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SPECIAL ISSUE

Assistantships and Fellowships in the Mathematical Sciences 1978–1979

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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.

Committee on Employment and Educational Policy

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

ALABAMA

Auburn University, Auburn 36830

DEPARTMENT OF MATHEMATICS
Ben Fitzpatrick, Jr., Head

Applications due: 3/1/78

Bachelor's by inst. 3103
Bachelor's by dept. 26
Master's by dept. 6

Teaching Assistantship (38)*	3330-3680	9	549	5	

*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
A.C. Segal, Chairman

Applications due: 5/1/78

Bachelor's by inst. 340
Bachelor's by dept. 20
Master's by dept. 8

Teaching Fellowship (13)	4,500-5,000	12	800	4[c]	

University of Alabama in Huntsville 35807

DEPARTMENT OF MATHEMATICS
F. Lee Cook, Chairman

Applications due: 3/1/78*

Bachelor's by inst. 550
Bachelor's by dept. 19
Master's by dept. 9

Teaching Assistantship (8)	3000-3600	9		4[c]	
Scholarship (2)	Tuition				

*Late applications considered if positions are still available.

University of Alabama (Tuscaloosa), University 35486

DEPARTMENT OF MATHEMATICS
C. Hobby, Chairman

Applications due: 3/15/78

Bachelor's by inst. 2511
Bachelor's by dept. 27
Master's by dept. 8

Fellowship (3)		9			
Teaching Assistantship (22)	2675-4675	9	100	20	
Research Assistantship (1)		9			

Ph. D. (1974-1977 incl.) A&NT 1, G&T 4, A&FA 1, AM 1. Total: 7

TYPE of financial assistance (with number anticipated 1978–1979)	STIPEND amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
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 Ph. D. (1974-1977 incl.) A&NT 1, A&FA 1, P 1, CS 1, AM 2, Other 1. Total: 7
Teaching Assistantship (47)	3850-4700	9	280/sem.	6[c]	Teaching	
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 Ph. D. (1974-1977 incl.) A&NT 2, G&T 1, A&FA 1, P 1, AM 1. Total: 6
Teaching Assistantship (26)	3510-4941	9	*	6	Teaching	
*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 Ph. D. (1974-1977 incl.) A&NT 1, G&T 5, A&FA 1. Total: 7
Teaching Assistantship (30)	1650-3500	9		6[c]	Teaching	

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

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
Research Assistantship (2)	3480	9			Research

Ph.D. (1974-1977 incl.)
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

*Less than 15 units, $35/unit or fraction thereof; 15 or more units, $525/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 amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	type of service	DEGREES AWARDED Academic year 1976–1977	
California State University, Los Angeles 90032							
DEPARTMENT OF MATHEMATICS Donald I. Kiel, Chairperson			Applications due: 7/15/78			Bachelor's by inst. Bachelor's by dept. Master's by dept.	2025 20 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. Bachelor's by dept. Master's by dept.	3100 20 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. Bachelor's by dept. Master's by dept.	2999 25 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
Fellowship (10) Tuition waivers (10)*	1000-2400	9				Ph.D. (1974-1977 incl.) A&NT 3, A&FA 1, AM 2. Total: 6	
*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. Bachelor's by dept. Master's by dept.	4350 105 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. Bachelor's by dept. Master's by dept.	3600 91 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. Bachelor's by dept. Master's by dept.	683 9 3
Teaching Assistantship (3-5)	1000-2000	4 1/2-9		3-6	Teaching		

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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	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977

Stanford University, Stanford 94305

DEPARTMENT OF MATHEMATICS — Applications due: 1/78
Robert Osserman, Chairman

Fellowship (2)	2400-2600	9				Bachelor's by inst. 1791
Graduate Assistantship (40)*	2985-3445	9			**	Bachelor's by dept. 40
						Master's by dept. 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 — Applications due: 3/1/78
Arthur F. Veinott, Jr., Chairman

Fellowship (8)	2600-2800	9				Bachelor's by inst. 1791
Teaching Assistantship (3)	3345	9	*	10-20	Teaching	Bachelor's by dept. 25
Research Assistantship (22)	2800-3400	9	*	10-20	Research	Master's by dept. 54
						Ph.D. (1974-1977 incl.) OR 24. Total: 24

*9 unit tuition grant.

University of California, Berkeley 94720

DEPARTMENT OF MATHEMATICS — Applications due: *
J.L. Kelley, Chairman

Fellowship (26)	900-3900	9 & 12	256.50-891.50			Bachelor's by inst. 5283
Teaching Assistantship (88)	5298-5382	9	256.50-891.50	16	Teaching	Bachelor's by dept. 105
Research Assistantship (24)	4248	9	256.50-891.50			Master's by dept. 69
						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

*Assistantships: 2/1/78; Fellowships: 12/1/77

GROUP IN LOGIC AND METHODOLOGY OF SCIENCE — Applications due: *
David Blackwell, Chairperson

*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.

Bachelor's by inst. 5283
Ph.D. (1974-1977 incl.) L 5. Total: 5

University of California, Davis 95616

DEPARTMENT OF MATHEMATICS — Applications due: 1/15/78
D.G. Mead, Chairman

Fellowship (4)	3000	9				Bachelor's by inst. 2953
Teaching Assistantship (23)	5382	9		20	Teaching	Bachelor's by dept. 51
Associate In. (2)	5430	9		20	Teaching	Master's by dept. 4
Community Teaching Fellowship (5)	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
Remedial Teaching (3)*						
Reading Assignments (5)*						

*Stipends and hours vary with extent of duties.

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DEPARTMENT OF MATHEMATICS

invites applications for an Assistant Professorship, with preference given to the field of Partial Differential Equations. Strong record in teaching and research required. Application deadline December 31, 1977.

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

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 hours per week	type of service	DEGREES AWARDED Academic year 1976–1977

University of California, Irvine 92717

DEPARTMENT OF MATHEMATICS
Howard L. Resnikoff, Chairman

Applications due: 2/1/78

Teaching Fellowship (3)	5380	9	735	7		Bachelor's by inst. 1438
Teaching Assistantship (23)	5380	9	735	20		Bachelor's by dept. 39
						Master's by dept. 2
						Ph.D. (1974-1977 incl.) A&NT 1, L 1, A&FA 3, P 3, AM 1. Total: 9

University of California, Los Angeles 90024

DEPARTMENT OF MATHEMATICS
Henry A. Dye, Chairman

Applications due: 2/15/78

Fellowship (8)*	2700-3000	9	**			Bachelor's by inst. 4443
Teaching Fellowship (9)*	5382-6300	9	**	7[c]	Teaching	Bachelor's by dept. 170
Teaching Assistantship (53)*	5382-6300	9	**	7[c]	Teaching	Master's by dept. 29
						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

*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

Fellowship (2)	2700-3000	9				Bachelor's by inst. 4443
Teaching Assistantship (2)	5382-5940*	9	2661	5[c]	Teaching	Bachelor's by dept. 182
Research Assistantship (6)	5.43/hr.-6/24/hr.	12	2661	20	Research	Master's by dept. 19
Nonresident Tuition Waiver (2)	2661					Ph.D. (1974-1977 incl.) OR 9, CS 2, AM 3, Other 20. Total: 34

*50% time.

University of California, Riverside 92502

DEPARTMENT OF MATHEMATICS
A.R. Stralka, Chairman

Applications due: 2/1/78

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

*Plus 5% anticipated range adjustment.

University of California, San Diego, La Jolla 92037

DEPARTMENT OF MATHEMATICS
Burton Rodin, Chairman

Applications due: 1/15/78

Fellowship (3)	5400-5600	9				Bachelor's by inst. 1200
Teaching Assistantship (45)	5400-5600	9	*	3-4[c]	Teaching	Bachelor's by dept. 30
Research Assistantship (5)	6500-6800	11	*			Master's by dept. 10
Scholarship (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

*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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Research Assistantships (approximately $472 per month)
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 of financial assistance (with number anticipated 1978–1979)	STIPEND amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
University of California, Santa Barbara 93106						
DEPARTMENT OF MATHEMATICS Charles A. Akemann, Chairman				Applications due: 1/16/78		Bachelor's by inst. 2019 Bachelor's by dept. 20 Master's by dept. 14
Fellowship (3)	2500-3000	9	*			
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 John Guckenheimer, Chairman				Applications due: 2/1/78		Bachelor's by dept. 20 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 R. Gutzman, Acting Head				Applications due: 3/15/78		Bachelor's by inst. 260 Bachelor's by dept. 9 Master's by dept. 1
Teaching Assistantship (5)	3325-5200	9		12	Teaching	
Research Assistantship (2)	3325-5200	9		12	Research	Ph.D. (1974-1977 incl.) OR 1. Total: 1
Colorado State University, Fort Collins 80523						
DEPARTMENT OF MATHEMATICS Robert E. Gaines, Acting Head				Applications due: 3/15/78		Bachelor's by inst. 2653 Bachelor's by dept. 20 Master's by dept. 11
Teaching Assistantship (32)	3600-3960	9	193	15	Teaching	
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. Marschner, 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 Master's by dept. 8
Teaching Assistantship (7)	3600-3780	9		20	Teaching	
Research Assistantship (15)	3600-3780	9		20	Research	Ph.D. (1974-1977 incl.) S 1. 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 UCSB programs and activities.

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

Yale University, New Haven 06520

DEPARTMENT OF MATHEMATICS
Walter Feit, Chairman

Applications due: 1/20/78

Bachelor's by inst. 1180
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
Edgar T. Irons, Acting Chairman

Applications due: 1/20/78

Bachelor's by inst. 1180
Bachelor's by dept. 5
Master's by dept. 3

Fellowship (15)	*	9				
Teaching Fellowship (33)	770/sem.	5	**	12-15	Teaching	Ph.D. (1974-1977 incl.)
Research Assistantship (20)	325/mo.	12				CS 7. Total: 7
IBM Fellowship (1)	325/mo.	12				

*Minimum is tuition up to maximum of $2500 plus tuition.
**$5130; reduced tuition $1800, after a three year residence requirement.

