorial games and graph-theory. Preliminary report, A-33.
- FRANCHETTI, C. and CHENEY, E. W. Orthogonal projections in spaces of continuous functions, A-104.
- FRANCIS, George K. From Riemann surfaces to catastrophe machines. Preliminary report, A-333.
- FRANCIS, Jack M. See HASTINGS, Harold M.
- FRANK, Evelyn. Zeros of polynomials, A-331.
- FRANK, Leonid S. Coercive singular perturbations. Preliminary report, A-25.
- FRANKE, William T. Decomposing real C^∞ functions without enlarging supports. Preliminary report, A-122.
- FREDERICKSON, P. O. Fast solution of generalized eigenvalue problems, A-172.
- FREEDMAN, Allen R., RAPHAEL, Marc and SEMBER, John J. Some Cesàro type summability spaces. Preliminary report, A-379.
- FREEDMAN, Marvin. See BERKEY, Dennis.
- FREEDMAN, Michael H. Multiple points of an immersion. Preliminary report, A-354.
- FREEMAN, J. W. Reguli and pseudo-reguli in $PG(3, s^2)$, A-135.
- FREEMAN, Jim. See LASKAR, Renu.
- FREY, G. Thomas. See ANDERSON, Patricia.
- FRICKE, G. H. See McCALL, J. D.
- FRICKE, G. H. and SHAH, S. M. Inequalities for entire functions of bounded index, A-540.
- FRIDY, John. Minimal rates of summability. Preliminary report, A-101.
- FRIEDMAN, Avner. The free boundary of a quasi-variational inequality, A-573.
- . See ANDERSON, Robert F.
- FRIEDMAN, Emily P. Schemes and formal languages. Preliminary report, A-645.
- FRIEDMAN, Eugene M. Improving the rate of convergence of power series solutions of differential equations, A-638.
- FRIEDMAN, Sy D. Minimal α -degrees. Preliminary report, A-621.
- FROHARDT, Daniel and FINKELSTEIN, Larry. Standard form problems in groups of characteristic 2-type. Preliminary report, A-71.
- FRÖHLICH, J. Mathematical physics of phase transitions and symmetry breaking: New rigorous results, A-177.
- FRYANT, Allan J. Interpolation and approximation of generalized axisymmetric potentials, A-309.
- FU, Yen Tzu. A complete normed space $C_{[a, b]}^n$. Preliminary report, A-310.
- FUCHS, Wolfgang H. J. An inequality involving the absolute value of an entire function and the counting function of its zeros, A-324.
- FULLER, Kent R. and HAACK, Joel. Rings with quivers that are trees, A-464.
- FULLER, R. J. and DENNIS, R. K. Machine computation of Whitehead groups. Preliminary report, A-46.
- FULP, R. O. and MARLIN, J. A. Involution subgroups of function groups, A-156.
- GAFFNEY, Terence and WILSON, Leslie. Uniqueness of normalization in the smooth category, A-568.
- GALLIAN, Joseph A. Using the computer in an abstract algebra course, A-185.
- GALPERIN, E. A. Robustness of asymptotic observers applied to unstable systems. Preliminary report, A-249; Nonasymptotically stable observers for linear time-invariant systems. Preliminary report, A-296.
- GALVIN, Fred. On Gruenhagen's generalization of first-countable spaces, A-22; On Gruenhagen's generalization of first-countable spaces. II, A-257.
- . See ERDÖS, P.
- GAMELIN, T. W. and SIBONY, N. Localization of subharmonicity with respect to a uniform algebra, A-486.
- GANESAN, S. Some characterisations in Banach star algebras. Preliminary report, A-272.
- GANSNER, Emden R. Enumeration of reverse and shifted reverse plane partitions via hook lengths. Preliminary report, A-38.
- GARAVAGLIA, Steven. Elementary equivalence of modules. Preliminary report, A-551.
- GARBANATI, L. F. Existence and uniqueness theorems for the linearized Boltzmann equation, A-476.
- GARD, Thomas C. A generalization of the Nagumo uniqueness criterion. Preliminary report, A-90.
- GARDNER, Robert B. Laplace invariants of hyperbolic P. D. E. Preliminary report, A-137.
- GARFINKEL, Gerald S. Ring cores are pure subgroups, A-231.
- GARLING, D. J. H. Convexity, smoothness and martingale inequalities, A-325.
- GARNER, J. B. Some boundary value problems arising in physiology. Preliminary report, A-274.
- . See MOORTI, V. R. G.
- GARNETT, John B. and JONES, Peter W. The distance in BMO to L^∞ . Preliminary report, A-487.
- GARRETT, B. D. Functions which jump no arcs and an erroneous argument, A-144.
- . See GIBSON, R. G.
- GASPER, George and TREBELS, Walter. Multiplier criteria for Jacobi expansions and Hankel transforms, A-105.
- GATTESCHI, Luigi and VINARDI, Giuliana. The degree of exactness of Chebyshev's quadrature formulas, A-388.

- GAY, C. D., MORRIS, G. C. and MORRIS, I. Adams operations on the Burnside ring of a finite group, A-529.
- GBUR, Mary E. The asymmetric Markoff spectra, A-45.
- GEARHART, Larry. Spectral theory for contraction semigroups on Hilbert space, A-126.
- GELLAR, Ralph. See CAMPBELL, Stephen L.
- GEMAN, Stuart A. Stochastic differential equations with smooth mixing processes and applications. Preliminary report, A-256.
- GENDLER, Alan M. An interesting weak* continuous function, A-121.
- GEOGHEGAN, Ross. Compacta having the homotopy type of finite complexes, A-500.
- GERASCH, Thomas E. On accessibility of boundary points of a simply connected domain. Preliminary report, A-79.
- GERHARD, J. A. Free products of idempotent semigroups, A-290.
- GERTH, Frank, III. Structure of ℓ -class groups of certain number fields and \mathbb{Z}_ℓ -extensions, A-48.
- GESSEL, Ira M. Counting permutations by descents, inversions, and greater index. Preliminary report, A-36.
- GEWAND, Marlene E. Lindelöf degree of the G_6 topology. Preliminary report, A-143.
- GHOSH, B. K., TRUTT, D. and RHOADES, B. E. Subnormal generalized Hausdorff operators, A-14.
- GHOUSSEUB, N. and SUCHESTON, L. A refinement of the Riesz decomposition for amarts and semiamarts, A-554.
- GIARDINA, Charles R. On the sampling rate for cardinal series representations, A-310.
- GIARDINA, Charles R. and KUHL, Frank P. The vector of maximum harmonic content with elliptical locus in Chebychev approximations, A-313.
- GIBBONS, Joel C. A characterization of linear relations, A-582.
- . See WEBB, Cary.
- GIBBONS, Joel C. and WEBB, Cary. A characterization of inverse groups of spheres, A-332.
- GIBBONS, Ned M. A parameter estimation method based on regression analysis. Preliminary report, A-275.
- GIBSON, Peter M. Real permanent roots of doubly stochastic matrices, A-271.
- GIBSON, R. G. and GARRETT, B. D. Darboux at a point. Preliminary report, A-143.
- GIEL, C. See CLEAVER, C.
- GILES, Robin. Continuous lattices in the foundations of physics, A-278.
- GILFEATHER, Frank. Norm conditions on resolvents of similarities of Hilbert space operators and applications, A-379.
- GILL, Tepper L. A new approach to the operator disentanglement problem, A-126.
- GILLMAN, David. On localizing Dehn's lemma. Preliminary report, A-352.
- GILMER, Robert and HEINZER, William. The Noetherian property for quotient rings of infinite polynomial rings. Preliminary report, A-629.
- GINGRAS, Armando R. Complete distributivity and order convergence, A-269.
- GINGRICH, Ross. See FLEISHMAN, B. A.
- GINSBURG, John. L-spaces in complete spaces of countable tightness using \diamond , A-394.
- . See BROVERMAN, S.
- GIRSE, Robert D. See CHAWLA, L. M.
- GISLASON, Gary A. Approximation by products of continuous functions. Preliminary report, A-480.
- GIVANT, Steven and TARSKI, Alfred. Peano arithmetic and the Zermelo-like theory of sets with finite ranks, A-437.
- GLANC, Alois. On classes of recursive languages. Preliminary report, A-551.
- GLASSEY, Robert T. Asymptotic behavior of solutions to certain nonlinear Schrödinger-Hartree equations. Preliminary report, A-12; On the blowing-up of solutions to nonlinear Schrödinger equations. Preliminary report, A-237.
- GLAZER, Steven. Some ultrafilter constructions using Martin's axiom. Preliminary report, A-316.
- GLOBEVNIK, J. The ranges of analytic functions with continuous boundary values, A-383.
- GOEL, V. K. A study of cotorsion theory, A-58.
- GOES, Günther. Multipliers between Lipschitz spaces. Preliminary report, A-106.
- GOETHALS, J.-M. Codes and t-designs over nonbinary alphabets, A-183.
- GOLDBERG, Don. See BOGART, Ken.
- GOLDBERG, M. S. See DAVEY, B. A.
- GOLDBERG, Michael. On the convex polyhedral space-fillers. Preliminary report, A-489.
- GOLDBERG, Moshe. Some inclusion relations for c-numerical ranges, A-343.
- GOLDBERG, Moshe and STRAUS, E. G. On norm properties of the C-numerical radius. Preliminary report, A-5.
- GOLDFEATHER, Jay E. Incompressible maps, A-339.
- GOLDSCHMIDT, Hubert. The integrability problem for Lie equations, A-154.
- GOLDSMITH, Donald L. See CHARTRAND, Gary.
- GOLDSTEIN, Alan A. See CHANEY, Robin.
- GOLDSTEIN, Jerome A. Improvements in the Hardy-Landau-Littlewood inequality. Preliminary report, A-191.
- GOLDSTINE, Jonathan. Formal languages, automata, and mathematical elegance, A-644.
- GOLOMB, Solomon W. Tiling patterns and unusual rep-tiles, A-452; Explicit twin prime formulas, A-457.
- GONZALEZ, Mario O. Area theorems for nonanalytic univalent functions, A-330.
- GOODAIRE, Edgar G. The centralizer of a Cartan subalgebra of a Jordan algebra, A-2.
- GOODMAN, A. W. The domain covered by a typically-real function, A-77.
- GOODMAN, Victor. Asymptotic behavior of certain exit probabilities for vector-valued symmetric random walk and Brownian motion, A-336.
- GOPAL, K. See KAPOOR, G. P.
- GOPINATH, B. and KURSHAN, R. P. Every T-space is isomorphic to a T-space of continuous functions, A-478.
- GORDH, G. R., Jr. and HUGHES, C. B. On freely decomposable mappings of continua, A-394.
- GORDH, G. R., Jr. and LUM, Lewis. A mapping characterization of smoothness in continua, A-145.
- GORDON, Jean. See BOGART, Ken.
- GORDON, Jean and BOGART, Kenneth. Enumeration of nonisomorphic hypergraphs. Preliminary report, A-450.
- GORDON, Sheldon P. A discrete approach to the calculus. Preliminary report, A-185.
- GORENSTEIN, Daniel and LYONS, Richard. Odd standard form in groups of characteristic two type. Preliminary report, A-70.
- GOTH, John A. Wreath products with supersolvable automorphism groups. Preliminary report, A-64.
- GOTTLIEB, Allan. See KOHN, Samuel.
- GOULD, H. W. Some formulas for Euler's constant, A-226.
- GOULD, H. W. and GREIG, W. E. A Lucas triangle primality criterion dual to that of Mann-Shanks, A-231.
- GRABINER, Sandy. Operators with eventually uniform ascent and descent, A-127.
- GRAEF, John R. A nonoscillation theorem for an nth order nonlinear equation, A-273.
- GRAEF, John R. and SPIKES, Paul W. Comparison and nonoscillation of perturbed nonlinear differential equations, A-91; Nonoscillation criteria for a nonlinear differential equation, A-474; A counterexample to a theorem of Wong, A-631; On the nonoscillation of perturbed nonlinear differential equations, A-631.
- GRAHAM, George P., Jr. The incidence function in planes of prime power order, A-298.
- GRAHAM, Ronald L. Combinatorial scheduling theory, A-355; On partitions of the plane. Preliminary report, A-449.
- . See BOLLOBAS, B.
- . See BURR, S. A.
- GRANOFF, Barry. See BERKEY, Dennis.
- GRASSL, R. M. See HILLMAN, A. P.
- GRÄTZER, G. and KELLY, D. Free m -products of lattices. I. Notation, A-1; Free m -products of lattices. II. The structure theorem, A-221; Free m -products of lattices. III. Applications, A-287; On the product of lattice varieties, A-526.
- GRÄTZER, G. and LAKSER, H. On the lattice of quasi-varieties of lattices, A-221.

- GRÄTZER, G. and PADMANABHAN, R. Median algebras, A-527.
- GRÄTZER, G. and PLATT, C. R. A characterization of sharply transferable lattices, A-228; Two embedding theorems for lattices, A-288.
- GRÄTZER, G., PLATT, C. R. and SANDS, B. Lattice ideal embedding theorems, A-527.
- GRAVES, Glenn W. See BROWN, Gerald G.
- GRAVES, Larry. On isometric immersions between indefinite Euclidean spaces. Preliminary report, A-547.
- GRAVES, Larry and NOMIZU, Katsumi. On sectional curvatures of indefinite metrics. Preliminary report, A-389.
- GRECHIE, Richard J. On generating distributive sublattices of orthomodular lattices, A-41.
- GREENBERG, James M. Pattern formation and periodic structures in systems modeled by reaction-diffusion equations, A-476.
- GREENBERG, James M. and HASTINGS, S. P. Spatial patterns for discrete models of diffusion in excitable media, A-100.
- GREENBERG, William. A class of transport type equations, A-177.
- GREENE, Curtis. A theorem on perfect graphs, A-38.
- GREENLEAF, Frederick P. See CORWIN, Lawrence.
- GREENLEAF, Frederick P., CORWIN, L. and PENNEY, R. Canonical formulas for multiplicities and primary projections in L^2 of a nilmanifold, A-468.
- GREIG, W. E. See GOULD, H. W.
- GRESSANG, R. See JONES, J., Jr.
- GRIERZ, Gerhard. Continuous lattices in analysis, A-273.
- GRIFFEATH, David. Some simple discrete-time dual processes, A-158.
- GRIFFITH, Philip A. See EVANS, E. Graham, Jr.
- GRIGGS, Jerrold R. Sufficient conditions for a symmetric chain order, A-42.
- GRILLET, P. A. All semigroups with $S/R = S/L = N$, A-63.
- GRIMM, Louis J. See FITZPATRICK, William J.
- GRINSTEIN, Georges G. Generalized Dirichlet series with complex exponents, A-631.
- GRISPOLAKIS, J. and TYMCHATYN, E. D. Confluent images of arclike rational continua, A-253; On the existence of arcs in rational continua. Preliminary report, A-441; Confluent mappings and acyclicity of Hausdorff continua. Preliminary report, A-555; σ -connectedness in hereditarily locally connected spaces, A-622.
- GROEMER, H. Multiple tilings of euclidean space, A-492.
- GROETSCH, C. W. and KING, J. T. Extrapolation and the method of regularization for generalized inverses, A-432.
- GRONE, Robert. Decomposable tensors as a quadratic variety, A-343.
- GRONSKI, Jan M. Controllability on compact connected manifolds. Preliminary report, A-132.
- GROSSBERG, Stephen. Serial codes for short term memory and long term memory. Preliminary report, A-18; The self-organization of sensory-motor maps and circular reactions. Preliminary report, A-246; Competition, decision, and consensus. Preliminary report, A-296; Decisions, patterns, and oscillations in nonlinear competitive systems with applications to Volterra-Lotka systems. Preliminary report, A-536.
- GROSSMAN, Jerrold W. On groups with specified lower central series quotients, A-321.
- GROSSMAN, Marvin W. Boundary measures and dilations for certain projection operators. Preliminary report, A-244.
- GRUENHAGE, Gary. A note on spaces having an ortho-base or a base of subinfinite rank, A-23.
- . See BOONE, James R.
- GRÜNBAUM, B. and SHEPHARD, G. C. Classifications of plane patterns, A-490.
- GRUNBAUM, F. Alberto. Inverse Eigenvalue problem for random matrices, A-305.
- GUASFARI, David. Partially conservative extensions of arithmetic, A-29.
- GUCCIONE, S. J. and STANOJEVIĆ, Č. V. Transition probabilities and inner products, A-117.
- GUGGENHEIMER, H. Nonoscillation of certain fourth order linear differential equations, A-540.
- GULLIVER, Robert. Finiteness of the number of minimal surfaces bounded by a given curve. Preliminary report, A-575.
- GUMM, H. Peter. A cancellation theorem for finite algebras, A-530; Solution sets of equations over universal algebras. Preliminary report, A-610.
- GUNDERSEN, Gary. The semigroup generated by anharmonic oscillators, A-429.
- GUPTA, Ram Niwas. Other two roots of a normal cubic, A-418.
- GUPTA, Ram Niwas and RAM, Jai. The Jacobson radical of fixed ring of automorphisms, A-528.
- GURAK, Stanley J. Classical analogue of the relative genus theory of algebraic number fields, A-50.
- GUREL, Okan. Decomposed partial peeling, A-317.
- GUREVICH, Yuri and SHELAH, Saharon. Modesty 1, A-20.
- GUSTAFSON, John L. A fast-convergence infinite product for $\Gamma(z)$, A-430.
- HAACK, Joel. See FULLER, Kent R.
- HADA, Dennis. See YODER, Lane.
- HAGHANY, A. Simple Ore extensions of some commutative rings, A-465.
- HAGOPIAN, Charles L. Homogeneous circle-like continua that contain pseudo-arcs, A-141.
- HAHN, Marjorie G. A characterization of the Kolmogorov difference property and its relationship to the central limiting behavior of square-integrable stochastic processes, A-337.
- HAIFAWI, Mahmoud. Nonstandard theory in non-archimedean analysis. Preliminary report, A-240; Complementation property in nonarchimedean normed spaces, A-536.
- HAILPERIN, Theodore. Boole's algebra isn't Boolean algebra, A-26.
- HAJEK, Petr. Another sequence of degrees of constructibility. Preliminary report, A-299.
- . See BALCAR, B.
- HALE, Mark, Jr. Partial geometries with reasonable local structure. Preliminary report, A-135.
- HALES, Alfred W. Presentations of Boolean algebras. Preliminary report, A-453.
- HALEY, David K. Compactness in discriminator varieties. Preliminary report, A-227; Injectives in discriminator varieties. Preliminary report, A-418.
- HALKIN, Hubert. Set-valued differentials and optimization theory, A-347.
- HALL, L. M. A solvability criterion for non-homogeneous Bessel equations, A-83.
- HALL, William S. A Rayleigh wave equation, A-381; The Rayleigh and Van der Pol wave equations, some generalizations, A-617.
- HALPERIN, Stephen and STASHEFF, James. Obstructions to homotopy equivalences. Preliminary report, A-499.
- HALPERN, Fred. An application of Scott's interpolation theorem, A-30.
- HAMANN, Eloise A. On cancellation. Preliminary report, A-320.
- HANDEL, David. See COHEN, Frederick R.
- HANF, William P. The Boolean algebra of formulas with one free variable. Preliminary report, A-447; Using tilings to construct first-order theories. II. Preliminary report, A-451.
- HANKINS, J. C. and RAKESTRAW, Roy M. Convex cones and dentability, A-117.
- HANKS, Christopher. See BARRATT, Michael.
- HANSEN, Eldon. Global optimization using interval analysis. Preliminary report, A-347.
- HANSEN, Lowell J. Some geometric aspects of the growth of entire functions, A-577.
- HARARY, Frank and MELTER, Robert A. On the metric dimension of a tree, A-31.
- HARBIN, Mickie S. See BEARD, Jacob, T. B., Jr.
- HARBORTH, Heiko. Prime number criteria in Pascal's triangle, A-521; Prescribed numbers of tiles and tilings, A-619.
- HARDT, Robert M. On boundary regularity for two dimensional flat chains modulo two minimizing the integral of an elliptic integrand in R^3 , A-132.
- HARER, John L. See CASSON, Andrew J.