DEPARTMENT OF STATISTICS
I. Richard Savage, Chairman

Applications due: 1/20/78

Bachelor's by inst. 1180
Master's by dept. 1

Fellowship (12)	900-2500	9	*			Ph.D. (1974-1977 incl.)
Research Assistantship (3)	2700	9	*			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
William L. Reddy, Chairman

Applications due: 3/15/78

Bachelor's by inst. 547
Bachelor's by dept. 35
Master's by dept. 2

Teaching Assistantship (13)	2950-3250	9		10	Assisting, research	Ph.D. (1974-1977 incl.)
Summer Support (13)	450	3		10		A&NT 4, G&T 7, L 1. Total: 12

DELAWARE

University of Delaware, Newark 19711

DEPARTMENT OF MATHEMATICS
Ivar Stakgold, Chairman

Applications due: 3/1/78

Bachelor's by inst. 2639
Bachelor's by dept. 30
Master's by dept. 4

Fellowship (2)	3350	9		9		Ph.D. (1974-1977 incl.)
Teaching Assistantship (23)	3350-3850	9		12-15		A&NT 1, G&T 3, A&FA 3. Total: 7

DEPARTMENT OF STATISTICS AND COMPUTER SCIENCE
James F. Leathrum, Chairperson

Applications due: 3/1/78

Bachelor's by inst. 2639
Bachelor's by dept. 25
Master's by dept. 4

Teaching Assistantship (14)	3350-3600	9		15-20	Teaching	Ph.D. (1974-1977 incl.)
Research Assistantship (2)	3600	9		15-20	Research	S 2, CS 2. Total: 4

DISTRICT OF COLUMBIA

American University, Washington 20016

DEPARTMENT OF MATHEMATICS, STATISTICS AND COMPUTER SCIENCE
Mary Gray, Chairman

Applications due: 3/15/78

Bachelor's by inst. 800
Bachelor's by dept. 15
Master's by dept. 15

Teaching Assistantship (11)	2900*	9		3[c]		Ph.D. (1974-1977 incl.)
Special Opportunities for Minority Students (2)	2900*	9		3[c]		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
John N. Welch, Chairman

Applications due: 4/1/78

Bachelor's by inst. 570
Bachelor's by dept. 4
Master's by dept. 7

Teaching Assistantship (4)	2400	9		3[c]		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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
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.			
Teaching Assistantship (20)	4200	9	22/hr.*	6	Teaching	Ph. D. (1974-1977 incl.) A&NT 4, A&FA 4, AM 2. Total: 10
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				
Teaching Assistantship (12)	3900-4200	12	22/cr.hr.	13	Teaching	Ph. D. (1974-1977 incl.) P 1, S 13, OR 4. Total: 18
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 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 hours per week	type of service	DEGREES AWARDED 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.			Ph.D. (1974-1977 incl.) S 9. Total: 9
Teaching Assistantship (12)	3120-6435	9	22/cr.hr.	13-20	Teaching	
Research Assistantship (15)	3120-6435	9	22/cr.hr.	13-20	Research	
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	Ph.D. (1974-1977 incl.) A&NT 2, G&T 1. Total: 3
Teaching Assistantship (23)	2900-3500	9		6[c]	Teaching	
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.) A&FA 3, AM 3. Total: 6
Teaching Assistantship (35)	3525-4050*	9	225.50/qtr.**	6[c]		

*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				Ph.D. (1974-1977 incl.) CS 7. Total: 7
Teaching Assistantship (6)	3000	12	231.50/qtr.	13	Teaching	
Research Assistantship (8)	3000	12	231.50/qtr.	13	Research	
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. 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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
University of Georgia, Athens 30602						
DEPARTMENT OF MATHEMATICS James C. Cantrell, Head				Applications due: 2/15/78		Bachelor's by inst. 2273 Bachelor's by dept. 13 Master's by dept. 11
Teaching Assistantship (20)	3250-3475	9	234	5[c]	Teaching	
Scholarship (2) (open)	2750	9	234			Ph.D. (1974-1977 incl.) A&NT 2, G&T 4, A&FA 3, AM 1, Other 2. Total: 12
Non-teaching Assistantship (6)	3250-3475	9	234	10	Grading	
DEPARTMENT OF STATISTICS Carl F. Kossack, Head				Applications due: 2/15/78		Bachelor's by inst. 2273 Bachelor's by dept. 9 Master's by dept. 6
Teaching Assistantship (18)	9750-10425	9	15/qtr.hr.	14		Ph.D. (1974-1977 incl.) S 12. Total: 12
HAWAII						
University of Hawaii, Honolulu 96822						
DEPARTMENT OF MATHEMATICS Jack Williamson, Chairman				Applications due: 3/1/78		Bachelor's by inst. 1263 Bachelor's by dept. 41 Master's by dept. 5
Teaching Assistantship (13)	4512-5040	9		3-4[c]	Teaching	Ph.D. (1974-1977 incl.) A&NT 1. Total: 1
DEPARTMENT OF INFORMATION AND COMPUTER SCIENCE W. Wesley Peterson, Chairman				Applications due: 3/1/78		Bachelor's by inst. 1263 Bachelor's by dept. 26 Master's by dept. 19
Teaching Assistantship (1)	4512-5040	9		20	Teaching, consulting	
Research Assistantship (3)	5292-5892	11		20	Research	
IDAHO						
Idaho State University, Pocatello 83209						
DEPARTMENT OF MATHEMATICS W. Lyle Cook, Chairman				Applications due: 3/15/78		Bachelor's by inst. 850 Bachelor's by dept. 10 Master's by dept. 4
Fellowship (4)	3000	9				
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 Howard E. Campbell, Chairman				Applications due: 3/1/78		Bachelor's by inst. 1163 Bachelor's by dept. 10 Master's by dept. 4
Teaching Assistantship (11)	3700-4200	9	530	6[c]	Teaching	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 Richard Johnsonbaugh, Chairperson						Bachelor's by inst. 1222 Bachelor's by dept. 27 Master's by dept. 7
Faculty Assistantship (1)	6000	10		30-35	Tutoring	
Eastern Illinois University, Charleston 61920						
DEPARTMENT OF MATHEMATICS Alphonso J. DiPietro, Chairman				Applications due: 3/1/78		Bachelor's by inst. 1100 Bachelor's by dept. 25 Master's by dept. 12
Teaching Assistantship (14)	3000	9		5[c]		
Graduate Assistantship (2)	1890	9		10	Tutoring, computer programming	
Illinois Institute of Technology, Chicago 60616						
DEPARTMENT OF MATHEMATICS P.C. Deliyannis, Chairman						Bachelor's by inst. 447 Bachelor's by dept. 21 Master's by dept. 11
Fellowship (1)	2500	9				
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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977	
Illinois State University, Normal 61761							
DEPARTMENT OF MATHEMATICS Albert D. Otto, Chairperson				Applications due: 4/1/78*		Bachelor's by inst. Bachelor's by dept. Master's by dept.	3293 66 8
Teaching Assistantship (12)	2520	9		12	Assisting		
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 Richard J. Maher, Chairman				Applications due: Open		Bachelor's by inst. Bachelor's by dept. Master's by dept.	600 30 3
Teaching Assistantship (2)	2500	9		4-8			
Northern Illinois University, DeKalb 60115							
DEPARTMENT OF MATHEMATICS D.B. McAlister, Chairman				Applications due: 7/1/78		Bachelor's by inst. Bachelor's by dept. Master's by dept.	1838 59 25
Fellowship (1)	2700-3200	9					
Teaching Assistantship (54)	2790-3420	9		20	Teaching		
Northwestern University, Evanston 60201							
DEPARTMENT OF MATHEMATICS Daniel Zelinsky, Head				Applications due: 2/1/78		Bachelor's by inst. Bachelor's by dept. Master's by dept.	1752 27 9
Teaching Fellowship (34)	3000-3400	9		12		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 E. Cinlar, Chairman				Applications due: 1/15/78		Bachelor's by dept. Master's by dept.	8 4
Fellowship (3)	2700-3400	9				Ph.D. (1974-1977 incl.) S 1, CS 1, AM 4. Total: 6	
Teaching Fellowship (3)	2700-3200	9					
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 Jack Silber, Chairman				Applications due: 3/1/78		Bachelor's by inst. Bachelor's by dept. Master's by dept.	900 25 3
Teaching Assistantship (1)	2000	9		8-10	Tutorials		
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 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 hours per week	type of service	DEGREES AWARDED Academic year 1976–1977

Southern Illinois University, Carbondale 62901

DEPARTMENT OF MATHEMATICS
Alphonse Baartmans, Chairman
Applications due: 2/1/78*

Bachelor's by inst. 3344
Bachelor's by dept. 29
Master's by dept. 4

Fellowship (2)	3355-3630	11	**			
Teaching Assistantship (15)	3258-3555	9	**	6[c]	Teaching	
Graduate Assistantship (7)	3982-4345	11	**	6[c]	Teaching	

Ph.D. (1974-1977 incl.) A&NT 2, A&FA 2, AM 2, Other 2. Total: 8

*Late applications will be accepted.
**$52-80 for fees per semester.

Southern Illinois University-Edwardsville 62025

DEPARTMENT OF MATHEMATICAL STUDIES
H.K. Wilson, Chairman
Applications due: 2/15/78

Bachelor's by inst. 1223
Bachelor's by dept. 36
Master's by dept. 7

Teaching Assistantship (17)	346-426/mo.	9		20	Teaching	

University of Chicago, Chicago 60637

DEPARTMENT OF MATHEMATICS
Paul J. Sally, Jr., Chairman
Applications due: *

Bachelor's by inst. 489
Bachelor's by dept. 33
Master's by dept. 20

Fellowship (15)	7380	9				
Teaching Fellowship (15)	7380	9		5		
Research Assistantship (10)	7380	9			Research	
Scholarship (5)	3930	9				
Lecturer (20)	5310	9		5-8		

Ph.D. (1974-1977 incl.) A&NT 18, G&T 12, L 1, A&FA 5, AM 1. Total: 37

*Foreign: 1/1/78; domestic: 2/1/78.

DEPARTMENT OF STATISTICS
David L. Wallace, Chairman
Applications due: 2/1/78

Bachelor's by inst. 489
Bachelor's by dept. 3
Master's by dept. 3

Fellowship (2)	3500-4125	9		10		
Research Assistantship (12)	3000-4000	9		10		
Scholarship (6)		9	up to 1800	10		

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

University of Illinois at Chicago Circle, Chicago 60680

DEPARTMENT OF MATHEMATICS
Philip Dwinger, Chairman
Applications due: *

Bachelor's by inst. 2931
Bachelor's by dept. 80
Master's by dept. 35

Fellowship (2)	2500	9				
Teaching Assistantship (85)	3790-4000	9		20	Teaching	
Scholarship (7)		9				

Ph.D. (1974-1977 incl.) A&NT 7, G&T 1, L 1, A&FA 4, P 2, S 3, AM 4. Total: 22

*Assistantship: 8/15/78; Fellowship: 2/1/78.

University of Illinois at Urbana-Champaign, Urbana 61801

DEPARTMENT OF MATHEMATICS
P.T. Bateman, Head
Applications due: 2/15/78*

Bachelor's by inst. 6182
Bachelor's by dept. 64
Master's by dept. 61

Fellowship (12)	3000-5300	12		0-10	Teaching	
Teaching Assistantship (155)	2300-4600	9	**	10-20	Teaching	
Tuition Waiver (5)						

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

*Late applications will be accepted.
**$50 hospitalization fee per semester.

DEPARTMENT OF COMPUTER SCIENCE
J.N. Snyder, Head
Applications due: 2/15/78

Bachelor's by inst. 6182
Bachelor's by dept. 77
Master's by dept. 58

Fellowship (3)	2500	9 or 12				
Teaching Assistantship (31)	3790-4080	9		20	Teaching	
Research Assistantship (39)	3790-5000	11		20	Research	
Tuition Waiver (5)	950-2500	9				
Fellowship (Minority) (2)	2500	9 or 12				

Ph.D. (1974-1977 incl.) CS 54. Total: 54

INDIANA

Ball State University, Muncie 47306

DEPARTMENT OF MATHEMATICAL SCIENCES
Duane E. Deal, Chairman
Applications due: 3/1/78*

Bachelor's by inst. 2437
Bachelor's by dept. 68
Master's by dept. 60

Teaching Assistantship (25)	2800	9	**	4[c]	Teaching	

*Late applications may be considered.
**$117 for 8 hours; $173 for 12 hours.

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

IOWA

Drake University, Des Moines 50311

DEPARTMENT OF MATHEMATICS — Applications due: 3/1/78*
Wayne Woodworth, Chairman

Bachelor's by inst. 907
Bachelor's by dept. 7
Master's by dept. 4

Teaching Assistantship (0-5)	2200-2500	9		20	

*Late applications accepted.

Iowa State University, Ames 50011

DEPARTMENT OF MATHEMATICS — Applications due: 3/1/78
Wilfred E. Barnes, Head

Bachelor's by inst. 3340
Bachelor's by dept. 26
Master's by dept. 7

Teaching Assistantship (36)	3780-4257*	9	143	5-6[c]	Teaching

*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
R. F. Brodsky, Head

Bachelor's by inst. 3340
Bachelor's by dept. 25
Master's by dept. 5

Teaching Assistantship (2)	3420-4320	9	143/qtr.	20	Teaching
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
Robert M. Stewart, Chairman

Bachelor's by inst. 3340
Bachelor's by dept. 52
Master's by dept. 16

Teaching Assistantship (18)	390-555/mo.	9	143/qtr.	3-6[c]	
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
H. A. David, Head

Bachelor's by inst. 3340
Bachelor's by dept. 11
Master's by dept. 21

Teaching Assistantship (9)	3420-4995	9	143/qtr.	20	Teaching & service
Research Assistantship (8)	4080-6180	12	143/qtr.	20	Research & service
Premium for Academic Excellence (PACE) (10)*	143/qtr.	12			

Ph.D. (1974-1977 incl.) S 24. Total: 24

*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
Eugene W. Johnson, Chairman

Bachelor's by inst. 4648
Bachelor's by dept. 34*
Master's by dept. 4

Teaching Assistantship (30)	4500-5100	9	429 (9 or more hours)	20	Teaching

*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
Robert V. Hogg, Chairman

Bachelor's by inst. 4648
Bachelor's by dept. 34*
Master's by dept. 20

Fellowship (1)	5000-6000	12			**
Teaching Assistantship (12)	4600-5300	9	900	6[c]	Teaching
Research Assistantship (2)	4500-5300	9	900	20	Research
Scholarship (12)	300-400				

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

*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
David Duncan, Head

Bachelor's by inst. 1313
Bachelor's by dept. 26
Master's by dept. 7

Graduate Assistantship (3)	2226	9		12	

KANSAS

Fort Hays Kansas State College, Hays 67601

DEPARTMENT OF MATHEMATICS — Applications due: 3/1/78
E. Beougher, Chairman

Bachelor's by inst. 864
Bachelor's by dept. 14
Master's by dept. 1

Teaching Assistantship (1)	2100	9	*	20	

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

TYPE of financial assistance (with number anticipated 1978–1979)	STIPEND amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
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			Applications due: *			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	
Research Assistantship (15)	350-1100	9	19/cr.hr.	20-30	Research	Ph.D. (1977 only) CS 4. Total: 4
*Teaching Assistantship: 1/31/78; Research Assistantship: Open.						
DEPARTMENT OF STATISTICS Arthur D. Dayton, Head			Applications due: 6/1/78			Bachelor's by inst. 2778 Bachelor's by dept. 5 Master's by dept. 5
Teaching Assistantship (14)	3800-4000	9*	263**	16	Teaching	
Research Assistantship (3)	4400-5000	12		20	Research	Ph.D. (1974-1977 incl.) S 9. Total: 9
*Summertime positions are a supplement. **For 10 credit hours.						
Pittsburg State University, Pittsburg 66762						
DEPARTMENT OF MATHEMATICS Helen F. Kriegsman, Chairman			Applications due: 3/1/78			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			Applications due: 3/1/78			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			Applications due: 5/1/78			Bachelor's by inst. 3272 Bachelor's by dept. 29 Master's by dept. 8
Fellowship (2)	3200-3500	9				
Teaching Assistantship (30)	4200-6300	9	*	20	Teaching	Ph.D. (1974-1977 incl.) CS 3. Total: 3
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			Applications due: 3/1/78			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			Applications due: Open			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			Applications due: 3/31/78			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 hours per week	type of service	DEGREES AWARDED Academic year 1976–1977
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	Programming support	
Internship (10)	3700-3850	9-10	310/sem.	20	Programming 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 10. 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 amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	type of service	DEGREES AWARDED Academic year 1976–1977
Nicholls State University, Thibodaux 70301						
DEPARTMENT OF MATHEMATICS Larry S. Haw, Chairman						Bachelor's by inst. 607 Bachelor's by dept. 12 Master's by dept. 2
Teaching Assistantship (6)	2532	9	17	6[c]	Teaching	
Northeast Louisiana University, Monroe 71203						
DEPARTMENT OF MATHEMATICS R.D. Finley, Head			Applications due: 5/1/77			Bachelor's by inst. 1224 Bachelor's by dept. 11 Master's by dept. 4
Teaching Assistantship (10)	3000	9		6		
Northwestern State University, Natchitoches 71457						
DEPARTMENT OF MATHEMATICS Russell Whittington, Jr., Head			Applications due: 3/1/78			Bachelor's by inst. 674 Bachelor's by dept. 10 Master's by dept. 2
Teaching Assistantship (3)	2400	9	400	10		
Southeastern Louisiana University, Hammond 70402						
DEPARTMENT OF MATHEMATICS Robert C. Brown, Head			Applications due: 4/15/78			Bachelor's by inst. 828 Bachelor's by dept. 11 Master's by dept. 1
Teaching Assistantship (4)	2400	9	approx. 78	6[c]		
Tulane University, New Orleans 70118						
DEPARTMENT OF MATHEMATICS Laszlo Fuchs, Chairman			Applications due: 3/1/78			Bachelor's by inst. 846 Bachelor's by dept. 24
Teaching Assistantship (8)	3200-3400	8		3-4[c]		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			Applications due: 5/1/78			Bachelor's by inst. 1455 Bachelor's by dept. 15 Master's by dept. 5
Teaching Assistantship (9)	3000-3300	9	55	6[c]	Teaching	
University of Southwestern Louisiana, Lafayette 70504						
DEPARTMENT OF MATHEMATICS AND STATISTICS Duane Blumberg, Chairman			Applications due: 4/78			Bachelor's by inst. 1575 Bachelor's by dept. 9 Master's by dept. 14
Fellowship (2)	3000	9				
Teaching Assistantship (23)	2500-3500	9		6	Teaching	Ph.D. (1974-1977 incl.) A&NT 3, P 1, S 2. Total: 6
Scholarship added to Assistantship (10)	100-500	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 L. 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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977

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

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

Teaching Assistantship (16)	2600-3200	9		5[c]	Teaching

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

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

Teaching Fellowship (20)	Varies	9	3750	6-8	Teaching

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

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

Teaching Assistantship (12)	3800-4750	9		15	Teaching

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 hours per week	type of service	DEGREES AWARDED Academic year 1976–1977
University of Maryland, College Park 20742						
DEPARTMENT OF MATHEMATICS* W.E. Kirwan, Chairman				Applications due: 2/1/78		Bachelor's by inst. 5322 Bachelor's by dept. 53 Master's by dept. 15
Fellowship (2)	3800-4750	10	**	Varies	Research	
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 R.R. Carroll, Chairman				Applications due: 2/15/78		Bachelor's by inst. 1862 Bachelor's by dept. 42 Master's by dept. 6
Fellowship (10)	3000	9		6[c]		
Boston University, Boston 02215						
DEPARTMENT OF MATHEMATICS Robin Esch, Chairman				Applications due: 4/1/78		Bachelor's by inst. 4500 Bachelor's by dept. 27 Master's by dept. 6
Fellowship (2)	2600	9				
Teaching Fellowship (18)	3100	9	5 courses	15		Ph.D. (1974-1977 incl.) A&NT 5, L 1, A&FA 4, S 5, AM 2. Total: 17
Teaching Assistantship (3)		9		10		
Research Assistantship (4)*		12	Varies	Varies		
* Contract pay, varies.						
Brandeis University, Waltham 02154						
DEPARTMENT OF MATHEMATICS Maurice Auslander, Chairman				Applications due: 2/15/78		Bachelor's by inst. 706 Bachelor's by dept. 20
Fellowship (10-14)	4000	9			Grading, teaching	Ph.D. (1974-1977 incl.) Total: 17
Harvard University, Cambridge 02138						
DEPARTMENT OF MATHEMATICS Shlomo Sternberg, Chairman				Applications due: 1/15/78		Bachelor's by dept. 30 Master's by dept. 6
Teaching Fellowship (19)	2790-3390	9		3[c]	Teaching	Ph.D. (1974-1977 incl.) A&NT 25, G&T 5, A&FA 6, P 1. Total: 37
Research Assistantship (3)		9			Research	
Scholarship (12)	1000-4000	9				
DEPARTMENT OF APPLIED MATHEMATICS Paul C. Martin, Dean				Applications due:*		Bachelor's by inst. 1552 Bachelor's by dept. 33 Master's by dept. 25
Teaching Fellowship (20)	2325-2825	9		10[c]	Teaching	
Teaching Assistantship (5)	2000-2325	9		10[c]	Teaching	Ph.D. (1974-1977 incl.) Total: 28
Research Assistantship (100)	4790-6860	12		20[c]	Research	
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 Master's by dept. 2
Teaching Fellowship (16)	1000-1200	5*		4		Ph.D. (1974-1977 incl.) S 12. Total: 12
Research Assistantship (6)	**					
Scholarship (4)	***					
*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 Kenneth Hoffman, Chairman				Applications due: 1/16/78		Bachelor's by inst. 1018 Bachelor's by dept. 94 Master's by dept. 10
Fellowship (24)	2925	9				
	3900	12				Ph.D. (1974-1977 incl.) A&NT 8, G&T 19, L 6, A&FA 8, P 4, S 1, OR 1, AM 9, Other 11. Total: 67
Teaching Assistantship (47)	4275	9		6	Teaching	
				16	or grading papers	
Research Assistantship (8)	8055	9	4350	16	Research	