- NIK, V. and MAKKAJ, M. Some proof theory for formalized quantifiers, A-435.
- TEN, A. See LAX, Peter D.
- TIG, Donald. Pseudocompactness and local compactness in completely regular spaces, A-145.
- TINGS, Harold M., FRANCIS, Jack M. and MOZZI, Frank J. A model for bankruptcy using catastrophe theory, A-387.
- TINGS, S. P. See GREENBERG, J. M.
- TINGS, William. On $H^2(\mu)$ for μ a pure atomic measure. Preliminary report, A-580.
- TCHER, John R. Closed form solutions of a nonlinear perturbation problem. Preliminary report, A-81.
- TSKNECHT, Adam O. Coabelian cosemigroups of the category of rings. Preliminary report, A-61.
- YMAN, W. K. See BARTH, Karl F.
- YS, John. Logical clustering algorithm for medical diagnostics, taxonomy, general systematics. Preliminary report, A-434; A vector (ordinal) switching algebra as a conservative extension of present scalar (typological) switching algebra. Preliminary report, A-619.
- AD, Tom, See ANDERSON, James A.
- . See BLATTNER, Meera.
- ATH, Larry F. Weighted deficiency of meromorphic functions. Preliminary report, A-84.
- ATH, Robert W. and LINDGREN, William F. A note on semiparacompact spaces. Preliminary report, A-636.
- ASTROM, G. W. Outflow boundary conditions for nonlinear hyperbolic systems, A-643.
- ASTROM, John R. and HOUSTON, Evan G. Pseudo-contraction domains. Preliminary report, A-267.
- IL, Wolfgang and TOLLEFSON, Jeffrey. Deforming a homotopy-involution of a 3-manifold to an involution, A-397.
- INZER, William. See EAKIN, Paul.
- . See GILMER, Robert.
- ISEY, Richard E. Factoring open subsets of R^∞ with control. Preliminary report, A-303; Stability with control on R^∞ manifolds. Preliminary report, A-560.
- ITSCH, James L. Foliations with nontrivial secondary classes, A-633.
- JHAL, Dennis A. Monodromy groups and Poincaré series, A-83.
- JELLER, Alex. Topology of discrete groups, A-500.
- JELLERSTEIN, Simon and WILLIAMSON, Jack. Derivatives of entire functions and a conjecture of Pólya and Wiman, A-327.
- JELTON, J. William. The distance of a function to H^∞ ; electrical power transfer, A-640.
- JELTON, Jon. See STUCKWISCH, Stephen.
- JENSON, C. Ward. See BECKER, Joseph.
- JENTZEL, Irvin Roy. Ideals of right alternative rings, A-62.
- JERBST, Ira W. Unitary equivalence of Stark Hamiltonians, A-117.
- JERMANN, Robert. Some neglected features of Sophus Lie's work, A-26.
- JEROD, James V. Product integral representation of the generalized inverse for closed operators. Preliminary report, A-128.
- JERRERO, Domingo A. Quasi-similar operators with different spectra. Preliminary report, A-11; Examples of strictly weighted shifts, A-616.
- . See BARRIA, Jose.
- JERRMANN, Robert A. Perfect maps and convergence spaces, A-139; Point monads and P-closed spaces, A-397.
- JERSH, Reuben. Higher-order approximations for C_0 semigroups, A-387; Higher-order approximations for \mathfrak{h}_p semigroups. II, A-546.
- JESTENES, Magnus. A role for augmentability in optimization theory. Preliminary report, A-348.
- JICKIN, Kenneth K. Complete universal locally finite groups, A-231; Complete universal homogeneous groups. Preliminary report, A-288.
- JICKIN, Kenneth K. and PHILLIPS, R. E. Infinite periodic groups, A-232.
- JICKS, Troy L. and HUFFMAN, Ed. W. Fixed point theory in generalized Hilbert spaces, A-114.
- JICKS, Troy L. and HUFFMAN, Shirley M. A note on locally quasi-uniform spaces, A-141.
- JICKS, Troy L. and KUBICEK, John D. Nonexpansive mappings in locally convex spaces, A-118.
- HIGGINS, P. J. See BROWN, R.
- HILDEBRANDT, S. On 't Hooft's eigenvalue problem in two-dimensional quantum chromodynamics, A-578.
- HILLE, G. N. See BEAR, H. S.
- HILGERS, John W. A method for finding the optimal regularization parameter. Preliminary report, A-485.
- HILL, Theodore P. On the existence of good Markovian strategies. Preliminary report, A-163.
- HILLER, Howard L. and SHELAH, Saharon. Ext in L . Preliminary report, A-316.
- HILLMAN, A. P. and GRASSL, R. M. Functions on tableau frames, A-636.
- HILLMAN, Jonathan A. A nonhomology boundary link with Alexander polynomial 0. Preliminary report, A-257; High dimensional knot groups which are not 2-knot groups, A-301.
- HILTON, Peter. On co-H-spaces, A-496.
- HINDMAN, Neil and TAYLOR, Alan D. On repeating sums and small cells. Preliminary report, A-34.
- HIREMATH, V. A. On copure injective modules, A-611.
- HIRSCHMAN, Isidore I., Jr. Spherical multipliers. Preliminary report, A-108.
- HIRSCHMAN, Isidore I., Jr. and LIANG, David S. Szegő's theorem on $SU(3)$. Preliminary report, A-329.
- HIRSCHORN, R. M. Invertibility of control systems on Lie groups, A-182.
- HIRSHON, Ronald. The equivalence of $X^t C \approx X^t D$ and $JXC \approx JXD$. Preliminary report, A-525.
- HITT, L. R. and SUMNERS, D. W. Knots which are uniquely determined by their complements, A-634.
- HO, Chung-wu. On the space of the linear homeomorphisms of a 2-disk with two interior vertices. Preliminary report, A-151.
- HOBBS, Arthur M. See ERDÖS, P.
- HOCHBERG, Kenneth J. A signed measure on path space related to Wiener measure, A-503.
- HOCHSTER, Melvin. Canonical elements in local cohomology modules. Preliminary report, A-319; Cohen-Macaulay modules. Preliminary report, A-459.
- HOF, H. C. Im. See EHRlich, Paul E.
- HOFF, D. See CONWAY, E. D.
- HOFFMAN, William C. A mathematical model of Piagetian psychology, A-18; Holonomy in psychology. Preliminary report, A-180.
- HOFFMANN, Karl H. and MISLOVE, Michael. Is the lattice of kernel operators of a continuous lattice continuous?, A-4.
- HOFFMANN, Karl H. and THAYER, F. Javier. On the spectrum of approximately finite dimensional C^* -algebras, A-114.
- HOGGATT, V. E., Jr. and BICKNELL-JOHNSON, M. Reflections in three glass plates. Preliminary report, A-450.
- HOLLAND, Charles J. Stochastically perturbed limit cycles, A-503.
- HOLLINGSWORTH, Mark. Typically real functions of order p . Preliminary report, A-83.
- HOO, Cheong S. Principal and induced fibrations, A-497.
- HOOVER, Douglas N. Probability logic. Preliminary report, A-438.
- HOPPENSTEADT, Frank C. On the optimal exploitation of a spatially distributed fishery, A-509.
- HORNE, J. G. On the automorphism group of a cone, A-136.
- HOROWITZ, David A. A further refinement for coefficient estimates of univalent functions. Preliminary report, A-381.
- HOUSTON, Evan G. Chains of primes in $R \langle x \rangle$. Preliminary report, A-267.
- . See HEDSTROM, John R.
- HOWARD, Paul E. Some strong forms of the Boolean prime ideal theorem. Preliminary report, A-446.
- HOWARD, Paul E., RUBIN, Arthur L. and RUBIN, Jean E. Independence results for class forms of the axiom of choice, A-391.
- HOWORKA, Edward. Generators for algebras of relations. Preliminary report, A-4; A characterization of distance-hereditary graphs, A-227; On metric properties of certain clique graphs, A-291.
- HSIANG, W. C. See FARRELL, F. T.

- HSIAO, George C. Singular perturbation of an exterior Dirichlet problem, A-97.
- HU, T. C. Some results in network theory. Preliminary report, A-644.
- HUCKABA, James. See ANDERSON, D. D.
- HUFF, Barthel W. Mixtures that cannot be infinitely divisible. Preliminary report, A-161; Maxima and infinite divisibility, A-503.
- HUFFMAN, Ed. W. See HICKS, Troy L.
- HUFFMAN, Shirley M. See HICKS, Troy L.
- HUFFMAN, W. Cary. Polynomial invariants of finite linear groups of degree 2, A-70.
- HUGGINS, Frank N. Generalized Lipschitz conditions. II, A-295.
- HUGHES, C. B. See GORDH, G. R., Jr.
- HUGHES, Daniel R. Biplanes, A-33.
- HULKOWER, Neal D. Application of the stable manifold theorem to the zero energy three body problem. Preliminary report, A-174.
- HUMI, Mayer. Invariant solutions for a class of diffusion equations, A-174.
- HUNEKE, Phil. Smooth tessellations of a sphere (à la Betty Collings) and other surfaces. Preliminary report, A-501.
- HUNEYCUTT, James E. See FAULKNER, Gary D.
- HUNG, H. H. A contribution to the theory of metrization, A-22; Strengthening of Frink's metrization theorem, A-263; A characterization of local bases, A-445; Metric, symmetric, asymmetric, A-557; An alternative to Bing's generalization of Urysohn's metrization theorem, A-622.
- HUNT, Richard A. Harmonic measure and estimates of Green's function, A-331.
- HURD, A. E. Nonstandard models in nonequilibrium statistical mechanics. Preliminary report, A-506.
- HUTCHINSON, Joan P. See ALBERTSON, Michael O.
- HUTCHINSON, John E. A measure of De Giorgi and others does not equal twice Hausdorff measure. Preliminary report, A-240.
- HYERS, D. H. Bounds for polynomial operators and their Frechet derivatives, A-488.
- HYMAN, J. M. See LAX, Peter D.
- ILAMED, Yehiel. On polynomials orthogonal with respect to the trace bilinear form. II, A-368; Lie elements, the Killing form and trace identities, A-420.
- INFANTE, Ronald P. Strong normality and normality in difference algebra, A-48.
- INFANTOZZI, Carlos A. On bi-quaternion integers: "Lattice of Hankelian near-rings with units", A-562.
- INGRAM, W. T. Hereditarily indecomposable tree-like continua. II. Preliminary report, A-636.
- INSELBERG, Alfred. On determinants of Toeplitz-Hessenberg matrices arising in power series, A-15; Quasi-three-chambered model of the cochlea (inner ear) at low frequencies, A-180.
- IRLBECK, B. William. Finitely generated projective ideals in commutative rings, A-460.
- IRVING, Ronald S. Prime ideals of Ore extensions. Preliminary report, A-57.
- ISEKI, Kiyoshi. On contractive mappings. Preliminary report, A-140.
- ISMAIL, Mourad E. H. Evaluation of certain integrals with application to probability theory and special functions, A-85; Bessel functions, Stieltjes transforms and infinite divisibility, A-382.
- ISMAIL, Mourad E. H. and MULDOON, Martin E. Monotonicity of the zeros of a cross-product of Bessel functions, A-86.
- IVANOV, Simeon. Holomorphic relative inverses, A-538.
- JACKSON, Bill. Hamilton cycles in 2-connected regular graphs. Preliminary report, A-523.
- JACO, William and MYERS, Robert. An algebraic characterization of closed-3-manifolds, A-263.
- JACOBOWITZ, Howard. Induced connections on hypersurfaces, A-137.
- JACOBSON, Elaine M. A characterization of the weakly almost periodic functions. Preliminary report, A-121.
- JAIN, R. K. On multiplication modules, A-415.
- JAIN, S. K. and MOHAMED, Saad. Rings whose cyclic modules are continuous, A-8.
- JAJODIA, Sushil. On 2-dimensional CW complexes with a single 2-cell, A-496.
- JAKIMOVSKI, A. See BORWEIN, D.
- JAMES, David M. Smooth free circle actions on 9-spheres. Preliminary report, A-259.
- JAMES, Robert C. Nonreflexive Banach space of type 2, A-534.
- JAMISON, Benton. Doeblin's theory of Markov processes; a historical survey, A-160.
- JAMISON, Robert E. Coaffine geometry and convexity over finite fields, A-492; Tietze's convexity theorem for semilattices and lattices, A-520; Isometries of k-subsets of a set. Preliminary report, A-608.
- JANOS, Ludvik. Dimension theory via bisector-chains, A-23; Uniform asymptotic stability and equi-continuity of dynamical systems, A-87; A linearization of continuous semiflows in the Hilbert space l_2 , A-276; Fixed point property and even continuity, A-302; Dimension theory via reduced bisector-chains, A-494; The language of inequality and topological properties, A-551; A measure of validity, A-620.
- JANOS, Ludvik and MARTIN, Harold. Metric characterizations of dimension for separable metric spaces, A-634.
- JANOS, Ludvik and SOLOMON, J. L. A fixed point theorem for operators with a compact iterate, A-260.
- JANOWITZ, M. F. Complemented congruences on complemented lattices, A-304.
- JATEGAONKAR, Arun V. Jacobson's conjecture and bimodules over Noetherian rings. Preliminary report, A-465.
- JECH, Thomas. A Boolean algebraic game, A-507.
- JEFFERS, Errol A. The amalgamation property in universal Horn classes of digraphs. Preliminary report, A-522; The Vaught conjecture for universal Horn theories of one binary relation. Preliminary report, A-620.
- JENKINS, Terry L. See OLSON, Dwight M.
- JEROSLOW, Robert G. Cut form for binary variables. Preliminary report, A-544.
- JERRI, A. J. Computations of the Hill functions of higher orders, A-19; Towards a discrete Hankel transform and its applications, A-112.
- JETER, Melvyn W. Some extremal elements of the convex cone of monotone processes of concave type. Preliminary report, A-297.
- JEWELL, Nicholas P. Multiplication by the coordinate functions on the sphere in \mathbb{C}^n and the Bergman spaces. Preliminary report, A-488.
- JITTORNTRUM, Krisorn. An implicit function theorem, A-615.
- JOCKUSCH, Carl G., Jr. and POSNER, David. Double jumps of minimal degrees, A-254.
- JOHNSON, David L. and LAHR, Charles D. Multipliers and derivations of Hilbert algebras, A-566; Multipliers of L^1 -algebras with order convolution, A-566.
- JOHNSON, Frederick C. A model for salmon fishery management. Preliminary report, A-510.
- JOHNSON, Gordon G. Moments and differential equations. Preliminary report, A-273.
- JOHNSON, Guy, Jr. See ARSOVE, Maynard.
- JOHNSON, Johnny A. Prime sequences in local Noether lattices. Preliminary report, A-42.
- JOHNSON, Jon L. Modules injective with respect to primes. Preliminary report, A-319.
- JOHNSON, L. W. See RIESS, R. D.
- JOHNSON, N. L. and OSTROM, T. G. Translation planes of characteristic two in which all involutions are Baer, A-133; The translation planes of order 16 that admit $PSL(2, 7)$, A-490.
- JOHNSON, William B. Symmetric structures in Banach spaces, A-486.
- JOHNSTON, Katherine. Congruence lattices of Rees matrix semigroups, A-291.
- JONES, Alan. See BRONSON, Richard.
- JONES, Charles A. See LAHR, Charles D.
- JONES, J., Jr., LEUTHAUSER, J. and GRESSANG, R. Solutions of the Riccati matrix differential equation. Preliminary report, A-94.
- JONES, John, Jr., LUKES, John W. and DOLAN, Kevin. On kinematic similarity of systems of differential equations. Preliminary report, A-474.
- JONES, L. W., Jr. Free semilattices. Preliminary report, A-269.

- JONES, Peter W. See GARNETT, John B.
- JONES, Roger L. An analog of the Marcinkiewicz integral in ergodic theory. Preliminary report, A-164.
- JONES, Wayne R. The 1-cohomology of some finite "twisted groups" of Lie type. Preliminary report, A-71.
- JORDAN, James, WALCH, Ray and WISNER, Robert. On triangles with integer sides, A-450.
- JORDAN, James H. The genesis and development of poor mental visualization. Preliminary report, A-184.
- JOSHI, C. M. See VERMA, A.
- JOY, Kenneth I. A description of the topology on the dual space of a nilpotent Lie group. Preliminary report, A-557.
- JUNEJA, Pushpa. See YADAV, B. S.
- JURDJEVIC, Velimir. Controllability of bilinear systems, A-315.
- JURKAT, W. and TROUTMAN, J. A general maximal inequality of the Hardy-Littlewood type. Preliminary report, A-73.
- KAINEN, Paul C. and WHITE, Arthur T. On stable crossing numbers, A-33.
- KAISER, Klaus. On relational selections for complete theories, A-446.
- KALABA, R. and ZAGUSTIN, E. A new representation and method for solution of Fredholm integral equations, A-112.
- KALANTARI, Iraj and RETZLAFF, Allen. Recursively enumerable topological spaces. Preliminary report, A-549.
- KALIKOW, Steven Arthur. Generalized random walk in a random environment, A-646.
- KALISCH, G. K. On unitary invariants of certain symmetric operators. Preliminary report, A-639.
- KALLAHER, Michael J. See FOULSER, David A.
- KALOUPSIDIS, N. and ELLIOTT, D. L. Stability theory of nonlinear control systems, A-314.
- KALTON, N. J. and PECK, N. T. Quotients of L_p , $0 \leq p < 1$, A-115.
- KAMOWITZ, Herbert. The spectra of a class of operators on the disc algebra, A-488.
- KAMP, William P. Trace class criteria for integral operators, A-489.
- KANAMORI, A. On Vopenka's and related principles. Preliminary report, A-392.
- KANG, Ming-Chang. Projective modules and Picard groups, A-373.
- KANNAN, V. Lattices of topologies, I, A-259.
- KANNAPPAN, P. On the measurable solutions of two functional equations, A-477.
- KANNAPPAN, P. and TAYLOR, M. A. On closure conditions, A-64.
- KANTOR, William M. Finite groups generated by relations of projective spaces, A-134.
- KAPILA, A. K. and MATKOWSKY, B. J. Arrhenius reactions in diffusive systems: Ignition and extinction, A-505.
- KAPLAN, Wilfred. On the trajectories of a quadratic differential, A-469.
- KAPOOR, G. P. and GOPAL, K. On the mean values of functions analytic in the unit disc. Preliminary report, A-381.
- KARON, John M. Computing best approximations by the continuation method, A-478.
- KARRAS, Ulrich. On pencils of curves and surface singularities. Preliminary report, A-329.
- KARTSATOS, Athanassios G. On the behaviour near infinity of oscillatory solutions, A-16.
- KATO, Tosio. An operator inequality and application, A-641.
- KATZ, Elyahu. See DULA, Giora.
- KAUFFMAN, Louis H. Signature of branched fibrations. Preliminary report, A-341.
- KAUFFMAN, E. H., Jr. and TAYLOR, G. D. Uniform approximation with rational functions having negative poles, A-479.
- KAUFMANN, Matt. A new omitting types theorem for $L(Q)$, A-438; Back-and-forth systems for stationary logic. Preliminary report, A-549.
- KAZDAN, Jerry L. Volume, injectivity radius, and Wiedersehen Flasche, A-582.
- KAZHDAN, David. Representations of semisimple groups over finite fields, A-305.
- KEARFOTT, Baker. Degree theory, Sperner's lemma, and a generalized method of bisections. Preliminary report, A-168.
- KEISLER, Michael. A condition yielding an integral representation of the members of $ba(S, \mathbb{Z})^*$. Preliminary report, A-385.
- KELLER, Joseph B. Rays, waves, and asymptotics, A-176; Population genetics and diffusion equations, A-349.
- KELLEY, Al. See CUSHMAN, Richard.
- KELLEY, R. G., Jr. See WILLIAMS, R. T.
- KELLOGG, Charles N. See BARNARD, Roger W.
- KELLUM, Kenneth R. Function space topologies for Darboux and connectivity functions, A-426.
- KELLY, David. See GRÄTZER, George.
- KENNISON, John F. See LEDBETTER, Carl S.
- KENNY, G. Otis. See BALL, Richard N.
- KERSHNER, Richard B. Paving with convex pentagons. Preliminary report, A-491.
- KERTZ, Robert P. and NACHMAN, David C. Optimal policies for the nonstationary dynamic programming model with general total reward function, II. The ws^0 -topology case, A-133.
- KEYFITZ, B. See LAX, Peter D.
- KEYFITZ, Barbara L. and KRANZER, Herbert C. Existence and uniqueness of entropy solutions to the Riemann problem for hyperbolic systems of two nonlinear conservation laws, A-96.
- KHALILI, Siamak. On Lipschitz properties of Brownian motion random measure. Preliminary report, A-255; Strong Markov property for a Brownian motion random measure. Preliminary report, A-439.
- KHAN, M. A. Chain conditions on subgroups of LCA groups, A-443.
- KHAN, M. Zubair. Modules behaving like torsion abelian groups, A-376.
- KHAN, R. S. See ANSARI, M. S.
- KHARAGHANI, H. Absolutely continuous weakly almost periodic measures. Preliminary report, A-484.
- KIM, J. H. Completion of a quasi local ring. Preliminary report, A-52.
- KIM, Jin Bai. The tree defined by a sequence of nonnegative integers, A-400.
- KIM, K. H. and ROUSH, F. W. Enumeration of normal topologies on a finite set, A-519; Enumeration of semi-orders and transitive relations, A-610.
- KIMBERLING, Clark. Bernoulli zero-one sequences. Preliminary report, A-455.
- KINDERLEHRER, David. Variational inequalities and free boundary value problems, A-98.
- KINDERLEHRER, David S., NIRENBERG, Louis and SPRUCK, Joe. Remarks about higher order free boundary problems, A-581.
- KING, Henry. See AKBULUT, Selman.
- KING, J. T. See GROETSCH, C. W.
- KING, James R. Boundaries of complex analytic varieties in projective space, A-473.
- KING, Lucy Lam. Statistical approach to quality control in clinical chemistry laboratories, A-400.
- KING, Stephen C. The isoclinism class of a finite group. Preliminary report, A-369.
- KINNEY, James and ALEXANDER, Charles C. Counterexamples to conjectures by Bondy and Chvatal. Preliminary report, A-628.
- KINNEY, John. Some computer problems for probability, A-188.
- KINTALA, Chandra M. R. Refining nondeterminism in Q^2 , A-251.
- KIRBY, Robion. See AKBULUT, Selman.
- KIRBY, Robion and MELVIN, Paul. Slice knots and property R, A-353.
- KIRK, W. A. Fixed point theorems and surjectivity results for nonlinear mappings in Banach spaces. Preliminary report, A-127.
- . See DOWNING, David.
- KIRKMAN, Ellen E. and KUZMANOVICH, James. Orders over hereditary rings, A-61.
- KIRKMAN, Ellen E., KUZMANOVICH, James and MAZZOLA, Joseph B. Projective modules over commutative hereditary rings, A-52.
- KISHORE, Masao. Odd integers N with five distinct prime factors for which $2 - 2/10^{10} < \sigma(N)/N < 2 + 2/10^{10}$. Preliminary report, A-46.