TYPE of financial assistance (with number anticipated 1978–1979)	STIPEND amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
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	
				3	Conference	Ph.D. (1974-1977 incl.)
Tuitionship (7)	Tuition only			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				

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

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

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
Ph.D. (1974-1977 incl.) A&NT 9, G&T 4, A&FA 5, AM 10, Other 2. Total: 30

Teaching Assistantship (120)	4500-5135	9	28/cr.	5[c]	Teaching
Research Assistantship (20)	690-740	3*		10	Research
Scholarship (3)	500				

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

Teaching Assistantship (4)	4700-6000	9	29/cr.	3[c]	Teaching
Research Assistantship (8)	4700-6000	9	29/cr.	20	Research

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
Ph.D. (1974-1977 incl.) P 2, S 8. Total: 10

Teaching Assistantship (18)	4500-4918.50	9	28/cr.	15	Teaching

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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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977

Michigan Technological University, Houghton 49931

DEPARTMENT OF MATHEMATICS
Z.C. Motteler, Head
Applications due: 3/1/78

Teaching Assistantship (16)	3600	9		4-5[c]	

Bachelor's by inst. 800
Bachelor's by dept. 20
Master's by dept. 3

Oakland University, Rochester 48063

DEPARTMENT OF MATHEMATICS
Louis R. Bragg, Chairperson
Applications due: 4/1/78

Teaching Assistantship (3-5)	2700-3000	9		15-20	

Bachelor's by inst. 1250
Bachelor's by dept. 23
Master's by dept. 4

University of Michigan, Ann Arbor 48109

DEPARTMENT OF MATHEMATICS
F.W. Gehring, Chairman
Applications due: 2/1/78

Fellowship (16)	2475-3510	9		Full Time Study & Research	
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	

Bachelor's by inst. 4615
Bachelor's by dept. 61
Master's by dept. 42
Ph.D. (1974-1977 incl.)
A&NT 12, G&T 3, L 1, A&FA 20, P 1, Other 1.
Total: 38

*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*

Fellowship (1)	3500	9	**		
Teaching Assistantship (20)	3350-5100	9			
	3650-5800	9		6	
Research Assistantship (1)	3350-5800	9			

Bachelor's by inst. 5783
Bachelor's by dept. 23
Master's by dept. 10
Ph.D. (1974-1977 incl.)
A&NT 1, G&T 1, A&FA 4, P 3, S 5, AM 1. Total: 15

*Late applications will be considered if positions are still available.
**Up to 12 hours per quarter included.

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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 amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	type of service	DEGREES AWARDED Academic year 1976–1977

Western Michigan University, Kalamazoo 49008

DEPARTMENT OF MATHEMATICS James H. Powell, Chairman			Applications due: *			Bachelor's by inst. 3295 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 Johannes C.C. Nitsche, Head			Applications due: 2/15/78			Bachelor's by inst. 6700 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 J.B. Rosen, Head			Applications due: 2/15/78			Bachelor's by inst. 6700 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 Seymour Geisser, Director			Applications due: 3/15/78			Bachelor's by inst. 6700 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 M.M. Awad, Chairman			Applications due: 3/1/78			Bachelor's by inst. 400 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 T.A. Atchison, Head			Applications due: 3/1/78			Bachelor's by inst. 1919 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 Fred Davis, Director			Applications due: 8/1/78			Bachelor's by inst. 1919 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

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

TYPE of financial assistance (with number anticipated 1978–1979)	STIPEND amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
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 Ph.D. (1974-1977 incl.) G&T 1, A&FA 3. Total: 4
Fellowship (3)	4400	12	351/sem.			
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 Ph.D. (1974-1977 incl.) G&T 2, Other 2. Total: 4
Teaching Assistantship (10)	3000	9	*	6[c]	Teaching	
*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 Ph.D. (1974-1977 incl.) A&NT 4, G&T 1, A&FA 6, AM 1. Total: 12
Teaching Assistantship (65)	3690-4153	9	322/sem.	6-7[c]		
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 Ph.D. (1974-1977 incl.) S 2. Total: 2
Teaching Assistantship (8)	3800-4300	9		6[c]	Teaching	
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 Ph.D. (1974-1977 incl.) A&NT 1, G&T 2, A&FA 2 Total: 5
Teaching Assistantship (10)	3600-3900	9	335/sem.	5-6[c]	Teaching	
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 Ph.D. (1974-1977 incl.) A&FA 4, S 2, CS 6, AM 2. Total: 14
Teaching Assistantship (15)	4250	9	700/yr.	6-7[c]	Teaching	

TYPE of financial assistance (with number anticipated 1978–1979)	STIPEND amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
University of Missouri-St. Louis 63121						
DEPARTMENT OF MATHEMATICS Raymond Balbes, Chairperson						Bachelor's by inst. 1385 Bachelor's by dept. 14 Master's by dept. 2
Teaching Assistantship (8)	3800-4000	9	324.50	6	Teaching	
Washington University, St. Louis 63130						
DEPARTMENT OF MATHEMATICS Robert H. McDowell, Chairman			Applications due: 2/15/78			Bachelor's by inst. 1017 Bachelor's by dept. 12 Master's by dept. 2
Fellowship (7)	3100-3200*	9		10	Teaching & research	Ph.D. (1974-1977 incl.) G&T 3, A&FA 10. Total: 13
Teaching Fellowship (9)	3100-3200*	9		10	Teaching, grading, and/or proctoring	
Teaching Assistantship (3)	3100-3200*	9		10	Teaching, grading, and/or proctoring	
Research Assistantship (3)	3100-3200*	9		10	Research	
Scholarship (2)		9				
Med-School Internship (1)	3400*	9		20	Research	

*Plus tuition.

MONTANA

Montana State University, Bozeman 59717						
DEPARTMENT OF MATHEMATICS K.J. Tiahrt, Professor			Applications due: 4/1/78			Bachelor's by inst. 1420 Bachelor's by dept. 21 Master's by dept. 5
Teaching Assistantship (32)	3200-5400	9	94/qtr.	6-7[c]		Ph.D. (1974-1977 incl.) A&NT 1, A&FA 4, S 3. Total: 8
Research Assistantship (3)	3200-5400	9	94/qtr.	20		
University of Montana, Missoula 59801						
DEPARTMENT OF MATHEMATICS William R. Ballard, Chairman			Applications due: 4/1/78			Bachelor's by inst. 1247 Bachelor's by dept. 8 Master's by dept. 1
Teaching Assistantship (20)	3100-3500	9	*	5-6[c]	Teaching	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.

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

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 hours per week	type of service	DEGREES AWARDED Academic year 1976–1977

NEBRASKA

Kearney State College, Kearney 68847

DEPARTMENT OF MATHEMATICS, STATISTICS AND COMPUTER SCIENCE
L.M. Larsen, Chairman — Applications due: 3/1/78

Teaching Assistantship (2)	2500	9		5-6		Bachelor's by inst. 746 Bachelor's by dept. 35 Master's by dept. 7

University of Nebraska, Lincoln 68588

DEPARTMENT OF MATHEMATICS AND STATISTICS
David L. Skoug, Chairman — Applications due: 4/1/78

Teaching Assistantship (38)	3600-5600	9	21/cr.hr.	4-6[c]	Teaching	Bachelor's by inst. 3000 Bachelor's by dept. 55 Master's by dept. 15 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

Teaching Assistantship (11)	3500-4000	9	650	18	Teaching	Bachelor's by inst. 3000 Bachelor's by dept. 25 Master's by dept. 12
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

Teaching Assistantship (4)	3225	9	*	6	Teaching	Bachelor's by inst. 1900 Bachelor's by dept. 20 Master's by dept. 5

*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

Teaching Assistantship (6)	3400-3600	9	5/cr.	6	Teaching	Bachelor's by inst. 579 Bachelor's by dept. 4 Master's by dept. 8

University of Nevada, Reno 89557

DEPARTMENT OF MATHEMATICS
E.M. Beesley, Chairman — Applications due: 3/15/78

Teaching Assistantship (4)	3400-4000	9		20	Teaching	Bachelor's by inst. 780 Bachelor's by dept. 7 Master's by dept. 2

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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977

NEW HAMPSHIRE

Dartmouth College, Hanover 03755

DEPARTMENT OF MATHEMATICS
Richard H. Crowell, Chairman

Applications due: 3/1/78

Teaching Fellowship (16)	4260			4-10	Teaching	

Bachelor's by inst. 983
Bachelor's by dept. 71
Master's by dept. 2

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

Fellowship (1)	3300	9				
Teaching Assistantship (8)	3300	9		6[c]	Teaching	
Scholarship (3)	Tuition only	9				

Bachelor's by dept. 55
Master's by dept. 19

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

NEW JERSEY

Fairleigh Dickinson University, Madison 07940

DEPARTMENT OF MATHEMATICS AND PHYSICS
H.A. Elkholy, Chairman

Applications due: 3/1/78

Teaching Fellowship (3)	3000	9		6	Teaching	

Bachelor's by inst. 647
Bachelor's by dept. 10
Master's by dept. 3

Fairleigh Dickinson University, Teaneck 07666

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
Donald Bein, Chairperson

Applications due: 4/30/78

Teaching Fellowship (8)	3000-4000	9		6[c]		