- KITCHEN, J. W. and ROBBINS, D. A. Gelfand representations of Banach modules, A-115.
- KITTEL, Phyllis M. Intermediate logics. Preliminary report, A-583.
- KLAASEN, Gene A. Asymptotic properties of third order linear differential equations. Coauthored with J. Michael Dolan, A-93; Decompositions of solution spaces of third order differential equations. Coauthored with J. Michael Dolan, A-93.
- KLASSEN, Vuryl J. Conformal mappings for free streamline problems, A-505.
- KLEINFELD, Erwin and SMITH, H. F. Prime locally $(-1, 1)$ rings with idempotent and a chain condition, A-423.
- KLEINFELD, Margaret Humm. Rings with $x(yz) = z(yx)$, A-2.
- KLEITMAN, Daniel J. Fast but imperfect algorithms, A-356.
- KLETZING, Dennis. Rational representations of \mathbb{Q} -groups. Preliminary report, A-63.
- KLINE, Morris. How pure was pure math; The record of history, A-27.
- KNIGHT, Ronald A. Certain closed flows on a 2-manifold, A-87.
- KNILL, R. J. On the index of isolated closed tori, A-149.
- KNOEBEL, R. Arthur. Axioms for diagrams and categories, A-234.
- KNOX, Nathaniel. The inverse semigroup coproduct of an arbitrary non-empty collection of groups, A-69.
- KNUEPPEL, Nicholas. Weak convergence for a sequence of total progeny processes. Preliminary report, A-163.
- KOCH, Richard M. and LOWENTHAL, Franklin. Uniform finite generation of Lie groups locally-isomorphic to $SL(2, \mathbb{R})$, A-468.
- KOFNER, Jacob. On quasi-metrizable nonorthocompact spaces, A-623.
- KOGELMAN, Stanley. See WARREN, Joseph.
- KOHLER, Werner. Multiple scales analysis of a randomly-perturbed one-dimensional wave equation. Preliminary report, A-316.
- KOHLMAYR, Gerhard F. A logarithmically closed field of generalized functions, A-245; Normed fields and topological fields which are not copies of \mathbb{C} , A-278; Good news about topological fields, A-300; Metric topological division algebras, A-309; A topological division ring setting for linear partial differential equations with constant coefficients, A-386; A solution of Hilbert's first problem concerning the continuum hypothesis, A-447; Pragmatic set theory and the Boolean prime ideal theorem, A-553; A nonvoid partially ordered set without maximal elements, A-570.
- KOHN, Meryle. See KOHN, Samuel.
- KOHN, Samuel, GOTTLIEB, Allan and KOHN, Meryle. A generating function approach to the traveling salesman problem, A-248.
- KOHN, Samuel and KOHN, Meryle. Investigation of stability of the Lindstedt equation using Struble's technique. Preliminary report, A-89.
- KOLASKI, Clinton. An F. and M. Riesz type theorem for the unit ball in complex N -space. Preliminary report, A-111.
- KOLK, Johan A. C. Spectra of compact negatively curved locally symmetric spaces, A-649.
- KOLMAN, Bernard. See BECK, Robert E.
- KOMKOV, Vadim. Dual variational principles, A-131; Another approach to the concept of a generalized solution of a differential equation, A-637.
- KOMORNICKI, Wojciech. Multiplications in two-cell spectra. Preliminary report, A-148.
- KONRAD, Michael D. A mathematical system with applications. Preliminary report, A-322.
- KONVALINA, John. Difference sets and quasigroups, A-32.
- KORENBUM, Boris. A Beurling-type theorem, A-307.
- KOTMAN, Larry J. An entire function with irregular growth and more than one deficient value, A-580.
- KOTZMANN, Ernst. Segal algebras on nonabelian groups, A-483.
- KOVACS, Amos. Generic splitting fields. Preliminary report, A-57.
- KOVESI-DOMOKOS, S. On algebraic models in the theory of elementary particles, A-571.
- KOWALIK, Janusz S. Hydroelectric power system optimization is a large scale mathematical programming problem, A-350.
- KOZŁOWSKI, George. Postnikov systems in shape theory. Preliminary report, A-500.
- KRAINES, David and LADA, Thomas. A counterexample to the transfer conjecture, A-632.
- KRAMARZ, Luis. Global approximations to solutions of ordinary initial value problems. Preliminary report, A-171.
- KRAMER, Richard J. Sub- and super-solutions of quasi-linear elliptic boundary value problems, A-308.
- KRANZER, Herbert C. See KEYFITZ, Barbara L.
- KRAUS, Jon. Compact groups of automorphisms with spectrum condition. Preliminary report, A-238.
- KREIMER, H. F. Normal bases for Galois p -extensions of rings. Preliminary report, A-268.
- KRENER, Arthur J. A formal approach to stochastic integration. Preliminary report, A-648.
- KRENGEL, Ulrich and SUCHESTON, Louis. How to bet against a prophet. (Some L^1 dominated estimates for semiamarts), A-159.
- KREYSZIG, Erwin O. An application of Markov chains in social sciences, A-256.
- KRIEGER, M. See ERDÖS, P.
- KRIETE, Thomas. The growth of point evaluation functionals in certain $H^2(\mu)$ spaces, A-578.
- KRISHNAN, V. S. Fine quasi-resolutions of semigroups with identity. Preliminary report, A-565.
- KRIVOSHEIN, L. E., LEUNG, K. V., MANGERON, D. J. and OGUZTORELI, M. N. Well posed problems concerning nonlinear integro-differential systems with hyperbolic operators and self-controlled limits of integration, A-313; Studies of nonlinear integro-differential systems with parabolic operators and self-controls in the limits of integration and in the initial value conditions, A-485.
- KROL, Igor. The existence of a "smooth truncation" operator bounded on $W_m, p(\mathbb{R}^n)$. Preliminary report, A-384.
- KRUSKAL, Martin. Surreal numbers, A-43.
- KUBICEK, John D. See HICKS, Troy L.
- KUELBS, J. D. Some exponential moments with applications to density estimation and the empirical distribution function, A-336.
- KUHL, Frank P. See GIARDINA, Charles R.
- KUMAGAI, Donna. A unified proof for subharmonicity of functions associated with certain uniform algebras, A-615.
- KUMAR, A. and SCHREIBER, B. M. Stability conditions for Banach-space-valued random variables, A-335.
- KUMMER, Martin. On resonant classical Hamiltonians with two degrees of freedom. Preliminary report, A-174.
- KUNEN, Kenneth. An extremely disconnected space, A-263.
- . See BROVERMAN, S.
- KUPERBERG, Włodzimierz. Unstable sets and the set of unstable points, A-146; On embeddings of manifolds into Cartesian products of compacta, A-634.
- KYNER, Walter T. See BURNS, T. J.
- KURLAND, Henry L. Transition solutions for multiple time scale systems. Preliminary report, A-93.
- KURSHAN, R. P. See GOPINATH, B.
- KURTZ, Thomas G. The optional sampling theorem for martingales indexed by partially ordered sets and representation of stochastic processes. Preliminary report, A-165.
- KUZMANOVICH, James. See KIRKMAN, Ellen E.
- KWAN-YUK, Claire Sit. See BRAUDE, Eric John.
- KYNER, Walter T. and SANCHEZ, David A. Lotka's demographic equation—some asymptotic results and a new numerical approach, A-349.
- KYRALA, Ali. A relativistic generalization of Maxwell's equations. Preliminary report, A-19.
- LACHER, R. C. See BRYANT, J. L.
- LACHLAN, A. H. A countable counterexample to Skolemisation of elementary pairs. Preliminary report, A-550.
- LACHLAN, A. H. and WOODROW, Robert E. Countable ultrahomogeneous undirected graphs. Preliminary report, A-370.
- LADA, Thomas. See KRAINES, David.

- IADDE, Gangaram S. Stability technique and thought provocative random dynamical systems. Preliminary report, A-89; Competitive processes IV: Stability of stochastic hereditary systems, A-433; Systems of differential inequalities and stochastic differential equations. IV, A-543; Stabilizing and oscillating time-delays in single-species processes, A-618.
- LAFFEY, Thomas J. The number of solutions of $x^4 = 1$ in a finite group. Preliminary report, A-1; Property P for a pair of matrices, one of which is nonderogatory. Preliminary report, A-230; The Hughes problem for exponent nine. Preliminary report, A-377; Two-generated subalgebras of matrix algebras. Preliminary report, A-529.
- LA FRANCE, Jane. See WARNE, Ronson J.
- LAHR, Charles D. See JOHNSON, David L.
- LAHR, Charles D. and JONES, Charles A. Weak and norm approximate identities are different, A-566.
- LAINE, Thomas P. Convolution structures for polynomials orthogonal with respect to the weight function $(1-x)^2 \alpha |x|^{2\beta+1}$. Preliminary report, A-326.
- LAKSER, Harry. Semisimplicial algebras that satisfy the Kan extension condition, A-526.
---. See GRATZER, G.
- LAKSHMIKANTHAM, V. See BERNFELD, Stephen R.
---. See CHANDRA, Jagdish.
- LAKSHMIKANTHAM, V., MITCHELL, A. R. and SETY, D. D. Quasilinearization of boundary value problems in separable Hilbert spaces, A-91.
- LAMBERT, Howard W. A class of nonsplittable links, A-445; A-586; A-650.
- LAMOREAUX, Jack. See CAMPBELL, Douglas M.
- LAMPE, William A. A note on algebras of fixed similarity type. Preliminary report, A-371.
- LANDAHL, Herbert D. Simulation of transient and steady state transport in the kidney, A-350.
- LANDAUER, Christopher. Matroids and permutation groups, A-627.
- LANDESMAN, E. M. and WALTON, Ian G. A generalized saddle point characterization for solutions of singular problems in differential equations. Preliminary report, A-347.
- LANDGREN, John J. Some essentially selfadjoint Dirac operators. Preliminary report, A-274.
- LANDIS, Dale L. Singular solutions: A geometric approach, A-474.
- LANDRAITIS, Charles K. On the homomorphism relation between countable order types, A-569.
- LANE, Ernest P. Insertion of a continuous function. Preliminary report, A-555.
- LANG, George E., Jr. Cross sectioning fibrations over spheres with Riemann surface fiber, A-147.
- LANGE, Ridgley. 2-decomposable operators are decomposable, A-540.
- LAROCHE, A. See BENABDALLAH, K.
- LA ROCHE, Peter. Recursively presented Boolean algebras, A-552.
- LARSON, David R. A structure theorem for nest algebras, A-131.
- LARSON, Roland E. A topological model for population growth. Preliminary report, A-141.
- LASHOF, Richard K. G-smoothing theory, A-152.
- LASKAR, Renu. See ALLAN, Robert B.
- LASKAR, Renu and FREEMAN, Jim. Further results on 3-nets, A-35.
- LATCH, Dana May. Weak homotopy equivalence (WHE) axiom is stronger than strong homotopy (SH) axiom, for homology theories of simplicial sets, A-147.
- LAU, A. Y. W. Images of compact 0-dimensional semigroups, A-277.
- LAUFER, Henry B. The behavior of the exceptional set under ambient deformations. Preliminary report, A-324.
- LAVOIE, J.-L. See SRIVASTAVA, H. M.
- LAWSON, Jimmie D. Continuous lattices and topological algebra, A-269.
- LAWSON, Terry C. Open book decompositions for odd dimensional manifolds, A-277.
- LAX, Peter D. See PHILLIPS, Ralph S.
- LAX, Peter D., HARTEN, A., HYMAN, J. M. and KEYFITZ, B. On finite-difference approximations and the entropy condition for shocks, A-173.
- LAZER, Alan C. See AHMAD, Shair.
---. See CASTRO, Alfonso.
- LEDBETTER, Carl S. A criterion for the representability of algebras by sections in sheaves. Preliminary report, A-463.
- LEDBETTER, Carl S. and KENNISON, John F. Sheaf representations and the Dedekind reals for Heyting algebras. Preliminary report, A-423.
- LEDGER, Arthur J. See BLAIR, David E.
- LEE, Cheng-Ming. An existence theorem via an intuitive idea and fixed point theorems. Preliminary report, A-130.
- LEE, Heisook. An exact sequence in base change of a normal variety. Preliminary report, A-369.
- LEE, John W. Best quadrature formulas and splines, A-479.
---. See ANSELONE, P. M.
- LEE, Ken W. See BROWN, Johnny M.
- LEE, Kit-sum. The global dimension of group rings of nilpotent groups. Preliminary report, A-375; Every quasiprime kernel functor is induced by a prime ideal, A-414.
- LEE, Sa Ge and YOON, Jaihan. Algebras of finite strict multiplicity. Preliminary report, A-245.
- LEE, Will Y. K. On a problem of Kato on the L^2 -continuity of pseudodifferential operators, A-99.
- LEELA, S. See CHANDRA, Jagdish.
- LEELA, S. and MOAURO, V. Existence of solutions of differential equations with delay in Banach spaces, A-92.
- LEES, Paul. Steinberg representations for $GL_n(\mathbb{Z}/p^k\mathbb{Z})$, A-71.
- LEGG, David and WARD, Joe. Essentially Hermitian operators on \mathcal{L}_1 are compact perturbations of Hermitians, A-488.
- LEHMER, D. H. Permanent problems concerning combinatorial matrices, A-345; Highly restricted permutations revisited, A-450.
- LEHNIGK, Siegfried H. Boundary condition solutions of the generalized Feller equation, A-272.
---. See BAZLEY, Norman W.
- LEHRER-LLAMED, Yehiel. On polynomials orthogonal with respect to the trace bilinear form, A-232.
- LEININGER, Charles W. Relations of even order on finite domains, A-552.
- LEITMANN, George. Avoidance control, A-349; A stabilization policy for an uncertain economy, A-642.
- LEITZEL, James R. C. Congruence function fields of genus g and class number $g+1$, A-47.
- LEON, Jeffrey S. and SIMS, Charles C. The existence and uniqueness of a simple group generated by $\{3, 4\}$ -transpositions, A-69.
- LEPOWSKY, James and WILSON, Robert Lee. A construction of certain Kac-Moody Lie algebras, A-572.
- LERMAN, Manuel. Automorphism bases for the semi-lattice of recursively enumerable degrees, A-251.
- LERMAN, Manuel and SCHMERL, James. Theories with recursive models. Preliminary report, A-300.
- LESNIAK-FOSTER, Linda. See STRAIGHT, H. Joseph.
- LESSNER, Lawrence. Interchanging iterated integration, A-76.
- LEUNG, Anthony. Periodic solutions for a prey-predator differential delay equation, A-100; Limiting behavior for a prey-predator model with diffusion and crowding effects, A-546.
- LEUNG, K. V. See BONDARENKO, B. A.
---. See CHIRIACESCU, S. T.
---. See KRIVOSHEIN, L. E.
- LEUTHAUSER, J. See JONES, J., Jr.
- LEVENTHAL, Stephen H. See CIMENT, Melvyn.
- LEVINE, Howard A. Saddle points and instability of solutions of nonlinear partial differential equations: Some examples, A-307.
- LEVINE, Howard A. and MONTGOMERY, John T. On quenching of solutions of a nonlinear parabolic equation with a finite singularity. Preliminary report, A-378.
- LEVITZ, Hilbert. An ordinal bound for the set of polynomial functions with exponentiation, A-42.
- LEVY, Lawrence S. See BITTMAN, Richard M.
- LEVY, Ronnie. Countable spaces without points of first countability. Preliminary report, A-141; Small compact

- spaces. Preliminary report, A-555.
- LEWIS, D. R. The distance from a subspace of L_p to a Hilbert space, A-116.
- LEWIS, John L. Convolutions of starlike functions, A-579.
- LEWIS, Paul W. A characterization of weakly compact operators. Preliminary report, A-76.
- . See BILYEU, Russell G.
- LEWIS, Robert H. Homology decompositions of non-simply connected spaces. Preliminary report, A-558; On cofibrations of the form $A \rightarrow X \rightarrow K(G, n+1)$, $\pi_1 A \neq 0$. Preliminary report, A-623.
- LEWIS, Roger T. See ETGEN, Garret J.
- LI, Shuo-Yen Robert. n -person NIM and n -person Moore's NIM, A-33.
- LIANG, David S. See HIRSCHMAN, I. I., Jr.
- LICK, Don R. and WALL, Curtiss E. Turán's theorem and graphical parameters, A-39.
- LIEBERHERR, Karl. Complexity of superresolution. Preliminary report, A-433.
- LIEM, Vo Thanh. A counterexample in L_2 -manifold theory. Preliminary report, A-558.
- LIGH, Steve. On a class of ring-semigroups. Preliminary report, A-268.
- LIN, Charlotte R. Recursion theory on countable Abelian groups, A-550.
- LIN, S. See BURR, S. A.
- LIN, T. Y. Stable cohomotopy groups of spectra for connective K -theories, A-623.
- LINDGREN, William F. See HEATH, Robert W.
- LINDLEY, Thomas L., III. Partial truth tables, A-252.
- LINDNER, Charles C. A self orthogonal partial latin square can be embedded in a self orthogonal latin square, A-37.
- LIPMAN, Marc J. Fusion free representations of finite groups, A-467.
- LIPSCHUTZ, Seymour. On the conjugacy problem and tree products of groups, A-66.
- LIPSCHUTZ-YEVICK, Miriam. On inconsistency and undecidability, A-20; An inconsistency in the non-computability argument of Martin Davis, A-253; Primitive signs as marks and as one symbol sequences, A-386.
- LIU, D. B. and YOUNG, L. C. Derivatives, differences, multiple Fourier kernels, A-73.
- LIU, Tai-Ping. Asymptotic behavior of solutions of general systems of nonlinear hyperbolic conservation laws. Preliminary report, A-98.
- LIULEVICIUS, Arunas. Characters tell all, A-341.
- LLOYD, Justin T. See BYRD, Richard D.
- LLOYD, Stuart P. Markov representation of Martingales, A-162.
- . See NEVILLE, Charles W.
- LLOYD, Stuart P. and NEVILLE, Charles W. F_X -spaces, A-535.
- LOATS, James T. Some results on Boolean algebras. Preliminary report, A-290; On "strongly" rigid Boolean algebras (BA's) and cofinalities of BA's, A-453.
- LOGAN, B. F., Jr. Bandlimited functions bounded below over an interval, A-331.
- LOGANATHAN, M. Cohomology and homology of semigroups with idempotents. Preliminary report, A-524.
- LOOMIS, Irene. See WARNE, Ronson J.
- LOONEY, Carl. Operator minimaxima in ordered Banach spaces, A-133.
- LOPEZ, Antonio M., Jr. The maximal right quotient semigroup of a strong semilattice of semigroups, A-372.
- LOPEZ, Manuel. Matrix differential operators, A-382.
- LORCH, Lee and TZIMBALARIO, Jean. A quasi-equivalence between Borel summability and convergence for Fourier-Laguerre series at the end-point, A-102.
- LORD, James M. \mathfrak{R} -semigroups: isomorphism criterion and structure group description. Preliminary report, A-7.
- LORD, M. E., NICHOLS, D. and TSAY, J. Measuring rates for return for investment projects, A-100.
- LOURY, Glenn C. The optimum exploitation of an unknown reserve, A-506.
- LOVÁSZ, László and PLUMMER, M. D. On minimal elementary bipartite graphs, A-626.
- LOWENTHAL, Franklin. See KOCH, Richard M.
- LUDWIG, Donald. Control and spatial patterning of an insect outbreak system, A-508.
- LUKE, Jon C. Buying and selling algorithms. Preliminary report, A-582.
- LUKES, John W. See JONES, John, Jr.
- LUM, Lewis. See GORDH, G. R., Jr.
- LUNING, C. D. and PERRY, W. L. An iterative technique for solution of a nonlinear eigenvalue problem with application to the generalized Emden-Fowler equation, A-93.
- LUTZER, D. J. See van DOUWEN, E. K.
- LYNCH, James F. Probabilities of sentences on finite and countable models, A-29; Applications of 0-1 laws in finite and countable spaces, A-552.
- LYONS, Carter. A characterization of the radical of $E(G)$ in terms of G . Preliminary report, A-58.
- LYONS, Richard. See GORENSTEIN, Daniel.
- MA, T. W. Total derivatives in locally convex spaces. Preliminary report, A-537; One dimensional invisible but detectable functions. Preliminary report, A-642.
- MacBAIN, John A. Global bifurcation from self-adjoint operators. Preliminary report, A-116.
- MacCORMACK, Robert W. An efficient numerical method for solving the time-dependent compressible Navier-Stokes equations for high Reynolds number flows past arbitrarily shaped bodies. Preliminary report, A-401; An approach for solving stiff hyperbolic-parabolic systems. Preliminary report, A-650.
- MACINTYRE, Angus J. and McKENNA, Kenneth. A converse to Tarski's theorem on real closed ordered fields, A-28.
- MACON, Nathaniel and BRYANT, Paul. Indefinite sums of economic time series, A-507.
- MacWILLIAMS, Jessie and SLOANE, Neil. Surprising properties of codes over $GF(4)$, A-36.
- MADAN, Ved P. Stability of viscoelastic (Voigt) bars. Preliminary report, A-19; Influence of an elastic end support on the stability of viscoelastic (Voigt) column, A-544.
- MADDUX, Roger. Relation algebras and neat embeddings of cylindric algebras. Preliminary report, A-298.
- MAGGIOLO-SCHETTINI, Andrea and UCCELLA, Giovanni. On some characterizations of computable functions $N^* \rightarrow N^*$, A-551.
- MAGILL, K. D., Jr. Homomorphisms from $S(X)$ into $S(Y)$. Preliminary report, A-71.
- MAGNUS, Alfred E. Nonspherical principal series representations, A-468.
- MAGURN, Bruce A. SK_1 of dihedral groups, A-369.
- MAHFOUD, Wadi E. Oscillation criteria for a second order delay differential equation, A-88.
- MAHONY, L. M. See MAHONY, P. S.
- MAHONY, P. S. and MAHONY, L. M. A number theoretic study in orinthology, A-610.
- MAHOWALD, Mark. New infinite families in the stable 2-stem of the homotopy of spheres, A-340.
- MAJDA, Andrew and RALSTON, James. Nonlinear instability, discrete shocks, and the entropy condition, A-646.
- MAKKAI, M. See HARNIK, V.
- MAKOWSKY, J. A., II. A note on stationary logic. Preliminary report, A-438.
- MALIK, Saroj B. and MOTT, Joe L. Strong s -rings and Prüfer domains. Preliminary report, A-460.
- MALKEVITCH, Joseph. Single-peaked voter preference schedules. Preliminary report, A-179.
- MALLEY, James. Algebra automorphisms and power series field extensions. Preliminary report, A-228.
- MALM, Donald G. Number theory as an experimental science, A-185; On Monte Carlo primality tests, A-529.
- MALONE, J. J. D. g. near rings on D_{2n} , n even. Preliminary report, A-60.
- MALRAISON, Pierre. Bicategories from a homotopy associative point of view. Preliminary report, A-62.
- MANDELBAUM, Richard. Four manifolds, complex surfaces and framed links, A-635.
- MANGEL, Marc and CLARK, Colin W. Effects of schooling behavior of tuna on the purse-seine fishery, A-508.
- MANGERON, D. J. See BONDARENKO, B. A.
- . See CHIRIACESCU, S. T.
- . See KRIVOSHEIN, L. E.
- MANITIUS, A. Controllability and observability of retarded functional differential equations—a C_0 -semigroup approach, A-312.

- MANN, W. Robert. Improving convergence by averaging, A-124.
- MANNA, Zohar. The fixedpoint theory of recursive programs, A-644.
- MANOCHA, Jitendra. A generalization of singular submodule for modules. Preliminary report, A-61.
- MANSFIELD, Lois. Mixed finite element methods for elliptic equations, A-479.
- MARCHETTO, D. A. Invariant measures admitted by Denjoy-type flows on orientable surfaces of higher genus. Preliminary report, A-157.
- MARCUM, Howard J. Twisted Whitehead products. Preliminary report, A-498.
- MARCUS, Daniel A. Normal semimodules over a good ordered domain, A-42.
- MARCUS, Marvin and FILIPPENKO, Ivan. Linear operators preserving the decomposable numerical range, A-343.
- MARCUS, Marvin, MOYLS, B. N. and FILIPPENKO, I. Some convexity properties of the higher numerical range, A-342.
- MARGULIES, William. The residue of the function $f(z) = (1 - \gamma z)^{-1} \exp \alpha z^{-1} \exp \beta (1 - z)^{-1}$. Preliminary report, A-77.
- MARKANDA, Raj K. and PASCUAL, Joaquin. Fixed rings of automorphisms of $k[x, y]$. Preliminary report, A-527.
- MARKOWSKY, George. Scott's theory of computation and continuous lattices, A-270.
- MARLIN, J. A. See FULP, R. O.
- MARSDEN, J. E. Some interactions between bifurcation theory and catastrophe theory, A-642.
- MARTIN, Harold. See JANOS, Ludvik.
- MARTIN, Joseph. Surgery on solid tori. Preliminary report, A-354.
- MARTINDALE, Wallace S., III. See BAXTER, Willard E.
- MARXEN, Donald. Pseudometrics on quotient spaces, A-141.
- MASAT, Francis E. The minimum group congruence on a regular semigroup. Preliminary report, A-69; The structure of the minimum group kernel of a regular semigroup, A-416; Proper regular semigroups. Preliminary report, A-519.
- MASSAM, H el ene. Optimality criterion for a cone-convex program without constraint qualification. Preliminary report, A-386.
- MASSEY, Frank J., III. Evolution equations governed by a class of perturbed accretive operators. Preliminary report, A-95.
- MASSEY, James L. Introduction to convolutional codes. Preliminary report, A-182.
- MASTIN, C. Wayne. Discrete quasiconformal mappings, A-78.
- MATCHETT, Andrew. A subgroup of the projective class group. Preliminary report, A-65.
- MATHIS, Frank H. A Ritz-Galerkin procedure for hereditary optimal control problems. Preliminary report, A-169.
- MATJEVIC, Jacob R. See ESTES, Dennis R.
- MATKOWSKY, B. J. See KAPILA, A. K.
- MATLIS, Eben. Higher properties of R-sequences, A-321; Representation theorems on a category of R-modules. Preliminary report, A-460.
- MATTSON, H. F., Jr. See ASSMUS, E. F., Jr.
- MAULDIN, R. Daniel. See CENZER, Douglas.
- MAX, Nelson L. Turning a sphere inside out with computer graphics, A-333.
- MAXSON, C. J. and SMITH, Kirby C. Endomorphisms of linear automata, A-182.
- MAXWELL, Charles N. Degree of multiple-valued maps of spheres, A-635.
- MAXWELL, Jim. See EVANS, Benny.
- MAY, E. Lee, Jr. A nonlinear transformation with a nondifferentiable resolvent function, A-127; A nonlinear transformation with no spectrum, A-630.
- MAY, Kenneth O. The relevance of C. F. Gauss on his bicentennial, A-27.
- MAYER, Richard. An equation for nonlinear wave propagation in thermoviscous fluids, A-176.
- MAYLAND, E. J., Jr. Examples of nonfibred knots with Π_c knot group. Preliminary report, A-353.
- MAYNE, Joseph H. Centralizing automorphisms and ideals in prime rings. Preliminary report, A-59.
- MAZZOLA, Joseph B. See KIRKMAN, Ellen E.
- MCADAM, S. See DAVIS, E. D.
- MCCALL, J. D., FRICKE, G. H. and BEYER, W. A. Remainders of power series. Preliminary report, A-80.
- MCCONNELL, Alan. See BERKSON, A. J.
- MCCOY, Peter A. Extremal properties of real biaxially symmetric harmonic functions, A-78; Chebyshev approximation of axially symmetric potentials in E^3 . Preliminary report, A-469.
- MCCRIMMON, Kevin. Jordan algebras and their applications, A-272.
- MCCRORY, Clint. See BANCHOFF, Thomas F.
- MCDONALD, John N. Positive operators on the disk algebra, A-114.
- MCDOWELL, Kenneth. See BULMAN-FLEMING, Sydney.
- McELIECE, Robert J. Bounds for codes, via linear programming, A-183; Combinatorial analysis of convolutional codes, A-355.
- McGEHEE, O. C. and WOODWARD, G. S. Continuous graphs. Preliminary report, A-109.
- MCGRATH, Stephen A. Abelian ergodic theorems of local type, A-125.
- McKEAN, H. F. Hyperelliptic Riemann surface with infinitely many branch points and the related theta function, A-77.
- McKENNA, J. P. and RAUCH, J. Strongly nonlinear Landesman-Lazer theorems, A-237.
- McKENNA, Kenneth. Pseudo-real-closed and pseudo-p-adically closed fields, A-520.
- . See MACINTYRE, Angus J.
- McLAUGHLIN, D. E. See DERSHEM, H. L.
- McLAUGHLIN, T. G. Two observations on strongly universal regressive isols, A-27.
- McLINDEN, Lynn. Extremum problems involving a convex process. Preliminary report, A-131.
- McMILLAN, Daniel R., Jr. An arc in M^n with no neighborhood in S^n , $n \geq 4$, A-22.
- McNULTY, George F. Fragments of first order logic. II. Positive logic. Preliminary report, A-28.
- McRAE, George. Topological structures as (co-) reflective subcategories, A-144; On the left and right injective dimensions of coherent rings. Preliminary report, A-271.
- MELKMAN, Avraham A. and MICCHELLI, Charles A. Optimal estimation of linear operators from inaccurate data in Hilbert spaces, A-480.
- MELTER, Robert A. See HARARY, Frank.
- MELVIN, Paul. See KIRBY, Robion.
- MELVIN, Peter J. On deviations from linear wave motion in inhomogeneous stars, A-178.
- MELVIN, William R. Design of bifocal lenses. Preliminary report, A-311.
- MENGERSEN, Ingrid. The maximum number of edges without crossings in drawings of complete n-partite graphs. Preliminary report, A-230.
- MERKLEN, H ector A. Group bases in group rings, A-5.
- MERRIS, Russell. Generalized matrix functions, A-342; The structure of higher degree symmetry classes of tensors, A-524; Subgroups normal modulo the zeros of an irreducible character, A-562.
- MERZBACH, Ely. Predictability and extension of the stochastic integral in the plane. Preliminary report, A-255.
- MERRIS, Russell. Inequalities involving positive-definite matrices, A-55.
- MESIROV, Jill P. Necessary conditions for existence of minima in the calculus of variations. Preliminary report, A-157.
- MESSER, Robert. Open 2-manifolds as covering spaces. Preliminary report, A-570.
- MESSER, Robert and WRIGHT, Alden. Embedding open 3-manifolds in compact 3-manifolds, A-151.
- METCALF, Frederic T. See CHALMERS, Bruce L.
- . See ODDSON, J. K.
- METZGER, Thomas A. On vanishing Eichler periods and Carleson sets. Preliminary report, A-308.
- MEZZAROBBA, Joseph A. and SALWACH, Chester J. The four biplanes with $K = 9$, A-32.
- MIAMEE, A. G. and SALEHI, H. Harmonizability, V-boundedness and stationary dilations of stochastic processes, A-393.

- MICCHELLI, Charles A. See MELKMAN, Avraham A.
- MIHRAM, G. Arthur. Why are computerised simulations not mathematical models? Preliminary report, A-315.
- MILES, Joseph. A theorem on entire functions of infinite order, A-327.
- MILLAR, P. Warwick. Sample function analysis at last exit times. Preliminary report, A-647.
- MILLAR, Terrence S. Some results in recursive model theory. Preliminary report, A-252.
- MILLER, Ann. Characterizations of k -distributive lattices. Preliminary report, A-41.
- MILLER, Arnold W. Vaught's conjecture for theories of one unary operation. Preliminary report, A-253; The number of countable rigid models and the Barwise compactness theorem. Preliminary report, A-435.
- MILLER, Charles F., III. See BAUMSLAG, Gilbert.
- MILLER, Douglas E. On classes closed under unions of chains, A-28.
- MILLER, Jay I. Duality in regular p -groups. Preliminary report, A-69; Center-by-metabelian groups of prime exponent, A-415.
- MILLER, Kenneth G. Hypocoellipticity on the Heisenberg group, A-541.
- MILLER, Sanford S., MOCANU, Petru T. and READE, Maxwell O. Starlike integral operators. Preliminary report, A-79.
- MILLER, Webb C. The composition of numerically stable procedures. Preliminary report, A-643.
- MILLET, Kenneth C. Embeddings of D^n in $D^m \times S^n$, A-354.
- MILLMAN, Richard. Laplace-Beltrami operator on differential forms for symmetric spaces, A-138.
- MILLS, George. Extensions of models of Peano arithmetic. Preliminary report, A-254; Substructure lattices in Peano arithmetic. Preliminary report, A-435.
- MILMAN, Mario. An inequality for a generalized modulus of continuity, A-427; Embeddings of $L(p, q)$ spaces and Orlicz spaces with mixed norms. Preliminary report, A-533.
- MILOJEVIĆ, P. S. Surjectivity results for A -proper, their uniform limits and pseudo A -proper maps with applications. Preliminary report, A-16; Fixed point theorems for multivalued P_γ -compact mappings, A-246.
- MILNE, Stephen C. Mappings of subspaces into subsets, A-563.
- MINKUS, Jerome. On the commutator subgroup of $\langle n, 2k + 1, 2 \rangle$, A-3; On the branched cyclic coverings of knots with two bridges, A-262.
- MISHNAEVSKY, P. A. and RAMM, A. G. Uniqueness theorem of use in relativity, I, A-388; Uniqueness theorem of use in relativity, II, A-431.
- MISKIN, Valery V. Regular sets and semiregular points of closed maps. Preliminary report, A-443; Closed maps of Moore spaces. Preliminary report, A-558.
- MISLOVE, Michael. The equivalence of continuous lattices and compact Lawson semilattices, A-267.
- . See HOFMANN, Karl H.
- MITCHELL, A. Richard. Local and global existence of solutions for BVP in Banach spaces, A-92.
- . See LAKSHMIKANTHAM, V.
- MITRO, Joanna B. Markov processes in duality: A useful auxiliary process. Preliminary report, A-163.
- MIURA, Robert M. and TUCKWELL, Henry C. Qualitative and quantitative models of spreading cortical depression, A-190.
- MOAURO, V. See LEELA, S.
- MOCANU, Petru T. See MILLER, Sanford S.
- MOCHIZUKI, Horace Y. Unipotent linear transformations on vector spaces over division rings. Preliminary report, A-2.
- MOESSNER, Alfred. See XEROUDAKES, George.
- MOHAMED, Saad. See JAIN, S. K.
- MOISE, Edwin E. Statically tame periodic homeomorphisms of 3-manifolds, A-318.
- MOLER, Cleve. Numerical linear algebra, A-583.
- MOLLIN, Richard A. Herstein's conjecture, automorphisms and the Schur group, A-6; The Schur group of a field of characteristic zero, A-225.
- MONTGOMERY, Hugh L. Enflo's theorem on norms of products of polynomials in many variables. Preliminary report, A-329.
- MONTGOMERY, John T. See LEVINE, Howard A.
- MONTGOMERY, Susan. Outer automorphisms of prime rings, A-421.
- . See FISHER, Joe W.
- MOORE, Emily H. Using the group of a code to compute its minimum weight, A-40.
- MOORE, Hal G. and YAQUB, Adil. The equational interdefinability of operations in certain rings, A-58.
- MOORE, L. C., Jr. On the norm and relative uniform topologies on a normed Riesz space, A-119.
- MOORE, Robert. Commutants of reductive operators. Preliminary report, A-129.
- MOORTI, V. R. G. and GARNER, J. B. Existence and uniqueness of solutions to certain n th order boundary value problems. Preliminary report, A-274.
- MORDESON, John. See DEVENEY, James K.
- MORGAN, Christopher L. Linear relations with small support for group representations, A-344; An algorithm for drawing views of four-dimensional regular convex polytopes, A-491.
- MORGAN, Frank. Almost every smooth curve in \mathbb{R}^3 bounds a unique area minimizing surface, A-565; Almost every curve in \mathbb{R}^3 bounds a unique area minimizing surface, A-574.
- MORGAN, John C., II. On ordinally closed sets, A-646.
- MORITZ, Elan. Stability criteria expressible through the Poincaré index. Preliminary report, A-428.
- MORLEY, T. D. See DUFFIN, R. J.
- MORRIS, G. C. See GAY, C. D.
- MORRIS, I. See GAY, C. D.
- MORROW, J. and ROSSI, H. A local property of linear subspaces of projective space, A-473.
- MORROW, James A. The structure of the space of holomorphic functions defined on some neighborhood of the zero section of the tangent bundle of an algebraic curve. Preliminary report, A-473.
- MORTON, Hugh R. A criterion for a surface in \mathbb{R}^3 to be unknotted, A-303.
- MORTON, Patrick. See BRILLHART, John.
- MOSTOW, Mark A. The differentiable space structures of of Milnor classifying spaces, simplicial complexes, and geometric realizations, A-148.
- MOTT, Joe L. Some results on dimension sequences and Prüfer v -multiplication rings. Preliminary report, A-268.
- . See MALIK, Saroj B.
- MOULIS, Edward J., Jr. Generalizations of the Robertson functions. Preliminary report, A-312.
- MOUSOURIS, Nick. See PORTER, A. Duane.
- MOUSOURIS, Nick and PORTER, A. Duane. The symmetric matrix $X_n \dots X_1 A X_1 \dots X_n = B$, A-55; A consideration by rank of some matrix equations. Preliminary report, A-461.
- MOYLS, B. N. See MARCUS, Marvin.
- MOZZOCHI, C. J. A remark on Goldbach's conjecture V, A-6; A remark on Goldbach's conjecture VI, A-223, A-401; A guide to the literature on the classical Hilbert transform, A-536.
- MUCKENHOUPT, Benjamin. Weighted multiplier theorems for trigonometric and Jacobi series. Preliminary report, A-107; Weighted norm inequalities relating the Hilbert transform to the Hardy-Littlewood maximal function, A-325.
- MUELLER, Bruno J. Noncommutative localization and invariant theory, A-230; Examples in noncommutative localization, A-466.
- MUGLER, Dale H. Completely convex polynomials, A-81.
- MUHLY, Paul S. A decomposition for Markov operators. Preliminary report, A-159; Radicals and crossed products. Preliminary report, A-243.
- MUKHERJEA, A. Questions on the convergence of distributions of products of random variables in groups, A-165.
- MULDOON, Martin E. See ISMAIL, Mourad E. H.
- MULLA, F. S. On 3-regular graphs. Preliminary report, A-561.
- MULLEN, Gary L. Weak equivalence of functions over a finite field. Preliminary report, A-48.
- MULLER, George M. A spline digital filter. Preliminary report, A-545; Wigert's theorem for entire functions of exponential type. Preliminary report, A-616.
- MULLIN, Albert A. Relations between fixed-point theory and combinatorial geometry, A-9; On arithmetic functions