Bachelor's by inst. 2203
Bachelor's by dept. 25
Master's by dept. 40

Montclair State College, Upper Montclair 07043

DEPARTMENT OF MATHEMATICS
Robert Garfunkel, Chairman

Applications due: 4/1/78

Teaching Assistantship (4)	2500	9		15		

Bachelor's by inst. 1597
Bachelor's by dept. 76
Master's by dept. 40

New Jersey Institute of Technology, Newark 07102

DEPARTMENT OF MATHEMATICS
Henry Zatzkis, Chairman

Applications due: 3/15/78

Teaching Assistantship (1)	3500	9		6		

Bachelor's by inst. 595
Bachelor's by dept. 8
Master's by dept. 8

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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
Princeton University, Princeton 08540						
DEPARTMENT OF MATHEMATICS Robert C. Gunning, Chairman				Applications due: 2/15/78		Bachelor's by inst. 949 Bachelor's by dept. 21 Master's by dept. 24
Fellowship (30)	1700-5400	9-12				
Teaching Assistantship (11)*	3400-4000	10		20		Ph.D. (1974-1977 incl.) A&NT 3, G&T 2, L 1, A&FA 8. Total: 14
Research Assistantship (12)*	2800-3500	10				
*Most assistants 1/2 teaching, 1/2 research						
Rutgers University, New Brunswick 08903						
DEPARTMENT OF MATHEMATICS Daniel Gorenstein, Chairman				Applications due: 3/1/78		Bachelor's by inst. 6130 Bachelor's by dept. 84 Master's by dept. 8
Fellowship (4)	5000	9				
Teaching Assistantship (40)	3969-4365	9		5-6	Teaching	Ph.D. (1974-1977 incl.) A&NT 14, G&T 10, L 7, A&FA 9. Total: 40
Research Assistantship (12)	3969-4365	9				
DEPARTMENT OF STATISTICS William E. Strawderman, Chairman				Applications due: 3/1/78		Bachelor's by inst. 6130 Bachelor's by dept. 10 Master's by dept. 18
Fellowship (4 1/2)	5000	9				
Teaching Assistantship (6)	3969-4365	9		Maximum 15	Teaching	Ph.D. (1974-1977 incl.) S 4. Total: 4
Research Assistantship (5)	3969-4365	9		Maximum 15	Research	
Seton Hall University, South Orange 07079						
DEPARTMENT OF MATHEMATICS Charles Franke, Chairman				Applications due: 4/1/78		Bachelor's by inst. 1170 Bachelor's by dept. 15 Master's by dept. 2
Teaching Assistantship (9)	2200	9		6[c]		
Trenton State College, Trenton 08625						
DEPARTMENT OF MATHEMATICAL SCIENCES Robert Price, Chairman				Applications due: 5/1/78		Bachelor's by inst. 1100 Bachelor's by dept. 35 Master's by dept. 20
Assistantships (3-6)	2000	9		15		
NEW MEXICO						
New Mexico Institute of Mining and Technology, Socorro 87801						
DEPARTMENT OF MATHEMATICS Alan Sharples, Head				Applications due: 3/30/78		Bachelor's by inst. 148 Bachelor's by dept. 18 Master's by dept. 3
Teaching Assistantship (6)	3400-3600	9	11/cr.hr.	5-6[c]	Teaching	
Research Assistantship (1)	3150-3350	9	11/cr.hr.	20	Research	
New Mexico State University, Las Cruces 88003						
DEPARTMENT OF MATHEMATICAL SCIENCES John D. DePree, Chairman				Applications due: 2/15/78		Bachelor's by inst. 1277 Bachelor's by dept. 20 Master's by dept. 5
Teaching Assistantship (23)	4000-4200	9	22/cr.hr.	20		Ph.D. (1974-1977 incl.) A&NT 4, G&T 1, A&FA 2, OR 1, CS 1, AM 3. Total: 12
DEPARTMENT OF COMPUTER SCIENCE J. Mack Adams, Head						Bachelor's by inst. 1277 Bachelor's by dept. 19 Master's by dept. 9
Teaching Assistantship (5)	4000	9	276/12 cr.	20	Teaching	
Research Assistantship (3)	4000	9	276/12 cr.	20	Research	
University of New Mexico, Albuquerque 87131						
DEPARTMENT OF MATHEMATICS AND STATISTICS Richard J. Griego, Chairman				Applications due: 2/15/78		Bachelor's by inst. 1914 Bachelor's by dept. 30 Master's by dept. 7
Teaching Assistantship (22)	3800-4000	9		5[c]		Ph.D. (1974-1977 incl.) A&NT 2, A&FA 6, P 2, S 7, CS 1, AM 1. Total: 19
DEPARTMENT OF COMPUTING SCIENCE D.R. Morrison, Chairman				Applications due: 4/1/78		Bachelor's by inst. 1914 Bachelor's by dept. 4 Master's by dept. 6
Teaching Assistantship (5)	3600-3800	9		20	Teaching	
Research Assistantship (2)	3600-3800	9		20	Research	

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

NEW MEXICO STATE UNIVERSITY ®

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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977

NEW YORK

Adelphi University, Garden City 11530

DEPARTMENT OF MATHEMATICS
Donald I. Hammer, Chairman

Applications due: 2/15/78

NSF Fellowship (1)	3400	9				
Teaching Assistantship (9)	2400-3800	9		20	Teaching	
Scholarship (5)		9				
Computing Center Assistantship (2)	2800	9		20	Teaching	

Bachelor's by inst. 1436
Bachelor's by dept. 12
Master's by dept. 13
Ph.D. (1974-1977 incl.) A&NT 1, A&FA 1, AM 3, Other 5. Total: 10

City University of New York, Brooklyn College, Brooklyn 11210

DEPARTMENT OF MATHEMATICS
Lester L. Gavurin, Chairman

Applications due: 5/78

Teaching Assistantship (2)	6350-8775	9		8[c]	Teaching	

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

DEPARTMENT OF MATHEMATICS
Jonah Mann, Chairman

Applications due: 3/1/78

Fellowship (1)	2000-4640	9	750/sem.	0-4		
Teaching Assistantship (6)	2640-5280	9	750/sem.	4-8		

Bachelor's by inst. 2919
Bachelor's by dept. 43
Master's by dept. 9

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

DEPARTMENT OF MATHEMATICS
Barry M. Cherkas, Chairman

Applications due: 2/20/78

Teaching Assistantship (8)	2019.60-5342.40		75/cr.	3-7[c]	Teaching	
Scholarship (1)	500-800					
Part-Time Lecturer (2)	6350-8475	12	75/cr.	6-8[c]	Teaching	

Bachelor's by inst. 1650
Bachelor's by dept. 30
Master's by dept. 8

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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977

City University of New York, Queens College, Flushing 11367

DEPARTMENT OF MATHEMATICS — Applications due: 4/1/78
Joseph Hershenov, Chairman

Teaching Assistantship (4)	1980-6350	9	*	3-8	Teaching	Bachelor's by inst. 3663 Bachelor's by dept. 74 Master's by dept. 4

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

DEPARTMENT OF COMPUTER SCIENCE — Applications due: 1/16/78
John Moyne, Chairman

Teaching Fellowship (7)	2970-7135	12	*	3-9[c]	Teaching	Bachelor's by inst. 987 Bachelor's by dept. 61 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*
Alan C. Newell, Chairman

Teaching Assistantship (15)	4000-6000	12		12	Teaching, grading	Bachelor's by inst. 636 Bachelor's by dept. 30 Master's by dept. 6 Ph.D. (1974-1977 incl.) AM 1. Total: 1
Research Assistantship (1)	4000-6000	12		12	Research	
Tuition Waiver (4)	3575	12		6	Teaching, grading	

*Late applications will be considered.

Columbia University, New York 10027

DEPARTMENT OF MATHEMATICS — Applications due: 1/9/78
Hyman Bass, Chairman

Fellowship (40)	3600-4400	9 or 11	*			Bachelor's by inst. 1528 Bachelor's by dept. 12 Ph.D. (1974-1977 incl.) A&NT 8, G&T 7, A&FA 4. Total: 19

*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.

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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
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			
Teaching Assistantship (14)	2400	9	4607	12		Ph.D. (1974-1977 incl.) CS 4, Other 15. Total: 19
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	Ph.D. (1974-1977 incl.) S 2, CS 1. Total: 3
Graduate Research Assistantship (5)	3150	9		27	Research	
Cornell Univeresity, 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		
Teaching Assistantship (44)	3200-3400	9		15		Ph.D. (1974-1977 incl.) A&NT 8, G&T 3, L 8, A&FA 2, P 7, S 1, AM 2. Total: 31
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					Ph.D. (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		
Teaching Assistantship (7)	4528-4803	12		15		Ph.D. (1974-1977 incl.) S 8. Total: 8
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			
Teaching Assistantship (13)	3300-3500	9	4400	15		Ph.D. (1974-1977 incl.) OR 26. Total: 26
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				
Teaching Fellowship (2)	3600-4400	9		6[c]	Teaching	Ph.D. (1974-1977 incl.) A&NT 1, G&T 1, A&FA 4. Total: 6
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 Ph.D. (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 of financial assistance (with number anticipated 1978–1979)	STIPEND amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
Polytechnic Institute of New York, Brooklyn 11201						
DEPARTMENT OF MATHEMATICS Harry Hochstadt, Chairman				Applications due: 3/1/78		Bachelor's by inst. 319 Bachelor's by dept. 20 Master's by dept. 10
Teaching Fellowship (10)	2000-2400	9		4	Teaching	Ph.D. (1974-1977 incl.) A&NT 5, G&T 1, A&FA 7, AM 2. Total: 15
Rensselaer Polytechnic Institute, Troy 12181						
DEPARTMENT OF MATHEMATICAL SCIENCES Richard C. DiPrima, Chairman				Applications due: 2/15/78		Bachelor's by inst. 890 Bachelor's by dept. 75 Master's by dept. 60
Teaching Assistantship (32)	3600-4200	9	200 fees	20	Teaching, grading	Ph.D. (1974-1977 incl.) A&FA 1, S 8, OR 7, CS 3, AM 10. Total: 29
Research Assistantship (8) Scholarship (20)	3600-4200	9	200 fees varies	20	Research	
St. John's University, Jamaica 11439						
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE Edward J. Miranda, Chairman						Bachelor's by inst. 3200 Master's by inst. 12
Teaching Fellowship (9)	2400-2600	9		15		
State University College at Brockport 14420						
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE Theron D. Rockhill, Chairman				Applications due: 6/1/78		Bachelor's by inst. 2200 Bachelor's by dept. 60 Master's by dept. 4
Teaching Assistantship (2)	2500	9		15	Teaching	
State University College at Buffalo 14223						
DEPARTMENT OF MATHEMATICS William T. Bailey, Chairman				Applications due: 3/1/78		Bachelor's by inst. 1800 Bachelor's by dept. 30 Master's by dept. 12
Teaching Assistantship (1-2)	2800	9		*		
*Teach one course.						
State University College at Cortland 13045						
DEPARTMENT OF MATHEMATICS Thomas M. O'Loughlin, Chairman				Applications due:*		Bachelor's by inst. 1200 Bachelor's by dept. 28 Master's by dept. 6
Teaching Assistantship (1-2)	2500 + tuition	9		20	Teaching	
*First week of February 1978.						
State University College at Fredonia 14063						
DEPARTMENT OF MATHEMATICS James E. McKenna, Acting Chairman				Applications due: 4/1/78		Bachelor's by inst. 777 Bachelor's by dept. 10 Master's by dept. 6
Teaching Assistantship (2)	2400	9		3[c]		

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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
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	
Teaching Assistantship (24)	2600-3900	9		4[c]	Teaching	Ph.D. (1974 -1977 incl.)
Research Assistantship (2)	3600-3900	12		20	Research	G&T 6, S 1, Other 1. Total: 8

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 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 hours per week	type of service	DEGREES AWARDED Academic year 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 4000	9 12				Ph.D. (1974-1977 incl.) A&NT 8, G&T 4, A&FA 4, AM 6. Total: 22
Teaching Assistantship (44)	3100-3500	9		3-4[c]		
Scholarship (5)	Varies					
Misc. University (4-6)	Varies			Varies		
*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	*	Ph.D. (1974-1977 incl.) CS 5. Total: 5
Research Assistantship (8)	3450-3900	9		16	**	
Graduate Assistantship (8)	3450-3750	9		16	***	
*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				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, erligion, 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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977

State University of New York at Stony Brook 11794

DEPARTMENT OF MATHEMATICS
Irwin Kra, Chairman

Applications due:*

Teaching Fellowship (2-4)	4000	9		4[c]	Teaching	
Teaching Assistantship (40-45)	3300-3900	9		4[c]	Teaching	
Research Assistantship (5-10)	2000-3900	9		4[c]	Teaching, research	

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

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

Applications due: *

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.