- asymptotic to the π -function, A-223; On common fixed extreme points for families of mappings, A-291; On imbrication theory, A-378; On a necessary condition for the validity of the Riemann hypothesis, A-414; On common fixed exposed points for families of mappings, A-532; More relations between fixed-point theory and combinatorial geometry, A-612.
- MUNRO, Gordon R. See CLARK, Colin W.
- MUNTEANU, Marie-Jeanne. See SEIDMAN, Thomas I.
- MURRAY, Amy Cohen. Existence and regularity for solutions of the Korteweg-de Vries equation, A-96; Solutions of the Korteweg-de Vries equation evolving from a "box" and from other irregular initial functions, A-477.
- MURRILL, Malcolm. On a hyperanalytic geometry for complex functions, A-250.
- MYERS, Dale. Measures on Boolean algebras, orbits in Boolean spaces, and an extension of transcendence rank. Preliminary report, A-447; Constructing noncomputable tilings and using tilings to construct first-order theories. I. Preliminary report, A-451.
- MYERS, Robert. See JACO, William.
- MYINT-U, Tyn. Satellite theory and Eikonal equation. Preliminary report, A-17.
- NACHMAN, David C. See KERTZ, Robert P.
- NADLER, Sam B., Jr. Some hyperspace results and questions about retractions. Preliminary report, A-142.
- NAGEL, Alexander and RUDIN, Walter. Local boundary behavior of bounded holomorphic functions, A-471.
- NAGLE, R. Kent. Alternative methods for nonselfadjoint operators. Preliminary report, A-97.
- NAIK-NIMBALKAR, U. See BHASKARAN, R.
- NAJAR, Rudolph M. See BECK, Walter E.
- NASHED, M. Zuhair. Perturbations and approximations of nonlinear alternative problems. Preliminary report, A-170.
- NATARAJAN, P. N. and RANGACHARI, M. S. Matrix transformations between sequence spaces over non-archimedean fields. Preliminary report, A-294.
- NATHANSON, Melvyn B. Minimal bases and maximal nonbases for the collection of finite subsets of the integers, A-455.
- NAVARRO, Francisco J. Topologically equivalent measures in the Cantor space. Preliminary report, A-384.
- NEGREPONTIS, S. See ARGYROS, S.
- NEISENDORFER, Joseph. Self equivalences of rational homotopy types. Preliminary report, A-317.
- NEUBERGER, John W. Boundary value problems for systems of nonlinear partial differential equations, A-171.
- NEUHOFF, D. L. See SHIELDS, Paul C.
- NEUMANN, M. and PLEMMONS, R. J. Semiconvergent nonnegative matrices and iterative methods for consistent linear systems, A-545.
- NEUMANN, Michael. 3-part splittings for singular and rectangular linear systems. Preliminary report, A-247.
- NEUMANN, Walter D. Weighted homogeneous surfaces. Preliminary report, A-326.
- NEVILLE, Charles W. See LLOYD, Stuart P.
- NEVILLE, Charles W. and LLOYD, Stuart P. \mathbb{R} -projective spaces, A-535.
- NEWMAN, Kenneth. The coalgebra structure of Hopf algebras, A-59.
- NEWMAN, Morris. Positive definite matrices and Catalan numbers, A-344.
- NG, Kan Ching. The Cantor-Bernstein theorem and related results in a relation algebraic setting. Preliminary report, A-30; A-304.
- NG, Kan Ching and TARSKI, Alfred. Relation algebras with transitive closure. Preliminary report, A-29.
- NGUYEN, Hien Q. Projections and weak maps in combinatorial geometries. Preliminary report, A-449.
- NICHOLS, D. See LORD, M. E.
- NICHOLS, J. On the totality of sequences in topological vector spaces, A-115.
- NICO, William R. Bounded monoids, A-70.
- NIEDERREITER, Harald G. Quasi-Monte Carlo methods and pseudo-random numbers: Some applications of number theory, A-169; A combinatorial problem in additive number theory, A-457.
- NIJENHUIS, Albert. Note on the unique determination of graphs by proper subgraphs, A-290.
- NILES, Richard. Pushing-up in finite groups. Preliminary report, A-65.
- NIRENBERG, Louis. Regularity in free boundary problems, A-581.
- . See KINDERLEHRER, David S.
- NISHIURA, T. See BRECKENRIDGE, J. C.
- NISHIZEKI, Takao and BAYBARS, Ilker. Lower bounds on the cardinality of the maximum matchings of planar graphs, A-612.
- NITA, Valerian. Meromorphic functions whose global cluster sets contain regular points. Preliminary report, A-537.
- NITSCHKE, Johannes C. C. The higher regularity of liquid edges in aggregates of minimal surfaces, A-312; Contours bounding at most finitely many solutions of Plateau's problem, A-378.
- NIVEN, Ivan. Polygonal coverings of the plane, A-136, A-389.
- NOMIZU, Katsumi. See GRAVES, Larry.
- NORDAHL, Thomas E. Residual finiteness of finitely-generated, left-commutative semigroups. Preliminary report, A-64.
- NORRIS, Eugene M. Union-preserving homomorphisms of semigroups of relations. Preliminary report, A-224; Union preserving homomorphisms of semigroups of closed relations, A-625.
- NORTON, Robert M. Application of moment properties to the arc sine law. Preliminary report, A-160.
- NOVIKOFF, Albert. The development of probability theory in the early 20th century, A-27.
- NUSSBAUM, Roger D. Generalizing the fixed point index. Preliminary report, A-239; Periodic solutions of special differential-delay equations. Preliminary report, A-424; Differential-delay equations with two time lags. Preliminary report, A-532.
- NYIKOS, P. J. See BERNEY, E. S.
- OBALD, S. A. See RUNG, D. C.
- OBERLIN, Daniel M. Translation-invariant operators of weak type. Preliminary report, A-110.
- O'CALLAGHAN, Liam. Properties of a topological product determined by small subproducts. Preliminary report, A-146.
- O'CONNOR, Brian M. Isoparametric techniques in the finite element method. Preliminary report, A-275.
- O'CONNOR, Thomas A. and ALF, Carol. Unimodality of the Lévy spectral function, A-161.
- ODDSON, J. K. and METCALF, F. T. An asymptotic comparison theorem, A-475.
- OEHRING, Charles. See COCHRAN, James A.
- OGUZTORELI, M. N. See BONDARENKO, B. A.
- . See CHIRIACESCU, S. T.
- . See KRIVOSHEIN, L. E.
- OKOH, Frank. A characterization of direct sums of canonical pencils of matrices. Preliminary report, A-419.
- OLIGER, Joseph. Methods for time dependent partial differential equations, A-585; Algorithms based on additive splittings for hyperbolic equations with different time scales, A-643.
- OLIKER, Vladimir. On the optimal ratio between the sample size and the number of variables in a linear regression model. Preliminary report, A-167.
- OLIN, R. F. See BALL, J. A.
- OLIN, Robert F. and THOMSON, James E. Lifting the commutant of a subnormal operator, A-577; Some index theorems for $\mathcal{A}_p(N)$. Preliminary report, A-578.
- OLSEN, James H. and SHREVE, Warren E. Some positive contractions on L_2 with a common positive semifixed point. Preliminary report, A-126.
- OLSON, Dwight M. and JENKINS, Terry L. Upper radicals generated by simple rings. Preliminary report, A-59.
- OLSON, Roy C. A countably compact k' -space need not be countably bi- k , A-259.
- O'NEIL, P. V. A simple proof of Menger's theorem, A-33.
- ONNEWEEER, C. W. Sets of divergence on a p -adic or p -series group, A-109.
- ORDMAN, Edward T. and THOMAS, Barbara V. Smith. Sequential conditions and free topological groups. Preliminary report, A-72.
- ORLIK, Peter. See SOLOMON, Louis.

- ORR, Gilbert F. Semirings whose multiplicative semi-group is free. Preliminary report, A-43.
- OSBORN, Howard. The Hopf ring, A-338.
- OSBORN, J. Approximation of eigenvalues of non-selfadjoint operators. Preliminary report, A-169.
- OSOFSKY, Barbara L. Projective dimension and subscripts of alephs, A-465.
- OSONDU, Kevin E. Extensions of homomorphisms of a subsemigroup of a group, A-65.
- OSTERBURG, James. Fixed rings of simple rings, A-419.
- OSTROM, T. G. Some open questions as to the existence of kinds of translation planes, A-31.
- . See JOHNSON, N. L.
- OTTAWAY, Malcolm. See BREWSTER, Ben.
- OUTCALT, D. L. and YAQUB, Adil. A commutativity theorem for rings with polynomial constraints, A-464.
- OUTLAW, Curtis. See SARAFYAN, Diran.
- OWENS, Frank W. Enumeration of standard tableaux. Preliminary report, A-572.
- OXTOBY, J. C. and PRASAD, V. S. Homeomorphic measures in the Hilbert cube, A-385.
- PADMANABHAN, R. See GRÄTZER, G.
- PALAGALLO, Judith. Continuous linear functionals on LP-spaces, $0 < p < 1$, A-124.
- PALMER, E. M. and SCHWENK, A. J. The number of self-complementary achiral necklaces, A-39.
- PANAGOPOULOS, John G. Groups of automorphisms of standard wreath products. Preliminary report, A-520.
- PANDA, Rekha. The reducible cases of certain hypergeometric functions of several variables. Preliminary report, A-293.
- PANNATONI, Ronald F. An asymptotic result for Poisson's equation with a sheet density. Preliminary report, A-249.
- PAO, Peter. See FINTUSHEL, Ronald.
- PAPADAKIS, John S. and WOOD, David H. The Green's function of Helmholtz's equation in terms of two parabolic Green's functions, A-475.
- PAPADOPOULOS, Alex S. The Burr distribution as a failure model, A-166.
- PAPASTAVRIDIS, Stavros. A necessary condition for the imbedding of a complex in a Euclidean space. Preliminary report, A-21.
- PAPICK, Ira J. Finite type extensions and coherence, A-7.
- . See DOBBS, David E.
- PAPP, Z. Spectrum, topologies and sheaves for left noetherian rings. Preliminary report, A-463.
- PAREEK, C. M. A study of finite-to-one and k-to-one mappings. Preliminary report, A-494.
- PARK, Chull and SKOUG, David L. Wiener integrals over the sets bounded by sectionally continuous barriers, A-163.
- PARK, Sehie. A generalization of a theorem of Janos and Edelstein. Preliminary report, A-397; Sequences of quasi-contractions and fixed points, A-442.
- PARKER, G. Edgar. Semigroups of continuous transformations and generating inverse limit sequences, A-631.
- PARKS, James M. On the topological monoid of self-equivalences, A-147.
- PARSONS, T. D. See ALSPACH, Brian.
- PASCUAL, Joaquin. See MARKANDA, Raj K.
- PATTEN, Paul R. The refinable image of a 1-dimensional ANR. Preliminary report, A-556.
- PAULOWICH, D. G. Trees are weakly contractible. Preliminary report, A-397.
- PAUR, Sandra O. An estimate of the density at the boundary of an integral current modulo ν . Preliminary report, A-137.
- PAYNE, L. E. On improperly posed Cauchy problems for partial differential equations, A-311.
- PAYNE, Stanley E. Finite generalized quadrangles, A-133.
- PAZY, A. See CRANDALL, Michael G.
- PEARCE, Lynn, DURHAM, Stephen and SUMNER, David. Random walks on trees, A-3.
- PEARSON, B. J. The Hahn-Mazurkiewicz theorem for hereditarily locally connected continua, A-264, A-401; Composites of nonmetric solenoids, A-303.
- PECHLANER, Edgar. Geometrical meaning of the curvature scalar of a 3-space, A-548.
- PECK, N. T. See KALTON, N. J.
- PEDERSEN, F. D. See BYRD, R. D.
- PELCZYNSKI, A. Bases, biorthogonal systems, and various approximation structures in Banach spaces, A-115.
- PENICO, A. J. and STANOJEVIC, C. V. Some characterizations of inner-product spaces, A-123.
- PENNEY, R. See GREENLEAF, F. P.
- PERKEL, Manley. The bound on the valency of graphs with a transitive automorphism group and satisfying a certain uniqueness condition. Preliminary report, A-66.
- PERRY, W. L. See LUNING, C. D.
- PESEK, John D., Jr. Paley multiplier theorems for Hardy spaces of Euclidean space, the Ball and Vilenkin groups. Preliminary report, A-108.
- PETERS, James V. Convolution transforms on \mathbb{R}^n . Preliminary report, A-13; Radon transforms over the complex domain. Preliminary report, A-111.
- PETERS, Justin R. Automorphisms of locally compact groups, A-483.
- PETERSON, Allan. Existence-uniqueness of solutions of k-point boundary value problems. Preliminary report, A-87.
- PETRIDIS, Nicholas C. A general Picard type theorem, A-155.
- PETRIE, Ted. Proper equivariant maps between representations of Lie groups. Preliminary report, A-340.
- PETRYSHYN, W. V. Constructive solvability of nonlinear abstract and differential equations. Preliminary report, A-128.
- PETTEY, Dix H. Products of R-closed spaces. Preliminary report, A-302; Feeble compactness and regular filterbases. Preliminary report, A-398.
- PEYSER, Gideon. An operational structure for initial value problems. Preliminary report, A-485.
- PHILIPP, Walter. A conjecture of Erdős and Gaal on the uniform distribution of lacunary sequences, II, A-6.
- PHILLIPS, A. V. An illustration for Robert Wells' cobordism of immersions: 8 times Boy's surface ($\mathbb{P}^2 \times \mathbb{R}^3$) is null-cobordant, A-334.
- PHILLIPS, R. E. See HICKIN, K. K.
- PHILLIPS, Ralph S. and LAX, Peter D. The time delay operator and a related trace formula. Preliminary report, A-640.
- PHILLIPS, Thomas M. An example in Baire space embeddings, A-264.
- PIACENZA, Robert J. Cohomology of fiber spaces. Preliminary report, A-146.
- PICARDELLO, Massimo A. See FIGA'-TALAMANCA, Alessandro.
- PICHORIDES, S. K. On a conjecture of Littlewood concerning exponential sums. Preliminary report, A-427.
- PIERCE, R. S. Tensor products of countable Boolean algebras. Preliminary report, A-452.
- PIGOZZI, Don. Finite groupoids without finite bases for their identities, A-371.
- PIRANIAN, G. See BELNA, C.
- PIRANIAN, George and WEITSMAN, Allen. Nonrectifiable level sets. Preliminary report, A-306.
- PISIER, G. and ZINN, J. The central limit theorem in \mathcal{L}^p ($p > 2$) and the log log law in Hilbert space, A-337.
- PITTS, Jon T. Minimal surfaces on Riemannian manifolds, A-568.
- PIXLEY, Carl P. See EATON, William T.
- PIXLEY, Carl P. and VENEMA, Gerard A. On locally flat approximations of piecewise linear embeddings in codimension two. Preliminary report, A-153.
- PLANT, Richard E. Constrained differential equations for the crustacean cardiac pacemaker, A-350.
- PLATT, C. R. Finite transferable lattices are sharply transferable, A-527.
- . See GRÄTZER, G.
- PLEMMONS, R. J. See NEUMANN, M.
- PLESS, Vera. Self-dual codes, A-183.
- PLUMMER, M. D. See LOVASZ, László.
- POKRASS, David. Solvability in a class of generalized alternative rings. Preliminary report, A-415.
- POLLARD, Harry. A new class of variational problems, A-329.
- POMERANCE, Carl. On the distribution of amicable numbers, A-225.
- POPPEN, Richard F. See TERLINDEN, David Mills.
- PORTER, A. Duane. See MOUSOURIS, Nick.

- PORTER, A. Duane and MOUSOURIS, Nick. Ranked solutions of the matrix equations $AX = B$, A-55; Ranked solutions of the matrix equation $A_1 X_1 = A_2 X_2$. Preliminary report, A-462.
- PORTER, J. F. See FELDMAN, W. A.
- PORTER, J. F. and FELDMAN, W. A. The topology induced by relative uniform convergence, A-120.
- PORTER, J. R. See DICKMAN, R. F.
- PORTER, Jack and SHARMA, Prem. Invariance of continuity. Preliminary report, A-556.
- POSNER, David. See JOCKUSCH, Carl G., Jr.
- POSTON, Tim. Visualizing relativistic gravitation. Preliminary report, A-334.
- POTS, D. H. Inverting operations in axiom systems. Preliminary report, A-454.
- POUCHER, William B. Group preserving block disjoint group divisible designs. Preliminary report, A-271.
- PRANGER, Walter. Bounded sections of unitary bundles on a Riemann surface. Preliminary report, A-468.
- PRASAD, V. S. See OXTOBY, J. C.
- PRATHER, Carl. On the zeros of the derivatives of balanced trigonometric polynomials. Preliminary report, A-614.
- PRENTER, P. M. Optimal L^2 and L^∞ error estimates for continuous and discrete least squares methods for boundary value problems, A-113.
- PRESKENS, Kenneth J. Integrating computer use into differential calculus, A-188.
- PROULX, Ronald J. Spherical functions in S_n . Preliminary report, A-467.
- PROULX, Viera K. Classification of the toroidal groups, A-452.
- PRZYMUSIŃSKI, Teodor C. On the notion of n -cardinality, A-261; Products of perfectly normal spaces. Preliminary report, A-302.
- , See WAGE, Michael L.
- PTAK, V. See FIEDLER, M.
- PUDLAK, Pavel. See SPRINGSTEEL, Fred N.
- PUDLAK, Pavel and TUMA, J. Every finite lattice can be embedded in a finite partition lattice, A-368.
- PUTCHA, Mohan S. Word equations in geometric semi-groups. Preliminary report, A-66.
- PUTTASWAMY, T. K. Asymptotic solutions of a certain differential equation, A-310.
- QUACKENBUSH, Robert W. The fraction of finite simple algebras in an equational class, A-2; An introduction to near-boolean algebras, A-454.
- QUART, George. Fixed point formula for singular varieties. Preliminary report, A-53.
- QUIGG, David L. Local limit theorem in the critical age-dependent branching process, A-164.
- QUINE, J. R. The geometry of $p(S^n)$, A-10; Tangent winding numbers and branched mappings, A-156; On positively turning immersions, A-262; Some convex classes of typically real polynomials, A-470.
- RABINOVITCH, I. Rank and dimension of partially ordered sets. Preliminary report, A-35.
- RADFORD, David E. Commutative pointed Hopf algebras. Preliminary report, A-61.
- RADJABALIPOUR, M. On equivalence of 2-decomposable and decomposable operators, A-488.
- RAGADE, Rammohan K. Enumeration of distinct games in $2 \times 2 \times \dots \times 2$ games, A-179.
- RAKESTRAW, Roy M. See HANKINS, J. C.
- RALL, Douglas F. A class of rings which are algebraic over the integers. Preliminary report, A-55.
- RALL, L. B. Perturbation methods for the solution of linear problems, A-167.
- RALSTON, James. See MAJDA, Andrew.
- RAM, Jai. See GUPTA, R. N.
- RAM, R. B. and VERMA, G. R. On the instability of nonlinear vibrations of beams with various boundary conditions, A-312.
- RAMASWAMY, A. M. S. See VENKATARAMAN, R.
- RAMM, Alexander G. Existence in the large of solution to nonlinear system of differential equations, A-17; Filtering of vectorial random nonstationary processes, A-235; Stable solution of an integral equation arising in applications, A-295.
- , See MISHNAEVSKY, P. A.
- RAMOND, Pierre M. Local symmetries in physics, A-572.
- RAMSEY, L. T. and WELLS, B. B. Some partial results on the $\mu * L^1$ question, A-110.
- RANDELL, Richard. Complete intersections with \mathbb{C}^* -action, A-323.
- RANGACHARI, M. S. See NATARAJAN, P. N.
- RANGE, R. Michael. Hölder estimates for $\bar{\partial}$ on "degenerate balls" in \mathbb{C}^n , A-472.
- RANKIN, Samuel M. Boundary value problems for partial functional differential equations. Preliminary report, A-95.
- RAO, K. Nageswara. On the discriminant of an extension of the cyclotomic polynomial. Preliminary report, A-45.
- RAO, N. V. Carlson's theorem for harmonic functions in \mathbb{R}^n , A-328.
- RAO, N. V. and SHEA, Daniel F. Growth and Riesz mass of subharmonic functions of finite order. Preliminary report, A-327.
- RAO, V. V. Identities involving Fourier coefficients of nonanalytic automorphic forms, A-309.
- RAPHAEL, Marc. See FREEDMAN, Allen R.
- RAPHAEL, Marc and SEMBER, J. J. Some further results on unconditional section boundedness, A-293.
- RASMUSSEN, Carl H. Oscillatory and asymptotic behavior of systems of ordinary linear differential equations. Preliminary report, A-427.
- RASMUSSEN, John R. The Artin index of irreducible characters of all finite metacyclic groups, A-67.
- RASSIAS, Themistocles M. On the problem of Plateau for two contours, A-22; An answer to a question by V. V. Nemyckii on the characterization of a pseudo-minimal set, A-264; A criterion for two Riemannian manifolds in the framework of global variational analysis to be isometric, A-394; Vector fields on smooth Banach manifolds, A-560.
- RATCLIFFE, John G. Crossed extensions, A-305; On the second transgression of the Lyndon-Hochschild-Serre spectral sequence, A-564.
- RATSCHEK, H. Centred forms of higher order. Preliminary report, A-18; The additive-multiplicative structure of interval arithmetic. Preliminary report, A-432.
- RAUCH, J. See McKENNA, J. P.
- RAUTENBERG, Wolfgang. The lattice of ramified modal and tense logics. Preliminary report, A-438.
- RAVENEL, Douglas C. and WILSON, W. Stephen. Morava K-theories of Eilenberg-Mac Lane spaces and the Conner-Floyd conjecture. Preliminary report, A-498.
- RAY, Sukomal Chandra. See DEBNATH, Lokenath.
- RAYCHOWDHURY, P. N. See BOYD, J. N.
- READ, D. R. Branchpoint covering theorems and n -pseudo-confluent mappings, A-303.
- READ, Thomas T. Higher order differential expressions as polynomials in second order expressions, A-638.
- READE, Maxwell O. See MILLER, Sanford S.
- REBHÜHN, D. On genericity and complements of measure zero sets in function spaces, A-560; On the stability of the existence of singular controls under perturbation of the control system, A-613.
- REDDIEN, G. W. Difference approximations to control problems with functional arguments, A-167.
- REDFIELD, R. H. T-groups. Preliminary report, A-41.
- REDHEFFER, Ray. Mathematics with and without words, A-341.
- REED, William J. Optimality criteria for the management of an animal population living in a stochastic environment, A-509.
- REEDER, John and SHINBROT, Marvin. The initial value problem for surface waves under gravity, A-175.
- REEKIE, G. M. A method of constructing normal collectionwise Hausdorff, not collectionwise normal spaces, A-139.
- REHMER, Karl O. Completions of spaces of vector-valued measures. Preliminary report, A-75.
- REICH, Jakob I. On the individual ergodic theorem for subsequences, A-25.
- REICH, Simeon. A minimal displacement problem, A-243; Almost convergence and nonlinear ergodic theorems, A-293.
- , See BAILLON, J.-B.
- , See BRUCK, Ronald E.
- REILLY, I. L. and VAMANAMURTHY, M. K. Compactness and finiteness, A-22.
- REINER, Irving. Invariants of integral representations, A-226.

- REMMEI, J. B. A r -maximal vector space that is not contained in any maximal vector space, A-252; On the lattice of r.e. superspaces of a r.e. space, A-299.
- RENEKE, James A. Optimal control of an hereditary system. Preliminary report, A-631.
- RESCO, Richard. Simple Noetherian rings and transcendence degrees. Preliminary report, A-531.
- RETZLAFF, Allen. See KALANTARI, Iraj.
- REZNICK, Bruce. Banach spaces which satisfy linear identities, A-124.
- RHOADES, Billy E. Ten problems in summability, A-101; Fixed point theorems for a contractive type mapping, A-427; A general fixed point theorem, A-536.
- . See GHOSH, B. K.
- RHOADES, Clark P. A multiplicity theory and decomposition theory for closed operators. Preliminary report, A-384.
- RIBET, Kenneth. Interplay between classical modular forms and associated Galois representations, A-458.
- RICH, Michael. On alternative rings with involution. Preliminary report, A-419.
- RIEGER, G. J. A Gauss-Kusmin-Lévy theorem for the singular continued fractions of Hurwitz, A-234; On a certain class of nonlinear congruences, A-375.
- RIEMENSCHNEIDER, S. See DeVORE, Ronald A.
- RIERA, Gonzalo G. Algebraic quotients of Bergman domains. Preliminary report, A-293.
- RIESS, R. D. and JOHNSON, L. W. Closed-form representations for errors of equidistant cubic spline approximations. Preliminary report, A-504.
- RIETZ, Ronald E. Quotient fields of rational-sequence rings, A-459.
- RIFPELMACHER, Dave. Sweedler's two-cocycles and an exact sequence. Preliminary report, A-225.
- RINGEISEN, R. D. See BEINEKE, L. W.
- RINGEL, C. M. See DIAB, V.
- RIVAL, Ivan. See DUPFUS, Dwight.
- RIVIERE, N. M. See CAFFARELLI, L. A.
- ROACH, F. A. A note on representation and extension of linear fractional transformations, A-83.
- ROAN, Raymond C. Composition operators on the space of functions with H^p -derivative. Preliminary report, A-82; Composition operators on $Lip(\alpha)$. Preliminary report, A-431.
- ROARK, Charles Winfred. Separable criteria for G-diagrams over commutative rings, A-51.
- ROBBINS, D. A. See KITCHEN, J. W.
- ROBERTS, James. See CIMA, Joseph A.
- ROBERTS, John. The degree sequences of asymmetric hamiltonian digraphs, A-34.
- ROBERTSON, Maril. A change of metric technique for functional differential equations, A-274.
- ROBINSON, Derek J. S. Outer automorphisms of torsion-free nilpotent groups, A-466.
- ROBINSON, I. J. W. See BROWN, H. I.
- ROBINSON, James E. Tridiagonal operators on Banach spaces with Schauder bases. Preliminary report, A-632.
- ROBINSON, Raphael M. Undecidable tiling problems in the hyperbolic plane, A-490.
- ROCKAFELLAR, R. Tyrrell. Monotone operators and Clarke's generalized gradients. Preliminary report, A-122; A generic characterization of optimality in non-convex programming. Preliminary report, A-349.
- ROCKWOOD, Alyn P. and BURTON, Robert P. An inexpensive technique for displaying algebraically defined surfaces, A-333.
- RODABAUGH, S. E. Locally starlike decompositions of separable metric spaces, A-145; A lattice of continuities for fuzzy topological spaces, A-258.
- ROGERS, J. W., Jr. See FORD, Jo.
- ROITMAN, Judy. Some results about p -points and about paracompact box products. Preliminary report, A-260.
- ROMAN, Steven M. The algebra of divided differences, A-563.
- RORRES, Chris. A nonlinear model of population growth in which fertility is dependent on birth rate, A-180.
- ROSE, Nicholas J. The Laurent expansion of a generalized resolvent, A-628.
- . See CAMPBELL, Stephen L.
- ROSEN, Kenneth H. A congruence from Dedekind sums, A-47.
- ROSEN, Ronald H. Regular neighborhoods of graphs in manifolds, A-395; Annularly equivalent triangulated suspension spheres in S^n , A-440.
- ROSENBERG, Milton. Infinite variate wide-sense stationary Markov processes, A-316; Functional analysis for infinite-variate wide-sense processes, A-503.
- ROSENBLATT, M. Some limit problems for Markov processes. Preliminary report, A-164.
- ROSENBLATT-ROTH, Millu. Entropy of a random field, A-317.
- ROSENCRANS, Steven I. Group theoretic calculation of Wiener integrals, A-159.
- ROSENHOLTZ, Ira. There is no differentiable metric for R^n , A-395.
- ROSENSTEIN, Joseph G. Recursive linear orderings, A-569.
- ROSENTHAL, John W. See ASH, Chris.
- ROSENGER, Elemer E. Nonlinear shock waves and distribution multiplication, A-235.
- ROSKES, Gerald. On the disintegration of nonlinear gravity wave packets. Preliminary report, A-175.
- ROSMOND, Thomas E. Global atmospheric modeling with spherical harmonics, A-352.
- ROSS, Kenneth A. See CHILANA, Ajit K.
- ROSS, Sharon Cutler. A classification of modules over discrete valuation rings, A-266.
- ROSSER, J. Barkley. Use of hand held calculators in teaching calculus. Preliminary report, A-186.
- ROSSI, H. See MORROW, J.
- ROTA, Gian-Carlo. Recent progress in combinatorics, A-563.
- ROTHER, Erich H. On the definition of the Leray-Schauder degree, A-124.
- ROUSH, F. W. See KIM, K. H.
- ROUSSEAU, C. C. and SHEEHAN, J. Ramsey numbers for books, A-629.
- ROW, W. H. An algebraic characterization of connected sum factors of closed 3-manifolds, A-398.
- ROWEN, Louis Halle. Central division algebras with involution of degree 8, A-229.
- ROWEN, Louis Halle and SCHILD, Uri. A scalar expression for matrices with symplectic involution, A-229.
- . See COHEN, Miriam.
- ROWLETT, Russell J. The fixed-point construction in equivariant bordism, A-635.
- ROXIN, Emilio O. On terminal conditions in the wave game. Preliminary report, A-179.
- RUBEL, Lee A. See ANDERSON, J. Milne.
- . See BECKER, Joseph.
- RUBIN, Arthur L. Free complete Boolean algebras. Preliminary report, A-453.
- . See HOWARD, Paul E.
- RUBIN, Herman. Infinite precision methods of generating random variables with specified distributions. Preliminary report, A-249.
- RUBIN, Jr. E. See HOWARD, Paul E.
- RUBIN, I. R. See DICKMAN, R. F.
- RUBIN, Matatyahu. Some results on Boolean algebras, A-621.
- RUBIN, Mati. Vaught's conjecture for linear orderings. Preliminary report, A-390; On the homeomorphism groups of topological spaces and manifolds, A-443.
- RUCKLE, William H. Schwartz topologies on Kothe sequence spaces, A-630.
- RÜDIN, Walter. Peak-interpolation manifolds of class C^1 , A-473.
- . See NAGEL, Alexander.
- RUDNICK, Karl. See BENNETT, Colin.
- RUDOLPH, Lee. Knots of every type bound complex analytic curves. Preliminary report, A-54.
- RUMELY, Robert S. Undecidability and elementary definability in the theory of global fields, A-550.
- RUNDELL, William and STECHER, Michael. The supports of solutions of pseudoparabolic equations, A-477.
- RUNG, D. C. and OBAID, S. A. Interpolating sequences with applications to σ -porous exceptional sets. Preliminary report, A-309.
- RUOFF, D. and SHILLETTO, J. R. Recursive n -gons. Preliminary report, A-136.
- RUSSELL, Gary L. Two generator subgroups of $SL(2, \mathbb{C})$ and the modulus function. Preliminary report, A-226.

- RÜTTER, E. A. See BREWER, J. W.
- RYSER, H. J. Indeterminates and incidence matrices. Preliminary report, A-344.
- SACKS, Jonathan. Global analysis, minimal surfaces and Teichmüller theory, A-156.
- SAFF, E. B. See VARGA, R. S.
- SAFF, E. B. and VARGA, R. S. Sharpness of Lorentz's theorem on incomplete polynomials. Preliminary report, A-540.
- SAHAI, Hardeo. A comparison of estimators of variance components in the two-way crossed random model, A-504.
- SALBANY, Sergio. See ABIAN, Alexander.
- SALEHI, H. See MIAMEE, A. G.
- SALTER, Richard. Small time limit theorems for stationary independent increment processes, A-554.
- SALTMAN, David J. Azumaya algebras with involution, A-463.
- SALWACH, Chester J. See MEZZAROBBA, Joseph A.
- SAMPSON, Gary. Weak (1, 1) estimates of singular convolutions and Fourier transforms, A-538.
- SAMSKY, Stanley R. Finite covers and modules of functions, A-502.
- SANCHEZ, David A. Linear age-dependent population growth with harvesting, A-508.
- . See KYNER, Walter T.
- SANDS, B. See GRÄTZER, G.
- SARAFYAN, Diran, DERR, Leroy and OUTLAW, Curtis. Generalizations of Euler-Maclaurin summation formulas. Preliminary report, A-275.
- SARASON, Donald. See AXLER, Sheldon.
- SARMA, I. Ramabhadra. See CHIVUKULA, R. Rao.
- SASS, E. B. See VARGA, R. S.
- SATTINGER, David H. Group theoretic methods in bifurcation theory, A-176.
- SAVAGE, Thomas R. Generalized inverses in regular rings. Preliminary report, A-60.
- SAVITCH, Walter J. Computational complexity of algorithms with parallel processing, A-644.
- SAWOROTNOW, Parfeny P. Diagonalization of a self-adjoint A-linear operator, A-487.
- SAWYER, Stanley. A limit law for patches in a geographically structured population. Preliminary report, A-647.
- SCANLON, Jane Cronin. A bifurcation lemma. Preliminary report, A-120.
- SCHAEFER, Thomas J. On the complexity of some two-person perfect-information games, A-173.
- SCHARLEMANN, Martin. Approximating CAT CE maps. Preliminary report, A-354.
- SCHATTSCHEIDER, Doris J. The plane symmetry groups: Their recognition and notation, A-249; Tiling the plane with congruent pentagons: An update, A-490.
- SCHECHTER, S. See ABLow, C. M.
- SCHEDLER, David A. A note on the Fréchet topology, A-317.
- SCHIEBLICH, H. E. The coproduct of two rectangular bands, A-72.
- SCH EIN, Boris M. Selfinjective inverse semigroups. Preliminary report, A-421.
- SCH EINBERG, Stephen. Uniform approximation by functions analytic on a Riemann surface, A-469.
- SCHIEFELBUSCH, Lary. Transfer and weakly closed subgroups, A-523.
- SCHILD, Uri. See ROWEN, Louis Halle.
- SCHMEELK, John F. A generalized Laplacian operators, A-306.
- SCHMEICHEL, Edward F. Embedding hypergraphs in euclidean space. Preliminary report, A-627.
- SCHMERL, James H. Extending models of arithmetic, A-255.
- . See LERMAN, Manuel.
- SCHNUTE, Jon. Improved estimates from the Schaefer production model, A-509.
- SCH OBER, Glenn. Applications of the calculus of variations for families of quasiconformal mappings, A-574.
- . See DUREN, Peter.
- SCH OCHETMAN, Irwin E. On the integrated form of an induced Banach representation, A-111.
- SCH OENBERG, I. J. On Landau's problem on bounds for derivatives, A-330.
- SCHOLNICK, Allen S. Representability in categories without completeness and application. Preliminary report, A-62.
- SCHÖNFELD, Wolfgang. Equations in finite proper relation algebras. Preliminary report, A-252.
- SCHREIBER, B. M. See KUMAR, A.
- SCHUMAKER, Larry L. On the Budan-Fourier theorem for splines, A-482.
- SCHUSTER, Seymour. See BURNS, David.
- . See CHARTRAND, Gary.
- SCHUUR, Jerry D. See ANICHINI, Guiseppe.
- SCHWARTZ, Alan L. δ^1 -convolution algebras: Representation and factorization, A-161.
- SCHWARTZ, Charles F. Generators for the group of rational solutions of $y^2 = x(x-1)(x-t^2-c)$. Preliminary report, A-322.
- SCHWARTZ, Diane L. On hitting probabilities for an annihilating particle model, A-256.
- SCHWARTZ, J. T. See DAVIS, Martin.
- SCHWENK, A. J. See PALMER, E. M.
- SCHWERTFEGER, Hans. A generalization of the cross ratio, A-389.
- SCOTT, Leonard L. Rational and generic cohomology, (with E. Cline, B. Parshall, and W. van der Kallen), A-67.
- SCOTT, Ridgway. The use of Banach space interpolation in the theory of finite element methods, A-172.
- SEELBACH, Marijean. Applications of order reduction methods to pilot modeling. Preliminary report, A-181.
- SEGAL, Jack. Shape theory and ANR's. Preliminary report, A-499.
- SEGERBERG, Krister. A completeness theorem in the modal logic of programs. Preliminary report, A-552.
- SEIDEN, Esther. On the uniqueness of the minimal support for BIB design (8, 56, 21, 3, 6), A-609.
- SEIDMAN, Thomas I. and MUNTEANU, Marie-Jeanne. A spline theoretic approach to input estimation with approximate observations. Preliminary report, A-168.
- SEIFERT, C. J. The dual of Baernstein's space and the Banach-Saks property, A-118.
- . See DIESTEL, J.
- SELDEN, Annie Alexander. The kernel of the determining endomorphism of a bisimple ω -semigroup, A-466.
- SELDEN, John, Jr. Bisimple inverse semigroups whose idempotents form an interval. Preliminary report, A-466.
- SELF, William M. An extension of Bernstein's theorem. Preliminary report, A-108.
- SELFRIDGE, J. L. Some problems on the prime factors of consecutive integers, A-456.
- . See AIZLEY, Paul.
- SELTZER, Stanley E. Closed ideals of \tilde{S} . Preliminary report, A-109.
- SEMBER, John J. See FREEDMAN, Allen R.
- . See RAPHAEL, M.
- SENECHAL, Marjorie L. Color groups. Preliminary report, A-510.
- SETY, D. D. See LAKSHMIKANTHAM, V.
- SGRO, Joseph. An application of topological model theory to Chang's modal logics, A-20.
- SHAFFER, Douglas. Planar gradient vectorfields with changing metrics. Preliminary report, A-155.
- SHAFFER, Dorothy Browne. Starlikeness and convexity for a special class of meromorphic functions, A-80; Generalized equipotential surfaces and Green's function with finite pole, A-469.
- SHAH, S. M. Analytic functions with some derivatives univalent and a related conjecture, A-79; Approximation to meromorphic functions on the positive real axis. II, A-328; Zeros of entire functions with univalent derivatives, A-426.
- . See FRICKE, G. H.
- SHANKAR, Hari. Geometric mean of analytic functions. Preliminary report, A-82.
- . See ABORN, Bruce J.
- SHANNON, David L. Invariants of inertial K-automorphisms of $K[X, Y]$ and $K[[X, Y]]$. Preliminary report, A-319.
- . See EAKIN, Paul.
- SHAPIRO, H. L. and SMITH, F. A. Classes of locally finite collections. Preliminary report, A-145.
- SHAPIRO, Victor L. Pressure, capacity, and the Navier-Stokes equations, A-476.
- SHARMA, A. Cardinal discrete splines, A-479.
- SHARMA, Prem. See PORTER, Jack.

- SHARP, Jack C. Antiregular semigroups. Preliminary report, A-266.
- SHARP, Thomas J. Certain properties of projection-invariances. Preliminary report, A-3; A remark on projection-invariance. Preliminary report, A-265.
- SHARPE, Michael J. Some applications of Markov additive functionals, A-352.
- SHARPLEY, Robert C. On the failure of a bilinear Marcinkiewicz theorem, A-541.
- . See DeVORE, Ronald A.
- SHAVEL, Ira. $|H^2(U, Z)_{\text{tor}}|$ for some general type surfaces. Preliminary report, A-54.
- SHEA, Daniel F. See RAO, N. V.
- SHEEHAN, J. See ROUSSEAU, C. C.
- SHELAH, Saharon. A Kurosh problem and related problems, A-1; Various results in mathematical logic, A-250; Moore spaces, club, Banach space with few operators existentially closed groups in continuum, and diamond, A-549.
- . See GUREVICH, Yuri.
- . See HILLER, Howard L.
- SHEPARD, G. C. See GRÜNBAUM, B.
- SHERK, F. A. The indicator sets of finite translation planes. Preliminary report, A-134.
- SHERWOOD, Howard. The relationship between two classes of random normed spaces. Preliminary report, A-164.
- SHIEH, Narn-R. See CHEN, Jau-D.
- SHIELDS, A. L. and WILLIAMS, D. L. Growth of harmonic conjugates in the unit disc, A-80.
- SHIELDS, Paul C. and NEUHOFF, D. L. A channel representation theorem, A-545.
- SHILLETTO, J. R. See RUOFF, D.
- SHINBROT, Marvin. See REEDER, John.
- SHONKWILER, R. Cell mitochondria studied as a branching process, A-180; Bellman-Harris branching processes with immigration, A-632.
- . See CHRISTENSEN, Mark J.
- SHOOK, T. W., II. The space of regular scientific functions, A-74.
- SHORE, Richard A. A decidable class of two quantifier sentences in the theory of the recursively enumerable degrees. Preliminary report, A-436.
- SHOWALTER, David W. Eigengenerators for Hermitian matrices, A-432.
- SHOWERS, Donald K. See BLAIR, David E.
- SHREVE, Steven E. and BERTSEKAS, Dimitri P. Dynamic programming in Borel space. Preliminary report, A-181.
- SHREVE, Warren E. See OLSEN, James H.
- SHUCK, John W. Gaussian coefficients and cyclotomic polynomials, A-45.
- SHULT, Ernest E. Incidence systems related to generalized quadrangles and hexagons. Preliminary report, A-134.
- SIBONY, Nessim. Peak sets in pseudoconvex domains, A-275.
- . See GAMELIN, T. W.
- SIEGEL, Jerrold. β -representable homotopy functors, A-340.
- SILVERMAN, Herb. Subclasses of univalent functions, A-78.
- SILVERT, William and SMITH, William R. The variability of discrete ecosystem models, A-510.
- SILVIA, Evelyn Marie. A note on special classes of p -valent functions. Preliminary report, A-81; Subclasses of spiral-like functions. Preliminary report, A-429.
- SIMMONS, Steven M. Restricted translation of measures on groups, A-484.
- SIMÕES-PEREIRA, J. M. S. Matroids and graphs, A-625.
- SIMON, L. See ALMGREN, F. J., Jr.
- SIMONS, Roger A. Structuring Boolean algebras using systems of refinements. Preliminary report, A-446.
- SIMS, Charles C. See LEON, Jeffrey S.
- SINGH, Bhagat. Vanishing nonoscillations of Liénard type retarded equations. Preliminary report, A-89.
- SINGH, K. L. A note on the sequence of iterates of generalized contraction mappings. Preliminary report, A-9; Fixed and common fixed points in convex metric spaces, A-425; Fixed point theorems for contractive type mappings, A-542; Fixed and common fixed points for two mappings. Preliminary report, A-622.
- SINGH, S. A linking axiom, retracts, and factors of E^{n+1} , A-557.
- SINGH, Surjeet. Modules over hereditary noetherian prime rings, A-611.
- SINGHI, N. M. See FOLDES, S.
- SJERVE, Denis. Generalized homological reduction theorems. Preliminary report, A-499.
- SKARDA, R. Vencil. A generalization of $(\sum a_i)^2 \leq \sum |a_i|$, A-324.
- SKOUG, David L. See PARK, Chull.
- SLATER, Peter J. Centers to centroids in graphs, A-522.
- . See ENTRINGER, R. C.
- SLOANE, Neil J. A. Self-dual codes and geometry, A-184.
- . See MacWILLIAMS, Jessie.
- SMALL, Charles. Sums of powers in large finite fields, A-8; Solution of Waring's problem mod n , A-47.
- SMITH, David A. See DERSHEM, H. L.
- SMITH, David A. and FORD, William F. Acceleration of linear and logarithmic convergence, A-163.
- SMITH, F. A. See SHAPIRO, H. L.
- SMITH, H. F. See KLEINFELD, Erwin.
- SMITH, Harvey A. Central twisted group algebras, A-110.
- . See BUSBY, Robert C.
- SMITH, James C. A remark on precompactness. Preliminary report, A-139; Cover characterizations for expandable spaces. Preliminary report, A-495.
- SMITH, Justin R. Complements of codimension-two submanifolds. I. The fundamental group, A-258; Homology surgery theory and perfect groups, A-288; Acyclic localizations, A-367; Complements of codimension-two submanifolds. II. Homology below the middle, A-440.
- SMITH, Kirby C. See MAXSON, C. J.
- SMITH, Philip W. See BARROW, David L.
- SMITH, R. T. Elliptic complexes and Poincaré lemma, A-95.
- SMITH, Richard F. Even unimodular hermitian forms. Preliminary report, A-44.
- SMITH, Ronald K. Integral representation of the symmetric group S_n . Preliminary report, A-66.
- SMITH, William R. See SILVERT, William.
- SMITH, William W. Properties of overrings which produce invertibility of a given ideal. Preliminary report, A-267.
- SMOLLER, J. A. See CONWAY, E. D.
- SMYTHE, R. T. First-passage percolation on the square lattice, A-647.
- SNAITH, Victor P. Some new elements in the stable homotopy of BO , A-338.
- SNIDER, R. L. See ARMENDARIZ, E. P.
- SNOW, Donald R. Generating function for sums of powers of integers by functional equations, A-37; A set of two-variable polynomials generalizing Bernoulli's polynomials and numbers, A-448.
- SNYDER, Herbert H. An improvement on Nicholson's formula for Bessel functions of the first kind, A-10; A function-theoretical structure associated with the one-dimensional diffusion equation, A-84.
- SOLDERTSCH, James. Polynomials which produce imaginary quadratic number fields with high p -rank. Preliminary report, A-49.
- SOLOMON, Alan D. The applicability and extendibility of Megerlin's method for solving parabolic free boundary problems, A-544.
- SOLOMON, J. L. Contractive mappings and attractors for compact sets. Preliminary report, A-143.
- . See JANOS, L.
- SOLOMON, Jay M. See CIMENT, Melvyn.
- SOLOMON, Louis and ORLIK, Peter. Automorphism groups of forms, A-341.
- SOMMESE, Andrew John. Theorems of Barth-Lefschetz type for complex subspaces of homogeneous complex manifolds, A-470.
- SONS, L. R. Another growth indicator for the study of value distribution. Preliminary report, A-328.
- SONTAG, Eduardo D. Jet sufficiency for observability of certain nonlinear systems. Preliminary report, A-546.
- SPERBER, Steven. Congruence properties of the Hyperkloosterman sum. Preliminary report, A-49.
- SPIKES, Paul W. Limit-circle type criteria for nonlinear differential equations, A-273.