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

Applications due: 3/1/78

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

Applications due: 3/1/78

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

Bachelor's by inst. 2413
Bachelor's by dept. 4
Master's by dept. 23

Ph.D. (1974-1977)
CS 16. Total: 16

University of Rochester, Rochester 14627

DEPARTMENT OF MATHEMATICS
Charles E. Watts, Chairman

Applications due: 2/78

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.

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

Applications due: 3/1/78

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

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

DEPARTMENT OF STATISTICS
W.J. Hall, Chairman

Applications due: 2/15/78

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

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

Applications due: 3/15/78

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

*Subject to increase.

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

Applications due: 3/1/78

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

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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
DEPARTMENT OF COMPUTER SCIENCE Donald Loveland, Chairman				Applications due: 3/1/78		Bachelor's by inst. 1305 Bachelor's by dept. 22 Master's by dept. 6
Fellowship (2)	4200	12				
Teaching Assistantship (4)	2200	9		3[c]	Teaching	Ph.D. (1974-1977 incl.)
Research Assistantship (11)	3000-4000			20	Research	CS 1. Total: 1
Scholarship (1)						
East Carolina University, Greenville 27834						
DEPARTMENT OF MATHEMATICS Frank W. Saunders, Acting Chairman				Applications due: 3/1/78		Bachelor's by inst. 1922 Bachelor's by dept. 27 Master's by dept. 11
Teaching Fellowship (22)	2500	9	*	5	Teaching	
Computer and Office Institutional Research (4)	2500	9	*	15	Assist in Computer Lab or OIR	
*$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 William T. Fletcher, Chairman				Applications due: 4/24/78		Bachelor's by inst. 596 Bachelor's by dept. 8 Master's by dept. 2
Graduate Assistantship (2)	1500	9	*	10		
*In-state: $440; out-of-state: $2006.						
North Carolina State University, Raleigh 27607						
DEPARTMENT OF MATHEMATICS AND SCIENCE EDUCATION Herbert E. Speece, Head				Applications due: 3/1/78		Bachelor's by inst. 2000 Bachelor's by dept. 42 Master's by dept. 9
Teaching Assistantship (1)	3000	9		15		Ph.D. (1974-1977 incl.) Other 2. Total: 2
OPERATIONS RESEARCH PROGRAM S.E. Elmaghraby, Chairman						Master's by dept. 3
Teaching Assistantship (15)	3100	9		20	Teaching	Ph.D. (1974-1977 incl.)
Research Assistantship (5)	3400-4200	9		20	Research	OR 3. Total: 3
DEPARTMENT OF STATISTICS D.D. Mason, Head				Applications due: 3/1/78		Master's by dept. 6
Teaching Assistantship (14)	3100-5200	9		0-20	Teaching	Ph.D. (1974-1977 incl.)
Research Assistantship (9)	3600-6000	12		0-20	Research	S 4, Other 1. Total: 5
University of North Carolina, Chapel Hill 27514						
DEPARTMENT OF MATHEMATICS William W. Smith, Chairman				Applications due: 2/1/78		Bachelor's by inst. 3289 Bachelor's by dept. 57 Master's by dept. 2
Fellowship (1)*	3000-4500	9	260/sem.		Research	
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 amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	type of service	DEGREES AWARDED Academic year 1976–1977
DEPARTMENT OF BIOSTATISTICS James E. Grizzle, Head			Applications due: 3/15/78			Bachelor's by inst. 3289 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 Jon W. Tolle, Chairman			Applications due:*			Bachelor's by inst. 3289 Master's by dept. 7
Fellowship (4)	3000-3500	9	260/sem.	0[c]10	Research	Ph.D. (1974-1977 incl.)
Teaching Assistantship (12)	3200-4000	9	260/sem.	3[c]	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 Gordon D. Simons, Chairman			Applications due: 2/1/78			Bachelor's by inst. 3289 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 J.F. Schell, Chairman			Applications due: 3/1/78*			Bachelor's by inst. 1126 Bachelor's by dept. 21 Master's by dept. 11
Teaching Assistantship (6)	1750-3500	9	**	3-6[c]	Teaching	
*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 E.E. Posey, Head			Applications due: 4/1/78			Bachelor's by inst. 1275 Bachelor's by dept. 55 Master's by dept. 18
Teaching Assistantship (16)	3200	9	350	6[c]		
Wake Forest University, Winston-Salem 27109						
DEPARTMENT OF MATHEMATICS Ivey C. Gentry, Chairman			Applications due: 3/1/78			Bachelor's by inst. 525 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 Leonard Shapiro, Chairman			Applications due: 3/1/78			Bachelor's by inst. 1024 Bachelor's by dept. 21 Master's by dept. 4
Teaching Assistantship (8)	3300-4000	9		6[c]	Teaching	
University of North Dakota, Grand Forks 58202						
DEPARTMENT OF MATHEMATICS Ronald Bzoch, Chairman			Applications due: 3/15/78			Master's by dept. 3
Teaching Assistantship (3)	1597-3195	9		3-6[c]	Teaching	
OHIO						
Bowling Green State University, Bowling Green 43403						
DEPARTMENT OF MATHEMATICS W.L. Terwilliger, Chairman			Applications due: 3/1/78			Bachelor's by inst. 2868 Bachelor's by dept. 35 Master's by dept. 12
Fellowship (4)	3000	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 David L. Fulton, Chairman			Applications due: 3/15/78			Bachelor's by inst. 2868 Bachelor's by dept. 47 Master's by dept. 11
Teaching Assistantship (6)	3241	9	50/qtr.	20	Teaching	
Research Assistantship (8)	3241	9	50/qtr.	20	Programming	
DEPARTMENT OF QUANTITATIVE ANALYSIS AND CONTROL Robert A. Patton, Chairman			Applications due: *			Bachelor's by inst. 2868 Bachelor's by dept. 4 Master's by dept. 5
Teaching Assistantship (5)	1620-3240	9		4		
*Priority given to those received by March 1, 1978.						

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 hours per week	type of service	DEGREES AWARDED Academic year 1976–1977	
Case Western Reserve University, Cleveland 44106							
DEPARTMENT OF MATHEMATICS AND STATISTICS Shelemyahu Zacks, Chairman			Applications due: 3/1/78			Bachelor's by inst. Bachelor's by dept. Master's by dept.	671 17 2
Teaching Assistantship (7 or 8)	3600-4800*	9		3-6[c]	Teaching		
Research Assistantship (1 or 2)	3600-4800*	9		15	Research	Ph.D. (1974-1977 incl.) A&NT 1, G&T 2, A&FA 3, P 6, S 1. Total: 13	
*Plus tuition.							
DEPARTMENT OF BIOMETRY H.B. Houser, Chairman			Applications due: 3/15/78			Bachelor's by inst. Master's by dept.	671 3
Fellowship (3)	5850	9		10			
DEPARTMENT OF OPERATIONS RESEARCH Hamilton Emmons, Chairman			Applications due: 4/78			Bachelor's by inst. Master's by dept.	671 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. Bachelor's by dept. Master's by dept.	1397 40 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. Bachelor's by dept. Master's by dept.	305 16 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. Bachelor's by dept. Master's by dept.	3572 47 8
Fellowship (1)	3200	9					
Teaching Fellowship (9)	4000-4200	9		5[c]	Teaching	Ph.D. (1974-1977 incl.) A&NT 2, G&T 1, A&FA 2, Other 2. Total: 7	
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. Bachelor's by dept. Master's by dept.	3000 50 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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
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				
Teaching Assistantship (60)	3600	9		20		Ph.D. (1974-1977 incl.) A&NT 10, G&T 4, A&FA 5, P 2, AM 2, Other 9. Total: 32
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 3600	10 12				Ph.D. (1974-1977 incl.) CS 25. Total: 25
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	Programming, research	
Ohio College Library Center (1)	4200-4500	12		20	Programming, 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				
Teaching Assistantship (30)	3375-4000	9		20	Teaching	Ph.D. (1974-1977 incl.) S 22. Total: 22
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 1. 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 hours per week	type of service	DEGREES AWARDED Academic year 1976–1977
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						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.) S 8, OR 1. Total: 9
Research Assistantship (6)	3000-3600	9	65/term	12-15		
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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED 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.)
Teaching Assistantship (10)	3000-4000	9		4-6[c]	Teaching	G&T 1, A&FA 9, OR 2,
Research Assistantship (12)	7000-8000	9	4000	20	Research	AM 5, Other 3. Total: 20
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.)
Stipend (13)	1125	9				S 6. Total: 6
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	
Research Assistantship (2)	3200-4200	9		20	Research	Ph.D. (1974-1977 incl.) AM 3. Total: 3
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 of financial assistance (with number anticipated 1978–1979)	STIPEND amount in dollars	STIPEND 9 or 12 months	TUITION If not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 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]		
Scholarship (2)					

Ph.D. (1974-1977 incl.) A&NT 4, G&T 3, L 1, A&FA 4, S 1, Other 1. Total: 14

*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		Research
Teaching Assistantship (25)	4032-4320	9	6	Teaching

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

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.) 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		
Scholarship (2)				