- . See GRAEF, John R.
- SPRAGUE, Alan. 3-nets, A-531.
- SPRECHER, David A. On uniform best approximations with superpositions, A-483.
- SPRINGSTEEL, Fred N. and PUDLÁK, Pavel. Time complexity of mechanized hypothesis formation. Preliminary report, A-173.
- SPRUCK, Joe. See KINDERLEHRER, David S.
- SQUIRES, W. A. See ANDERSON, J. M.
- SRIVASTAVA, H. M., LAVOIE, J.-L. and TREMBLAY, Richard. The Rodrigues type representations for a certain class of special functions. Preliminary report, A-238.
- STAFFORD, J. T. A simple Noetherian ring not Morita equivalent to a domain, A-464.
- STAFNEY, James D. A density property of eigenfunctions, A-638.
- STAHL, Saul. Multicolorings of outerplanar and line graphs. Preliminary report, A-189.
- STAHL, Stanley H. A generalization of constructibility in set theory, A-30.
- STALLINGS, John R. Fibred links, A-355.
- STANEK, Jean Chan. A Krasnosel'skiĭ-type theorem involving p -arcs in the Euclidean plane, A-250.
- STANOJEVIĆ, Č. V. See GUCCIONE, S. J.
- . See PENICO, A. J.
- STANTON, Dennis. A product formula for q -Hahn polynomials. Preliminary report, A-86.
- STANTON, Robert J. and TOMAS, Peter A. Some estimates on spherical functions and their applications, A-109.
- STARBUIRD, Michael. The Alexander linear isotopy theorem in E^3 , Preliminary report, A-153.
- STARK, Richard. An application of Martin's axiom in group theory. Preliminary report, A-68.
- STASHEFF, James. See HALPERIN, Stephen.
- STECH, Harlan W. On the adjoint theory for autonomous linear functional differential equations with unbounded delays. Preliminary report, A-89.
- STECHER, Michael. See RUNDELL, William.
- STEGG, Manfred. Finite p -groups with trivial Schur-multiplier. Preliminary report, A-68.
- STEEL, Christopher A. A Wiener-Lévy theorem for nuclear integral operators, A-113.
- STEIGER, W. L. Evaluating numerical algorithms. Preliminary report, A-170.
- STEIN, E. M. Some problems for multipliers in \mathbb{R}^n , A-107.
- STEIN, Junior. Singular quadratic functionals for multiple integral problems in the calculus of variations. Preliminary report, A-132; Conjugate gradient algorithms in non-Hilbertizable Banach spaces, A-346.
- STEIN, Michael R. Whitehead groups of finite groups, A-320.
- STEIN, Sherman K. Tiling by translates of unions of cubes, A-490.
- STEINBERG, Richard. Grötsch's theorem for the projective plans. Preliminary report, A-227.
- STEINER, Ray. See BLASS, Josef.
- STEMPLE, Joel. Geodetic graphs homeomorphic to a complete graph. Preliminary report, A-417.
- STENGER, Frank. Optimum convergence of minimum norm approximations in H_p , A-478.
- STEPP, James W. See BYRD, Richard D.
- STERN, Ronald J. On infinite dimensional cores. Preliminary report, A-314.
- STERNFELD, Robert. A contractible open n -manifold that embeds in no compact n -manifold. Preliminary report, A-277.
- STOLL, Wilhelm. A Casorati-Weierstrass theorem for Schubert zeroes. Preliminary report, A-471.
- STOLTZFUS, Neal W. Metabolic, split and hyperbolic equivariant inner product spaces and their geometric parallels: The double null concordance group of knots, A-633.
- STOUT, Quentin F. Schur products of operators and the essential numerical range, A-16; Convex ideals of $\mathcal{B}(X)$. Preliminary report, A-129.
- STRAIGHT, H. Joseph. See FINK, John Frederick.
- STRAIGHT, H. Joseph and LESNIAK-FOSTER, Linda. The chromatic number of a graph, A-39.
- STRALKA, Albert. Congruences on compact Lawson semilattices, A-268.
- STRANG, Gilbert. Linear programming governed by differential equations, A-178.
- STRATIGOS, P. Extensions of additive set-functions, A-17.
- STRAUS, E. G. See GOLDBERG, Moshe.
- STRAUSS, Charles M. See BANCHEFF, Thomas F.
- STRAUSS, Walter. See COOPER, Jeffery.
- STRAZDINS, Indulis. Complexity of the affine prototype classes of five-variable boolean functions, A-547; Affine prototype classes of two-variable three-valued Post functions, A-618.
- STREIT, Roy L. An algebraic representation of finite dimensional L_{2p} norms. Preliminary report, A-486.
- STRELITZ, Sh. and ABRAMOVICH, S. The universal problem of eigenvalues of linear differential operators and their existence, A-242.
- STUCKWISCH, Stephen and HELTON, Jon. Approximation of nonlinear operations, with an application to the Runge-Kutta equations. Preliminary report, A-170.
- SUBRAMANIAN, P. K. A norm for γ -linear operators on two-norm spaces. Preliminary report, A-122.
- SUCHESTON, L. See AKCOGLU, M. A.
- . See EDGAR, G. A.
- . See GHOUSSEUB, N.
- . See KRENGEL, Ulrich.
- SULLIVAN, Francis. Smoothness and reflexivity, A-15.
- SUMNER, David. See PEARCE, Lynn.
- SUMNERS, D. W. See HITT, L. R.
- SUN, Hugo S. Generalized incidence relations and matrices. Preliminary report, A-136.
- SUNDAY, Daniel M. An algebraic bifurcation, A-228; A nonlinear representation of shape for machine vision. Preliminary report, A-553.
- SUNDER, V. S. Unitary orbits of integral operators, A-639.
- SUNG, Chen-Han. On H. Cartan's conjecture on a system of holomorphic functions, A-158.
- SUNLEY, Judith S. Generalized genus characters. Preliminary report, A-46.
- SUROWSKI, D. B. Representations of a subalgebra of the generic algebra corresponding to the Weyl group of type F_4 , A-64.
- SURYANARAYANA, D. On a theorem of Apostol concerning Möbius functions of order k , A-44; On (k, r) -integers in an arithmetic progression and a problem in additive number theory, A-223; On the distribution of some generalized square-full integers, A-270; On some asymptotic formulae of S. Wigert, A-371; On the functional equation $S(m, n)F(n/(m, n)) = F(n)h(n/(m, n))$, A-413; On a functional equation relating to the Brauer-Rademacher identity, A-524; On a functional equation relating to Landau's identity, A-608.
- SUSSMANN, Hector J. Subanalytic sets and feedback controls. Preliminary report, A-314.
- SUTHERLAND, Pat. Boundary value problems for random differential equation, A-90.
- SVERDLOVE, Ronald. Polynomial systems in the plane with centers. Preliminary report, A-90; Vector fields defined by complex functions. Preliminary report, A-638.
- SWANSON, Laif. Factors of Bernoulli shifts, A-162.
- SWANSON, Richard C. Intersection theory and boundary deformation problems. Preliminary report, A-155.
- SZABO, Manfred Egon. Boolean aspects of structured categories: a deductive approach, A-448.
- SZEPTYCKI, Pawel. A variant of g -function of Littlewood-Paley, A-123.
- SZETO, George. The structure of semiperfect rings, A-56.
- TALIAFERRO, Steven D. Asymptotic behavior of decreasing solutions of $y'' = \varphi(t)y^\lambda$. Preliminary report, A-88.
- TALL, Franklin D. Weakly collectionwise Hausdorff spaces, A-24.
- . See BROVERMAN, S.
- TALWAR, Sudha. Pure and neat submodules of modules over (hnp) -rings. Preliminary report, A-422.
- TANIS, Elliot A. A computer-based laboratory for mathematical statistics and probability, A-185.
- TAPIA, Richard A. Some contributions to the theory of numerical methods via infinite dimensional formulations of finite dimensional problems, A-172.
- TARDIFF, Robert M. On a functional inequality arising in the construction of the product of several metric spaces.

- Preliminary report, A-74.
TARSKI, Alfred. See GIVANT, Steven.
---. See NG, Kan Ching.
TAYLOR, Alan D. See BAUMGARTNER, James E.
---. See HINDMAN, Neil.
TAYLOR, B. A. See ANDERSON, J. M.
TAYLOR, G. D. See KAUFMAN, E. H., Jr.
TAYLOR, James G. and COMSTOCK, Craig. Error bounds for the Lanchester equations with variable coefficients, A-92.
TAYLOR, Jean E. The geometry of soap films and crystals, A-565.
TAYLOR, Keith. See BAGGETT, Larry.
TAYLOR, Laird. Contractive mappings without fixed points, A-649.
TAYLOR, Laurence R. A bordism spectral sequence. Preliminary report, A-340.
TAYLOR, M. A. See KANNAPPAN, P.
TAYLOR, Walter. Cohomology rings of topological algebras, A-372; Congruence representation of modular lattices, A-420; Topological algebras in congruence-k-permutable or congruence-modular varieties, A-612.
TEPPER, David E. and WILDENBERG, Gerald. Some free boundary problems. Preliminary report, A-85.
TERASAWA, Jun. NUR and their dimensions. Preliminary report, A-262.
TERLINDEN, David Mills and POPPEN, Richard F. The disk jockey problem, A-233.
TEWARI, K. See WANGNEO, C. L.
THAYER, F. Javier. See HOFMANN, Karl H.
THO, Vo Van. See de KORVIN, Andre.
THOLEN, Ronald. See BALLEW, David.
THOMAS, Barbara V. Smith. See FAY, Temple H.
---. See ORDMAN, Edward T.
THOMPSON, R. C. Similarity invariants for principal submatrices, A-343.
THOMSON, James E. See BALL, J. A.
---. See OLIN, Robert F.
THRASH, Joe. A modification of the generalized G-transform, A-388.
TILLSON, Tim. A Hamiltonian decomposition of K_{2m}^2 , $2m \geq 8$. Preliminary report, A-291.
TINSLEY, Frederick. Cell-like decompositions of manifolds. Preliminary report, A-152.
TODD, Olga Taussky. Integral group matrices, A-345.
TOLLEFSON, Jeffrey. See HEIL, Wolfgang.
TOMAS, Peter A. Some problems on invariant multipliers. Preliminary report, A-106; A restriction theorem for the Fourier transform, A-326.
---. See STANTON, Robert J.
TOMBRELLO, Jeff. See WARNE, Ronson J.
TOMSON, J. D. See BRACE, J. W.
TONDRA, Richard J. Homeotopy groups of surfaces whose boundary is the union of 1-spheres, A-23.
TOOMER, Graham. Some excision theorems for nilpotent spaces. Preliminary report, A-148.
TORCHINSKY, A. See CALDERÓN, A. P.
TRAPP, George E. See ANDERSON, William N., Jr.
TRAWINSKI, B. J. Sampling distributions of a distance function. Preliminary report, A-439.
TREBELS, Walter. See GASPER, George.
TREGER, Robert. On p-torsion in étale cohomology, A-6.
TREMBLAY, Richard. See SRIVASTAVA, H. M.
TRENCH, William F. Interpolating the square of one oscillatory function at the zeros of another. Preliminary report, A-86.
TRETAKOFF, Marvin. Road maps for Riemann surfaces and the Jacobian variety of the Klein-Hurwitz surface. Preliminary report, A-321.
TREYBIG, L. B. Bounds related to the equivalence of polygonal knots in E^3 , A-152.
---. See BOROSH, I.
TRIMBLE, Selden Y. and WRIGHT, Donald J. Close-to-convex functions and their extreme points in Hornich space, A-78.
TROMBA, A. J. On the number of solutions to the classical problem of Plateau, A-158.
TROTTER, Hale F. Galois groups for some elliptic modular curves, A-49.
TROUTMAN, J. See JURKAT, W.
TRUSHIN, David S. See ALLEN, Harry P.
TRUTT, D. See GHOSH, B. K.
TSARPALIAS, Athanasios. A combinatorial theorem with applications in set-theory and functional analysis. Preliminary report, A-538.
TSAY, J. See LORD, M. E.
TSUI, Sze-Kai J. On generators of semigroups of positive linear mappings on C^* -algebras, A-120.
TUCCI, Ralph. The Krull radical. Preliminary report, A-62.
TUCKER, Thomas W. Two-generator kleinian groups are free. Preliminary report, A-497.
TUCKWELL, Henry C. See MUURA, Robert M.
TULANE, Louis S. U. Introduction to the special session on topological algebra and continuous lattices, A-270.
TUMA, J. See PUDLÁK, P.
TURETT, Barry. Fenchel-Orlicz spaces, A-113.
TVRDY, M. See BROWN, R. C.
TYMCHATYN, E. D. On hereditarily locally connected continua, A-24.
---. See GRISPOLAKIS, J.
TZANAKIS, Nikos. Circularly convex sets, A-548.
TZIMBALARIO, Jean. See LORCH, Lee.
UBHAYA, Vasant A. Approximation by starshaped functions. Preliminary report, A-242.
UCCELLA, Giovanni. See MAGGIOLÒ-SCHETTINI, Andrea.
UHLENBECK, Karen K. Variational problems on manifolds with a conformal structure, A-583.
UTZ, W. R. A second order differential equation of T. Otsuki, A-87.
VAALER, Jeffrey D. See BENNETT, Colin.
VAMANAMURTHY, M. K. See REILLY, I. L.
VAN BUSKIRK, James M. Kawauchi's conjecture for strongly amphicheiral knots, A-354.
van DOUWEN, Eric K. Separation and covering properties of box products and products, A-145; $4 \times \beta X$, A-442; Subcontinua and nonhomogeneity of $\beta \mathbb{R}^+ - \mathbb{R}^+$. Preliminary report, A-559.
van DOUWEN, Eric K. and LUTZER, D. J. Stationary sets in cardinals. Preliminary report, A-139.
VANHECKE, Lieven. See WATSON, Bill.
VAN IWAARDEN, John L. Computer techniques for ordinary differential equations. Preliminary report, A-186.
van MILL, Jan. See BELL, Murray G.
VAN REES, G. H. John. A lower bound for the number of rows in a permutation array of index 1, A-223.
VARADARAJAN, K. Finiteness obstruction for nilpotent spaces, A-496.
VARAH, James M. Numerical methods for the solution of ordinary differential equations, A-584.
VARGA, R. S. See SAFF, E. B.
VARGA, R. S. and SASS, E. B. Rational approximations of e^z and applications, A-105; Rational approximations to e^z and applications, A-278.
VASCONCELOS, W. V. Generating modules extravagantly. Preliminary report, A-318.
VAUGHAN, J. E. A weak version of property D. Preliminary report, A-560.
VAUGHAN, N. H. and YEAGY, R. W. Factoring ideals into semiprime ideals, A-51.
VAYO, H. Westcott. An exact solution to the Navier-Stokes equations, A-175.
VENEMA, Gerard A. Approximating disks in 4-space, A-153.
---. See EATON, William T.
---. See PIXLEY, Carl P.
VENKATARAMAN, R. and RAMASWAMY, A. M. S. Some algebraic structures on fuzzy sets. II. Preliminary report, A-368.
VERHEIDEN, Eric. Completions of integral matrices. Preliminary report, A-342.
VERMA, A. and JOSHI, C. M. Some remarks on a paper by M. E. Cohen, A-534.
VERMA, G. R. See RAM, R. B.
VERMA, H. K. Transport, diffusion and degradation of organic matter in a river—A theoretical solution, A-265.
VERMA, S. On a rotation of Pascal's triangle giving the number of terms in a multinomial expansion. Preliminary report, A-344.
VERSCHOREN, A. A note on the Van Geel-spectrum. Preliminary report, A-525.
VINARDI, Giuliana. See GATTESCHI, Luigi.

- VINOD-KUMAR, Compactification of a convergence space, A-262.
- VITALE, Richard A. Projection on re-arrangements of a function, A-167.
- VOLGER, H. Σ_1^- -relations of structures and interpolation for sentences. Preliminary report, A-392.
- VORA, Chandan, On E-C-monotone operators. Preliminary report, A-548.
- VOTRUBA, George F. The extremal generalized inverse and the metric generalized inverse. Preliminary report, A-128.
- VREM, Richard, Harmonic analysis on compact hypergroups. Preliminary report, A-484.
- WADLAND, Kenneth R. Double commutants of C_0 contractions, A-534.
- WADSWORTH, Adrian R. Krull dimensions of tensor products of commutative algebras over a field, A-531.
- WAGE, Michael L. and PRZYMUSIŃSKI, Teodor C. The dimension of product spaces, A-264.
- WAID, Margaret C. A finite element model for blood flow in atherosclerotic arteries. Preliminary report, A-181.
- WAJDA, Louis W. Collapsing of $K \times I^n$. Preliminary report, A-260.
- WALCH, Ray. See JORDAN, James.
- WALKER, Philip W. Orthogonal projections onto the graphs of certain differential operators, A-93.
- WALL, Curtiss E. See LICK, Don R.
- WALLS, Gary. See BERTHOLF, Dennis.
- WALTER, Colin D. A class number relation in Frobenius extensions of number fields, A-374.
- WALTER, Wolfgang. See ACKER, Andrew.
- WALTON, Ian G. Saddle points and the Ritz algorithm for certain singular equations. Preliminary report, A-14. --- See LANDESMAN, E. M.
- WAN, Frederic Y. M. Exhaustible resources and inter-generational equity. Preliminary report, A-507.
- WAN, Y. H. On the accessibility of local Pareto optima with constraints. Preliminary report, A-158.
- WANG, Da-Lun and WANG, Ping. Some results about the Chvátal conjecture, A-449.
- WANG, Hao. A class of tiling problems, A-451.
- WANG, James L. Approximation on boundary sets. Preliminary report, A-399.
- WANG, Peter C. C. See BLEICK, Willard E.
- WANG, Ping. See WANG, Da-Lun.
- WANG, Stuart S. Free cubic extensions over commutative rings. Preliminary report, A-52.
- WANGNEO, C. L. and TEWARI, K. Right noetherian rings integral over their centers. Preliminary report, A-524.
- WANNIER, Milton. The Wannier spectrum, A-376.
- WARD, Harold N. Combinatorial polarization and association schemes, A-183.
- WARD, James F. On a limit formula for weighted pseudo-inverses, A-461.
- WARD, James R. Boundary value problems for differential equations in a Banach space. Preliminary report, A-91.
- WARD, Joe. See LEGG, David.
- WARFIELD, Robert B. Efficient generation of modules and stable equivalence of matrices, A-465.
- WARMING, R. F. and BEAM, Richard M. Stability properties of implicit approximate factorization schemes for hyperbolic and parabolic equations. Preliminary report, A-645.
- WARNE, Ronson J. Left natural regular semigroups, A-8; Natural locally inverse semigroups, A-221; Natural \mathcal{L} -unipotent semigroups, A-287; Cliffordian semigroups, A-376; Split extensions and a class of bisimple semigroups, A-413; A class of bisimple inverse monoids. Preliminary report, A-522; Natural completely 0-simple semigroups. Preliminary report, A-607.
- WARNE, Ronson J. and LA FRANCE, Jane. Natural orthodox semigroups, I, A-423; Natural orthodox semigroups, II, A-523; Split extensions and a class of simple semigroups, I, A-607.
- WARNE, Ronson J. and LOOMIS, Irene. Standard regular semigroups, II. Preliminary report, A-523.
- WARNE, Ronson J. and TOMBRELO, Jeff. Standard Cliffordian semigroups. Preliminary report, A-525.
- WARNER, Hoyt D. Derived faces of a wedge and the closure of its set of positive operators. Preliminary report, A-54.
- WARREN, Joseph and KOGELMAN, Stanley. Techniques for reducing math anxiety, A-187.
- WARREN, Richard H. Discrete sets, A-495.
- WASON, James R. Curvature of product 3-manifolds. Preliminary report, A-569.
- WASON, Judith C. On infinite Nielsen kernels. Preliminary report, A-567.
- WATKINS, J. J. See BREWER, J. W.
- WATSON, Bill and VANHECKE, Lieven. A necessary and sufficient condition that the fibres of an almost semi-Kähler submersion be almost semi-Kähler, A-137.
- WAYMIRE, Ed. Gibbsian equilibria for the speed change with exclusion interaction, A-161.
- WEBB, Cary. See GIBBONS, Joel C.
- WEBB, Cary and GIBBONS, Joel. The inversive group of S^n , A-335.
- WEBB, William A. Uniform distribution of recurrence sequences of algebraic integers. Preliminary report, A-455.
- WEBER, Robert J. Attainable sets of quasiconcave markets, A-179.
- WEBSTER, Dallas E. General chaos, A-425.
- WEBSTER, S. M. On the mapping problem for algebraic real hypersurfaces, A-473.
- WEINBERG, Bernard C. See CIMENT, Melvyn.
- WEINBERGER, H. F. See ARONSON, D. G.
- WEINER, Joel L. Surfaces, especially hyperbolic surfaces, in \mathbb{R}^4 . Preliminary report, A-493.
- WEINSTEIN, Alan. Eigenvalues of the Laplacian plus a potential. Preliminary report, A-442.
- WEISMAN, Carl S. Some congruences for binomial coefficients, A-455.
- WEISS, Gary. The Fuglede commutativity theorem modulo operator ideals, A-240; The Fuglede commutativity theorem modulo the Hilbert-Schmidt class and generating functions for matrix operators, A-292; Fuglede's commutativity theorem modulo the Hilbert-Schmidt class and generating functions for matrix operators, II, A-382.
- WEISS, Neil A. See CRANWELL, Robert M.
- WEISLER, Fred B. Logarithmic Sobolev inequalities for the heat-diffusion semigroup on \mathbb{R}^n , A-117.
- WEITSMAN, Allen. On spread-type relations in the theory of functions, A-580. --- See PIRANIAN, George.
- WELLS, B. B. See RAMSEY, L. T.
- WELLS, Daniel R. A result on multivariate unimodal distributions, A-166.
- WELLS, James H. See WILLIAMS, Lynn R.
- WEN, Shih-liang. An eigenvalue problem in fluid dynamics, A-175.
- WENGER, Ronald H. Finite commutative semigroups having Frobenius semigroup algebras. Preliminary report, A-467.
- WENJEN, Chien. A new proof of a theorem for changing variables in multiple integrals, A-294.
- WENTE, Henry C. The stability of the axially symmetric pendent liquid drop, A-575.
- WERNER, H. See DAVEY, B. A.
- WETTE, Eduard W. Untruth and explicit end of elementary computations, A-373.
- WETZEL, John E. See ALEXANDERSON, G. L.
- WHEELER, Lewis. Uniqueness of solutions to the displacement problem of nonlinear dynamical elasticity, A-95.
- WHEELER, William H. Model-complete theories of pseudo-algebraically closed fields, A-391.
- WHITE, A. See DIMINNIE, C.
- WHITE, Arthur T. See KAINEN, Paul C.
- WHITE, H. E., Jr. Example 1, A-260.
- WHITESIDES, S. H. On collineations of order 10 projective planes, A-135.
- WICKE, Howard H. Inverse invariance theorems for complete mappings, A-143.
- WICKE, Howard H. and WORRELL, John M., Jr. On σ -scattered q -spaces, A-25.
- WIDOM, Harold. Asymptotic expansions of determinants for families of trace class operators, A-380; Eigenvalue distribution theorems on certain homogeneous spaces, A-648.

- WIEGAND, Roger and WIEGAND, Sylvia. Commutative rings all of whose finitely generated modules are direct sums of cyclics, A-319.
- WIEGAND, Sylvia. See WIEGAND, Roger.
- WIETING, Thomas W. N -chromatic plane ornaments ($1 \leq N \leq 60$), A-491.
- WIGGINS, Gary L. Harmonic analysis on algebras. Preliminary report, A-111.
- WIGGINS, Kenneth L. Successive approximations to solutions of Volterra integral equations, A-103.
- WILANSKY, Albert. A factorization theorem in summability, A-100.
- WILDENBERG, Gerald. See TEPPER, David E.
- WILF, Herbert S. A global bisection method for computing the zeros of polynomials in the complex plane, A-248; A note on graphical reconstruction, A-305.
- WILKER, John B. See BUTTON, Lillian.
- WILLETT, Michael. Arithmetic in a finite field. Preliminary report, A-48.
- WILLIAMS, D. L. See SHIELDS, A. L.
- WILLIAMS, Lynn R. and WELLS, James H. L^p inequalities, A-118.
- WILLIAMS, Michael. The validity of an asymptotic expansion of a neutron transport problem. Preliminary report, A-104.
- WILLIAMS, R. T. and KELLEY, R. G., Jr. Variable scale finite element models. Preliminary report, A-351.
- WILLIAMS, Ronald J. Kan extensions, group completions, and iterated loop spaces. Preliminary report, A-149.
- WILLIAMS, Scott W. Recent results in the theory of box products. Preliminary report, A-144; Boxes of compact ordinals. Preliminary report, A-395.
- WILLIAMS, Wiley. See EBERHART, Carl.
- WILLIAMSON, Frank, Jr. The finite element method in the early calculus of variations, A-399.
- WILLIAMSON, Jack. See HELLERSTEIN, Simon.
- WILLIAMSON, Susan. Separable crossed product algebras. Preliminary report, A-56.
- WILLSON, Stephen J. Limiting shapes for crystals, A-491.
- WILSON, James A. Some new orthogonal polynomials. Preliminary report, A-326.
- . See ASKEY, Richard.
- WILSON, Leslie. See GAFFNEY, Terence.
- WILSON, R. L. Relationships between continuous posets and compact Lawson posets. Preliminary report, A-628.
- WILSON, Robert Lee. See LEPOWSKY, James.
- WILSON, Robert Ross. Lattice orders constructible by algebraic ring extensions. Preliminary report, A-453.
- WILSON, W. Stephen. See RAVENEL, Douglas C.
- WINKLER, William E. Recurrence of Markov processes. Preliminary report, A-161.
- WISNER, Robert. See JORDAN, James.
- WITTEN, Matthew. Biological extinction and iterates of morphisms with domain $D(f) = [0, a]$, A-248; A discrete time model for the growth kinetics of tandem multiplicate genes as a model for the evolution of macromolecular complexity. Preliminary report, A-543; Intuition, survival, and fitness, A-618.
- WŁODARSKI, Lech. Remarks on iteration product of matrix transformations. Preliminary report, A-102.
- WOAN, Wen-Jin. Full conjugate groups. Preliminary report, A-67.
- WOGEN, W. R. Cyclic vectors for adjoints of subnormal operators, A-574.
- . See CIMA, Joseph A.
- WOLFE, Jerry M. On the convergence of an algorithm for discrete linear L_p approximation, A-481.
- WOLFOWITZ, J. The rate distortion function for source coding with side information at the decoder, A-545.
- WOLLMAN, Stephen. Existence and uniqueness of the solution to the Vlasov-Maxwell system of equations. Preliminary report, A-13.
- WONG, James C. S. On topological analogue of left thick subsets in semigroups, A-533.
- WONG, Pak-Ken. On the smallest graphs of girth 5, A-33.
- WONG, Roman W. Free ideal monoid rings, A-564.
- WOOD, David H. See PAPADAKIS, John S.
- WOODROW, Robert E. See LACHLAN, A. H.
- WOODRUFF, Edythe P. Cellular decompositions of E^3 , A-622.
- WOODWARD, G. S. See McGEHEE, O. C.
- WORRELL, John M., Jr. See WICKE, Howard H.
- WOYCZYNSKI, Wojbor A. Domains of attraction of stable measures on Banach spaces. Preliminary report, A-337.
- WRIGHT, Alden. See MESSER, Robert.
- WRIGHT, David. Cancellation of certain variables. Preliminary report, A-320.
- WRIGHT, David G. AR's which contain only trivial ANR's. Preliminary report, A-441.
- . See CANNON, James W.
- WRIGHT, Donald J. See TRIMBLE, Selden Y.
- WRIGHT, Marcus. Regularity and degeneracy of the differential Kobayashi pseudometric, A-472.
- WRIGHT, Ron. Projection-valued states of von Neumann algebras, A-247.
- WRIGHT, Steve. Similarity orbits of approximately-finite C^* -algebras. Preliminary report, A-122; Derivations on C^* -algebras. Preliminary report, A-616.
- WU, Hung-Hsi. On the volume of a noncompact manifold, A-389; On the volume of noncompact manifolds, II, A-434.
- WU, Jan-Mei G. Functions subharmonic in a Lipschitz domain, A-80.
- WU, Pei Yuan. Hyperinvariant subspaces of the direct sum of certain contractions. Preliminary report, A-238; Jordan model for weak contractions. Preliminary report, A-292; The hyperinvariant subspace lattice of the contraction of class $C_{0,0}$, A-537; Hyperinvariant subspaces of C_{11} contractions. Preliminary report, A-613.
- WU, T. C. Inverses modulo quasi-weakly compact operators, A-16; A characterization of quasi-weakly compact operators. Preliminary report, A-236.
- WU, Yel-Chiang. Obstructions in associative algebra, A-322.
- . See CHENG, Charles Ching-An.
- WULBERT, Daniel. Rational approximation of real functions, A-482.
- WULCZYN, Gregory. An application of combinatorials to the formation of like power identities in real quadratic fields. Preliminary report, A-563.
- WYLER, Oswald. Continuous lattices from the viewpoint of category theory and universal algebra, A-269.
- XEROUDAKES, George and MOESSNER, Alfred. On equal sums of like powers of integers, A-3.
- YADAV, B. S. and JUNEJA, Pushpa. Nagy-Foias-von Neumann inequality and operator representations, A-11.
- YAMAMOTO, Yutaka. On the existence and uniqueness of canonical realizations. Preliminary report, A-543.
- YANG, Jeong S. Simple equicontinuity in topological dynamics. Preliminary report, A-146.
- YAO, Andrew Chi-Chih. The complexity of pattern matching for a random string. Preliminary report, A-645.
- Yaqub, Adil. See MOORE, Hal G.
- . See OUTCALT, D. L.
- YAU, Shing-Tung. Some aspects of theory of elliptic equations in differential geometry, A-493.
- YAU, Stephen S.-T. On strongly elliptic singularities, A-330.
- YEAGY, R. W. See VAUGHAN, N. H.
- YESHA, Y. See FRAENKEL, A. S.
- YODER, Lane and HADA, Dennis. 2-variation of Brownian paths, A-162.
- YOON, Jaihan. See LEE, Sa Ge.
- YOUNG, Christopher. Convex algebraic varieties. Preliminary report, A-461.
- YOUNG, L. C. See LIU, D. B.
- YOUSIF, Salah M. Optimal control in Hilbert space. Preliminary report, A-348.
- ZAGUSTIN, E. See KALABA, R.
- ZAHN, George D. Logic and foundations. Preliminary report, A-549.
- ZAIMMAN, S. Regularity property for some zero-order pseudo-differential operators, A-15.
- ZAKS, Joseph. Upper bounds for neighboring families of convex polytopes, A-492.
- ZALCSTEIN, Yechezkel. Solvability of the finiteness problem for linear semigroups, A-224; Solvability of the finiteness problem for linear semigroups, A-374.
- ZAME, William R. Covering spaces and extensions of Banach algebras. Preliminary report, A-121.
- ZAMPIRESCU, Cristina-Maria. Local and global properties of line-, middle-, and total digraphs, A-624.
- ZASSENHAUS, Hans. Art. 266 in Gauss' disquisitiones

arithmetical, A-27; On the subalgebras of the classical Lie algebras, A-573.
 ZEITLIN, David. Parametric solutions for a sum of $2n + 2$ cubes equal to a sum of $n + 2$ cubes, A-7; Parametric solutions for two equal sums of 26 fifth powers, A-233; Parametric solutions for two equal sums of 22 fifth powers, A-367; Parametric solutions for a sum of $2n + 4$ cubes equal to a sum of $n + 3$ cubes, A-414; Parametric solutions for a sum of $2n + 5$ cubes equal to

a sum of $2n + 3$ cubes, A-528; Parametric solutions for two equal sums of $3n + 2$ cubes, A-610.
 ZELMANOWITZ, J. See CAMILLO, Victor P.
 ZERLING, David. Dense subgroups of Lie groups, A-72.
 ZIEBUR, A. D. See DERSHEM, H. L.
 ZIMMER, Robert J. Restricting Lie group actions to lattice subgroups, A-339.
 ZINN, J. See PISIER, G.

INDEX

Volume 24 (1977)

ABSTRACTS PRESENTED TO THE SOCIETY, A-1, A-221, A-287, A-367, A-413, A-519, A-607
 Errata, Volume 23: A-191, A-278
 Volume 24: A-278, A-357, A-401, A-512, A-586, A-650
 Index of Abstracts—Volume 24, A-
 Short Course Abstracts, A-355, A-583
 Symposium Abstracts (Denver), A-189

AMS REPORTS AND COMMUNICATIONS, 142, 192, 229, 303, 395, 456
 Business Meetings of the Society, 146, 307, 397
 Bylaws of the American Mathematical Society, 457
 Committee Appointments, 142, 456
 Corporate Members and Institutional Associates, 142, 292
 Council Meetings of the Society, 145, 307, 397
 Endowment Fund, 460
 Officers and Lecturers of the Society, 464
 Officers of the Society, 1976 and 1977, 194
 Prize Funds, 460
 Reports of Meetings
 The Summer Meeting in Toronto, 144
 The October Meeting in Storrs, 192
 The November Meeting in Ann Arbor, 192
 The November Meeting in Columbia, South Carolina, 193
 The November Meeting in Albuquerque, 193
 The Annual Meeting in St. Louis, 305
 The Spring Meeting in Huntsville, 308
 The April Meeting in New York, 308
 The April Meeting in Evanston, 309
 The April Meeting in Hayward, 310
 The Summer Meeting in Seattle, 395
 Report of the Treasurer, 303
 The Research-Expository Journal, 456
 Research Fellowship Fund (AMS), 142
 Special Funds, 463

APPLICATION DEADLINES FOR GRANTS AND ASSISTANTSHIPS, 62, 378, 438

ASSISTANTSHIPS AND FELLOWSHIPS
 In the Mathematical Sciences in 1977-1978 (Supplementary List), 126
 In the Mathematical Sciences in 1978-1979, Stipends for Study and Travel,

BACKLOG OF MATHEMATICS RESEARCH JOURNALS, 118, 298

BOOK SALE (AMS), 445

BUSINESS MEETINGS OF THE SOCIETY
 Toronto, August 1976, 146
 St. Louis, January 1977, 307
 Seattle, August 1977, 397

CLASSIFIED ADVERTISEMENTS, A-192, A-279, A-357, A-402, A-511, A-587, A-651

COMMITTEE ON EMPLOYMENT AND EDUCATIONAL POLICY, 466

COUNCIL MEETINGS OF THE SOCIETY
 Toronto, August 1976, 145
 St. Louis, January 1977, 307
 Seattle, August 1977, 397

DOCTORATES CONFERRED

In 1975-1976 (Supplementary List), 68, 362
 In 1976-1977, 344

EMPLOYMENT REGISTER PREREGISTRATION FORMS, A-597/A-598, A-659/A-660
 Summer Employment Register (Applicant), A-406

ERRATA TO ABSTRACTS

Volume 23: A-191, A-278
 Volume 24: A-278, A-357, A-401, A-512, A-586, A-650

FEATURE ARTICLES, By Author

Donald J. Albers, 106
 R. H. Bing, 287
 Truman Botts, 176
 Felix Browder, 456
 Walter Feit, 110
 Wendell H. Fleming, 103, 342
 J. K. Goldhaber, 435
 Paul R. Halmos, 283
 Peter Hilton, 435
 John W. Jewett, 105
 Nathan Jacobson, et al., 432
 Eugene H. Lehman, 426
 Arthur P. Mattuck, 6
 Phoebe J. Murdock, 63
 William H. Pell, 279
 Stephen Smale, 436

FEATURE ARTICLES, By Title

Acknowledgements, 288
 A Mathematical Visit to China, May 1976, 110
 Applied Mathematics Training, NAS-NRC Committee, 435
 Blind Refereeing, Call for Information on, 226
 CBMS Survey of Two-Year College Mathematics Programs, 1975-1976, 106
 CBMS Undergraduate Study, 1975-1976, 105
 Combined Membership List 1977-1978, 179
 Committee on Academic Freedom, Tenure, and Employment Security, 229
 Committee on Human Rights of Mathematicians, 229, 431
 Doctorates, Report on the 1977 Survey of New, 342
 Election Information, 1977, 272
 Employment Information for Mathematicians, 297, 377, 428
 Executive Director, American Mathematical Society, 116
 "Foreign Membership" or "Reciprocity Agreements"?, 6
 Gordon L. Walker Retires as Executive Director of the Society, 429
 Human Rights of Mathematicians, Report of the Committee on, 431
 The Major in Mathematics, 436
 Mathematical Reviews, 287
 Executive Editor, 335
 Associate Editors, 335
 Mathematical Sciences Employment Register, 376
 NAS-NRC Committee on Applied Mathematics Training, 435
 National Science Foundation Budget, 119
 New Alphabets and Symbols for Typesetting Mathematics, 63
 The Nominating Committee for 1976, 214
 Nominations for Vice-President or Member-at-Large, 212

- Officers and Committee Members of the Society, 299
Page Charges, Purpose, Policy and Practice, 117
Registration Fees at AMS Meetings, 423
The Research-Expository Journal, 456
Report on the 1977 Survey of New Doctorates, 342
Research Proposals Submitted to the Mathematical Sciences Section, National Science Foundation, 279
Some Very Young Mathematicians, 426
Suggestions for 1978 Nominations, 363
Translation Recommendations, 371
Two-Year College Mathematics Programs, The 1975-1976 CBMS Survey, 106
Two-Year College Survey (AMS), 103
Undergraduate Study, The 1975-1976 CBMS, 105
Washington Report: Science and the New Congress, 176
What a Book Review is, and is Not, 283
- GIFT CERTIFICATE (AMS), 439
- INVITED SPEAKERS AT AMS MEETINGS, 61, 97, 175, 211, 268, 323, 409
- INTERNATIONAL CONGRESS OF MATHEMATICIANS, 274
- LETTERS TO THE EDITOR, 76, 140, 180, 224, 269, 372, 433
Robert G. Bartle, 433
F. R. Buianouckas, 224
Paul J. Campbell, 224
George Glauberman, 225
Gerald Goldstein, 182
Judy Green, et al., 373
Carl Herz, 183
John R. Isbell, 372
Yakar Kannai, 433
H. Jerome Keisler, 269
Vadim Komkov, 269
Duro Kurepa, 140
Thomas J. Laffey, 194
Howard Lambert, 77
Serge Lang, 224
Violet H. Larney, 121
Mathematician's Action Group, 374
Arthur Mattuck, 76
Leopoldo Nachbin, 77
Gerald J. Porter, 140
Robert A. Rankin, 224
Miles Reid, 180
Peter Rosenthal, 433
Andrew Rukhin, 269
Jane Cronin Scanlon, 269
Jane Cronin Scanlon, et al., 76
Igor R. Shafarevich, 141
Mark Sheingorn, 372
Allen L. Shields, 140
Alan Shuchat, et al., 269
Albert Wilansky, 372
- MEETINGS OF THE AMS
Abstracts Presented at Meetings of the Society, A-25, A-265, A-304, A-399, A-446, A-561, A-624
Calendars of Meetings, Inside Front Cover
Preliminary Announcements
March: Huntsville, Alabama, 57
April: New York, New York, 91
Evanston, Illinois, 58, 92
Hayward, California, 59, 94
August: Seattle, Washington, 166, 196
October: Wellesley, Massachusetts, 264
West Lafayette, Indiana, 211, 265
November: Memphis, Tennessee, 266, 319
San Luis Obispo, California, 267, 320
January 1978: Atlanta, Georgia, 324, 410
March 1978: Columbus, Ohio, 420
New York, New York, 421
- Programs of Meetings
January: St. Louis, Missouri, 2
March: Huntsville, Alabama, 86
- April: New York, New York, 148
Evanston, Illinois, 154
Hayward, California, 161
August: Seattle, Washington, 234
October: Wellesley, Massachusetts, 312
West Lafayette, Indiana, 315
Memphis, Tennessee, 400
San Luis Obispo, California, 404
- Short Course
On Statistics, St. Louis, 3
Fundamentals of Applied Combinatorics, Seattle, 167, 197, 235
Numerical Analysis, Atlanta, 325, 411
Short Course Abstracts
Fundamentals of Applied Combinatorics, Seattle, A-355
Numerical Analysis, Atlanta, A-583
- NEW AMS PUBLICATIONS, 78, 138, 185, 216, 293, 379, 443
- NEWS ITEMS AND ANNOUNCEMENTS, 83, 113, 184, 189, 227, 232, 283, 388, 442
- ORGANIZERS AND TOPICS OF SPECIAL SESSIONS, 61, 97, 175, 210, 268, 323, 409
- PERSONAL ITEMS, 74, 137, 191, 225, 302, 384, 444
- QUERIES, 82, 136, 190, 222, 271, 386, 442
- RECIPROCITY AGREEMENTS (AMS), 276
Supplementary List, 430
- REPORTS AND COMMUNICATIONS (AMS), 142, 192, 229, 303, 395, 456
- RESERVATION AND PREREGISTRATION FORMS, A-285, A-365, A-411, A-518, A-599, A-603, A-658, A-662
- SALARY SURVEY
Twentieth Annual, Second Report, 98
Twenty-first Annual, First Report, 336
- SEMINARS AND INSTITUTES
1977 Summer Research Institute on Automorphic Forms, Representations, and L-Functions, 60, 96
Final Report on 1977 Summer Research Institute, 334, 425
1978 Summer Seminar in Applied Mathematics, 422
- SITUATIONS WANTED, A-191, A-279, A-356, A-401, A-512, A-586, A-650
- SPECIAL MEETINGS INFORMATION CENTER, 70, 130, 186, 218, 280, 374, 440
- SPECIAL SESSIONS, ORGANIZERS AND TOPICS, 61, 97, 175, 210, 268, 323, 409
- SUMMER GRADUATE COURSES, 120
Supplementary List, 178
- SYMPOSIA
Symposium on Some Mathematical Questions in Biology, Denver, Colorado, 56
Abstracts, A-189
Symposium on Computational Fluid Dynamics, New York, 58, 91, 148
Symposium on Some Mathematical Questions in Biology, Washington, D. C., 333, 420
Symposium on Relations Between Combinatorics and Other Parts of Mathematics, Columbus, 420
Symposium on Mathematical Problems in Fracture Mechanics, New York, 421
- VISITING MATHEMATICIANS, 364
Supplementary List, 69, 135, 436

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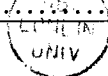
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