Ph.D. (1974-1977 incl.) A&NT 4, G&T 1, A&FA 3, P 1, S 2. Total: 11

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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Dr. Orin Chein (*Group Theory*), Dr. Francis Christoph (*Topology*), Dr. Bruce Conrad (*Topology*), Dr. Raymond Coughlin (*Algebra*), Dr. Martin Eisen (*Probability, Applied Math.*), Dr. Ivan Erdelyi (*Functional Analysis*), Dr. Janos Galambos (*Probability*), Dr. Robert Gordon (*Algebra*), Dr. Marvin Grossman (*Functional Analysis*), Dr. Emil Grosswald (*Analytic Number Theory, Analysis*), Dr. Peter Hagis, Jr. (*Number Theory*), Dr. David Hill (*Differential Equations*), Dr. Marvin Knopp (*Analysis, Number Theory*), Dr. Samuel Kotz (*Math. Stat., Information Theory*), Dr. V. S. Krishnan (*Topology, Algebra*), Dr. Diane Laison (*Functional Analysis*), Dr. Seymour Lipschutz (*Group Theory*), Dr. Nicholas Macri (*Functional Analysis*), Dr. Jatinder Mehta (*Stat.*), *Dr. Theodore Mitchell* (*Functional Analysis*), Dr. William Nathan (*Topology*), Dr. Donald Newman (*Analysis, Number Theory*), Dr. Eli Passow (*Analysis, Approx. Theory*), Dr. John Paulos (*Logic*), Dr. Hala Pflugfelder (*Algebra*), Dr. Allan Port (*Operations Research*), Dr. Herbert Putz (*Topology*), Dr. K. Raghunandanan (*Math. Stat., Stochastic Process.*), Dr. Louis Raymon (*Analysis, Approx. Theory*), Dr. Daniel Reich (*Analysis*), Dr. Michael Rich (*Algebra*), Dr. Albert Schild (*Complex Analysis, Operations Research*), Dr. John Schiller (*Analysis*), Dr. Thomas Slook (*Functional Analysis*), Dr. R. Srinivasan (*Statistics*), Dr. Leon Steinberg (*Analysis, Appl. Math*), Dr. Maria A. Wurster (*Analysis*), Dr. David Zitarelli (*Algebra, Hist. of Math.*).

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 amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	type of service	DEGREES AWARDED Academic year 1976–1977
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				
Teaching Assistantship (16)	2850-3250	9		3-6	Teaching	Ph.D. (1974-1977 incl.) A&NT 1, G&T 4, A&FA 6, Other 3. Total: 14
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 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 hours per week	type of service	DEGREES AWARDED Academic year 1976–1977	
Rhode Island College, Providence 02908							
DEPARTMENT OF MATHEMATICS James T. Sedlock, Chairman			Applications due: 4/1/78			Bachelor's by inst. Bachelor's by dept. Master's by dept.	880 21 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. Bachelor's by dept. Master's by dept.	1978 10 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. Bachelor's by dept. Master's by dept.	1978 11 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. Bachelor's by dept. Master's by dept.	1682 47 23
Teaching Assistantship (59)	4030-4290	12	14/hr.	3-6[c]	Teaching		
Programming Assistantship (12)	4550-5200	12	14/hr.	20	Computer Programming	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. Master's by dept.	164 3
Fellowship (15)	3960	12	7/qtr.hr.				
Research Assistantship (4)	3960	12	7/qtr.hr.	20			

THE MATHEMATICAL SCIENCES AT CLEMSON UNIVERSITY*

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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 amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	type of service	DEGREES AWARDED Academic year 1976–1977	
Winthrop College, Rock Hill 29730							
DEPARTMENT OF MATHEMATICS Edward P. Guettler, Chairman				Applications due: 5/1/78		Bachelor's by inst. Bachelor's by dept. Master's by dept.	560 20 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. Bachelor's by dept. Master's by dept.	206 27 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. Bachelor's by dept. Master's by dept.	805 19 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. Bachelor's by dept. Master's by dept.	1681 14 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. Bachelor's by dept. Master's by dept.	2877 19 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. Bachelor's by dept. Master's by dept.	2073 23 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. Bachelor's by dept. Master's by dept.	875 10 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. Bachelor's by dept. Master's by dept.	3598 34 10
Fellowship (1)	3000	12					
Teaching Assistantship (53)	3456-4122	9		6[c]		Ph.D. (1974-1977 incl.) A&NT 1, G&T 1, A&FA 3, Other 1. Total: 6	
Research Assistantship (2)	5000	9	1400	20			
DEPARTMENT OF COMPUTER SCIENCE Robert Todd Gregory, Head				Applications due: 3/1/78		Bachelor's by inst. Bachelor's by dept. Master's by dept.	3598 14 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. Bachelor's by dept. Master's by dept.	3598 6 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. Bachelor's by dept. Master's by dept.	1010 75 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 amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	type of service	DEGREES AWARDED Academic year 1976–1977
DEPARTMENT OF COMPUTER SCIENCE Donald J. Rose, Chairman			Applications due: 2/1/78			Bachelor's by inst. 1010 Bachelor's by dept. 30 Master's by dept. 2
Fellowship (1) Teaching Assistantship (12) Scholarship (10)	3000-6000 1500-6000	9 9		10	Teaching	Ph.D. (1974-1977 incl.) CS 4. Total: 4

TEXAS

Baylor University, Waco 76703

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

East Texas State University, Commerce 75428

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

Lamar University, Beaumont 77710

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

Midwestern University, Wichita Falls 76308

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

*$101.50 for 6 hours.

North Texas State University, Denton 76203

DEPARTMENT OF MATHEMATICS John Ed Allen, Chairman			Applications due: 3/1/78			Bachelor's by inst. 2058 Bachelor's by dept. 21 Master's by dept. 14
Teaching Fellowship (12)	3780-4800	9	50	6[c]	Teaching	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
AC 817-788-2155

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$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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
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		Ph.D. (1974–1977 incl.) A&NT 1, G&T 3, A&FA 3. Total: 7
Research Assistantship (3)	4000	12		6		
Scholarship (5)		9				
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		Ph.D. (1974–1977 incl.) CS 6. Total: 6
Research Assistantship (8)	350-400/mo.	9	*	20		
*$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 amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	type of service	DEGREES AWARDED Academic year 1976–1977
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	
Part-Time Instructor with Master's Degree (15)	3700-4500	9	**	6	Teaching	Ph. D. (1974-1977 incl.) 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	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
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 1/2 Teaching Assistantship (38)	1700-3800	9	585-765/sem.	10 20		
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 Ph.D. (1974-1977 incl.) A&NT 1, G&T 5, A&FA 7, P 2, Other 4. Total: 19
Teaching Fellowship (30)	4500-4950	9		6-7[c]		
Teaching Assistantship (10)	4500-4950	9		6-7[c]		
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 Ph.D. (1974-1977 incl.) A&FA 1, AM 1, Other 1. Total: 3
Teaching Fellowship (11)	3400	9		18	Teaching	
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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977

University of Virginia, Charlottesville 22903

DEPARTMENT OF MATHEMATICS
Robert Stong, Chairman

Applications due: 2/1/78

Fellowship (5)	6000	9	*			Bachelor's by inst. 2261
Teaching Fellowship (10)	4000-6000	9	*	3[c]		Bachelor's by dept. 42
Teaching Assistantship (25)	4200-5174	9	*	6[c]		Master's by dept. 4

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

Ph.D. (1974-1977 incl.) A&NT 5, G&T 5, A&FA 2. Total: 12

DEPARTMENT OF APPLIED MATHEMATICS AND COMPUTER SCIENCE
J.E. Mann, Jr., Acting Chairman

Applications due: 2/1/78

Fellowship (4)	2700	9				Bachelor's by inst. 2261
Teaching Assistantship (18)	3044-4059	9	*	15-20		Bachelor's by dept. 14
Research Assistantship (9)	2000-4400	9	*	15-20		Master's by dept. 11

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

Ph.D. (1974-1977 incl.) CS 5, AM 4. Total: 9

Virginia Commonwealth University, Richmond 23284

DEPARTMENT OF MATHEMATICAL SCIENCES
William Haver, Chairman

Fellowship, Supplementary (3-5)	250-350					Bachelor's by inst. 1895
Teaching Assistantship (10)	3500	9	*	6[c]	Teaching	Bachelor's by dept. 19
Supplementary Aid (4-7)	600-1000	9			Help sessions, computer labs, statistics labs	Master's by dept. 9

*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

Fellowship (1)	3000	12	20	Bachelor's by inst. 1800
Teaching Assistantship (5)	3000-3900	12	20	Master's by dept. 1

Ph.D. (1974-1977 incl.) S 6. Total: 6

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For information write to:

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

University of Virginia
Charlottesville, Va. 22903

R.E. Stong, Chairman
Department of Mathematics

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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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977

Virginia Polytechnic Institute and State University, Blacksburg 24061

DEPARTMENT OF MATHEMATICS — Applications due: 4/1/78
C. Wayne Patty, Head

Teaching Assistantship (37)	4005-4410	9	717	6[c]	Teaching	Bachelor's by inst. 3211; Bachelor's by dept. 25; Master's by dept. 8; Ph.D. (1974-1977 incl.) A&NT 1, G&T 4, AM 2. Total: 7

DEPARTMENT OF COMPUTER SCIENCE — Applications due: 2/1/78
Richard E. Nance, Head

Teaching Assistantship (20)	4005-4455	9	239	20	Teaching	Bachelor's by inst. 3211; Bachelor's by dept. 53; Master's by dept. 22
Research Assistantship (4)	5350-6000	12	239	20	Research	

DEPARTMENT OF STATISTICS — Applications due: 1/31/78
Jesse C. Arnold, Head

Teaching Assistantship (23)	445-490	9	254/qtr.	20	Teaching	Bachelor's by inst. 3211; Bachelor's by dept. 11; Master's by dept. 13; Ph.D. (1974-1977 incl.) S 12. Total: 12
Research Assistantship (8)	445-490	12	254/qtr.	20	Research	

Virginia State College, Petersburg 23803

DEPARTMENT OF MATHEMATICS — Applications due: 5/15/78
Loretta M. Braxton, Chairperson

General Assistantship (2 to 5)	2400-3600	9	*			Bachelor's by inst. 638; Bachelor's by dept. 12; Master's by dept. 7

*In-state: $800; out-of-state: $1200.

WASHINGTON

Eastern Washington State College, Cheney 99004

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE — Applications due: 3/1/78
Donald R. Horner, Chairman

Teaching Assistantship (2)	3450*	9	651/yr.*	15		Bachelor's by inst. 1226; Bachelor's by dept. 27; Master's by dept. 2

*1977-78 figures.

University of Washington, Seattle 98195

DEPARTMENT OF MATHEMATICS — Applications due: 2/15/78
J. Segal, Chairman

Teaching Fellowship (1)	5951	12	961	10	Teaching	Bachelor's by inst. 5567; Bachelor's by dept. 143; Master's by dept. 12; Ph.D. (1974-1977 incl.) A&NT 3, G&T 5, A&FA 3, P 1, S 4, CS 2. Total: 18
Teaching Assistantship (6)	4869-5431	9	741	20*	Teaching	
Research Assistantship (2)	4410-4977	9	741		Research	

*4 to 6 hours in class plus office hours and preparation time.

DEPARTMENT OF BIOSTATISTICS — Applications due: 7/1/78
Donovan J. Thompson, Chairman

THE BIOMATHEMATICS GROUP
Richard A. Kronmal, Chairman

Fellowship (17)	3900	12				Bachelor's by inst. 5567; Master's by dept. 13; Ph.D. (1974-1977 incl.) Other 13. Total: 13
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 — Applications due: 2/78
Calvin T. Long, Chairman

Teaching Assistantship (30)	4875-5175	9	741	20		Bachelor's by inst. 2694; Bachelor's by dept. 21; Master's by dept. 8; Ph.D. (1974-1977 incl.) A&NT 3, G&T 1, A&FA 1, AM 3. Total: 8
Research Assistantship (1)	5625	12	741	20		

DEPARTMENT OF COMPUTER SCIENCE — Applications due: 3/1/78
George Marsaglia, Chairman

Teaching Assistantship (14)	3656-5175	9	740	20	Teaching	Bachelor's by inst. 2694; Bachelor's by dept. 20; Master's by dept. 9; Ph.D. (1974-1977 incl.) CS 7. Total: 7
Staff Assistantship (6)		9	740	20	Consulting	

Western Washington State University, Bellingham 98225

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE — Applications due: 4/1/78
R.W. Chaney, Chairman

Teaching Assistantship (4)	1131/qtr.	9	228/qtr.	10-15	Teaching	Bachelor's by inst. 1487; Bachelor's by dept. 45; Master's by dept. 7

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 hours per week	type of service	DEGREES AWARDED Academic year 1976–1977	
WEST VIRGINIA							
Marshall University, Huntington 25701							
DEPARTMENT OF MATHEMATICS Steven Hatfield, Acting Chairman				Applications due: 4/1/78		Bachelor's by inst. Bachelor's by dept. Master's by dept.	1094 3 4
Teaching Assistantship (5-8)	1980-2430	9		6[c]	Teaching		
West Virginia University, Morgantown 26506							
DEPARTMENT OF MATHEMATICS I.D. Peters, Chairman				Applications due: 3/1/78		Bachelor's by inst. Bachelor's by dept. Master's by dept.	545 13 5
Teaching Assistantship (18)	2628-2844	9		10	Teaching		
DEPARTMENT OF STATISTICS AND COMPUTER SCIENCE Donald F. Butcher, Chairman				Applications due: 3/15/78		Bachelor's by inst. Bachelor's by dept. Master's by dept.	545 23 7
Teaching Assistantship (10)	2628-2844	9		12	Teaching		
Research Assistantship (3)	3000-3600	12		14	Statistical Analysis, Computer Programming		
WISCONSIN							
Marquette University, Milwaukee 53233							
DEPARTMENT OF MATHEMATICS AND STATISTICS W.E. Lawrence, Chairman				Applications due: 2/15/78		Bachelor's by inst. Bachelor's by dept. Master's by dept.	1266 18 7
Teaching Assistantship (10)	3200-3600	9		6[c]	Teaching		
Research Assistantship (2)	3200	9		20	Research		
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. Bachelor's by dept. Master's by dept.	1184 27 5
Fellowship (3)*	500	9	**				
Research Assistantship (20)*	3000-3500	9	**	20	Research		
*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. Bachelor's by dept. Master's by dept.	4834 44 29
Fellowship (10)	4284-5544	9-12	1038*				
Teaching Assistantship (150)	4322-6988	9	1038	16-23	Teaching	Ph.D. (1974-1977 incl.)	
Research Assistantship (3)	4284-5232	9-12	1038	20	Research	A&NT 15, G&T 12, L 9, A&FA 17, P 6, AM 2, Other 4. Total: 65	
*NSF Fellows have this paid.							

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Mathematics
Washington State University
Pullman, WA 99164

TYPE of financial assistance (with number anticipated 1978–1979)	STIPEND amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
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.)
Research Assistantship (24)	4284	9	1038	20	Research	S 24. Total: 24
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	*			
Teaching Assistantship (40)	5800-6100	9	*	20	Teaching	Ph.D. (1974-1977 incl.)
Advanced Opportunity Fellowship (2)	5500	12	*			A&NT 6, A&FA 6, S 1, AM 1. Total: 14
*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		
Research Assistantship (8)	3600	9*	117/sem.	18		Ph.D. (1974-1977 incl.) S 1. Total: 1
*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.)
Combined Teaching Assistantship/ Research Assistantship (25)	3500-7500	12	997.50	10	Teaching, research	A&NT 5, G&T 1, A&FA 1, P 3, S 1. Total: 11

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 Argiculture 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 amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	type of service	DEGREES AWARDED Academic year 1976–1977
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	Ph.D. (1974-1977 incl.) A&NT 3, G&T 1, S 2, OR 2. Total: 8
Scholarship (4)	4000-6500	12	800			
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. Rosenthall, 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	Ph.D. (1974-1977 incl.) A&NT 1, G&T 5, A&FA 7, P 2. Total: 15
Scholarship (5)	6000-7000					
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	Ph.D. (1974-1977 incl.) L 2, AM 4. Total: 6
Research Assistantship (5)	5400	12	**		Research	
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 amount in dollars	STIPEND 9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	SERVICE REQUIRED type of service	DEGREES AWARDED Academic year 1976–1977
DEPARTMENT OF COMPUTING SCIENCE J. Tartar, Chairman			Applications due: 4/30/78			Bachelor's by inst. 3507 Bachelor's by dept. 34 Master's by dept. 3
Teaching Assistantship (30)	4140-6270	8		12	Teaching	Ph.D. (1974-1977 incl.) CS 12. Total: 12
Research Assistantship (3)	4030-5300	8		12	Research	
Summer Research Assistantship (11)	1550					
University of British Columbia, Vancouver, British Columbia V6T 1W5						
DEPARTMENT OF MATHEMATICS Donald Bures, Head			Applications due: 5/31/78			Bachelor's by inst. 3055 Bachelor's by dept. 41 Master's by dept. 4
Teaching Assistantship (30)	4200-4500	9	660	12	Teaching, marking	Ph.D. (1974-1977 incl.) A&NT 1, L 1, A&FA 2, S 1, AM 5. Total: 10
DEPARTMENT OF COMPUTER SCIENCE Paul Gilmore, Head			Applications due: 4/1/78			Bachelor's by inst. 3055 Bachelor's by dept. 39 Master's by dept. 2
Teaching Assistantship (14)	4280	8		12	Teaching	Ph.D. (1974-1977 incl.) CS 3. Total: 3
Research Assistantship (5)	3360-3600	8		12	Research	
University of Calgary, Calgary, Alberta T2N 1N4						
DEPARTMENT OF MATHEMATICS AND STATISTICS E.C. Milner, Head						Bachelor's by inst. 1922 Bachelor's by dept. 23 Master's by dept. 3
Teaching Assistantship (36)	2050-2600	4		12		Ph.D. (1974-1977 incl.) G&T 2, A&FA 2, AM 4, Other 3. Total: 11
Research Assistantship (18)	1625	4		12		
Scholarship (6)						
DEPARTMENT OF COMPUTER SCIENCE A.W. Colijn, Head			Applications due: 7/2/78			Bachelor's by inst. 1922 Bachelor's by dept. 15 Master's by dept. 2
Teaching Assistantship (10)	4100-5200	8		12	Teaching	
Research Assistantship (8)	1700	4			Research	
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 J.A.R. Holbrook, Chairman						Bachelor's by inst. 2000 Bachelor's by dept. 10 Master's by dept. 6
Teaching Assistantship (6-12)	4950	12	250/sem.	10	Teaching	
Research Assistantship (2-4)	1700	3	250/sem.	10	Research	
Sessional Lecturer (2-4)	8400	9	250/sem.	37	Teaching	
University of Manitoba, Winnipeg, Manitoba R3T 2N2						
DEPARTMENT OF MATHEMATICS N.S. Mendelsohn, Chairman			Applications due: 10/13/78			Bachelor's by inst. 3845 Bachelor's by dept. 37 Master's by dept. 2
Teaching Assistantship (5)	4000-4500	9		3	Tutorial	Ph.D. (1974-1977 incl.) A&NT 5, G&T 2, A&FA 1, Other 1. Total: 9
Research Assistantship (5)	4000-4500	9		3	Grading	
University of Ottawa, Ottawa, Ontario K1N 6N5						
DEPARTMENT OF MATHEMATICS W.D. Burgess, Chairman			Applications due: 8/12/78			Bachelor's by inst. 700 Bachelor's by dept. 10 Master's by dept. 5
Fellowship (8)	4000-4500	12	315/trimester	10	Teaching or demonstrating	
Teaching Assistantship (2)	3300	9	315/trimester	10	Teaching	
University of Regina, Regina, Saskatchewan S4S 0A2						
DEPARTMENT OF MATHEMATICS E.L. Koh, Head			Applications due: 6/30/78			Bachelor's by inst. 650 Bachelor's by dept. 40
Teaching Assistantship (2)	3700*	8	584	10	Teaching or equivalent	Ph.D. (1974-1977 incl.) A&NT 1. Total: 1
*Plus up to $1650 if research is continued to summer months.						
University of Saskatchewan, Saskatoon, Saskatchewan S7N 0W0						
DEPARTMENT OF MATHEMATICS B.S. Lalli, Head			Applications due: 3/1/78			Bachelor's by inst. 2100 Bachelor's by dept. 100 Master's by dept. 4
Teaching Fellowship (10)	3900	8*	520	5-10	Teaching (or equivalent)	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 amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	type of service	DEGREES AWARDED Academic year 1976–1977

University of Toronto, Toronto, Ontario M5S 1A4

DEPARTMENT OF MATHEMATICS — Applications due: 2/1/78
F.V. Atkinson, Chairman

Master's by dept. 10

Ph.D. (1974-1977 incl.) A&NT 1, G&T 4, L 1, A&FA 6, P 1, S 7, AM 4. Total: 24

Research Assistantship (40)	5500-6500	12	750*	5	Tutoring
Scholarship (15)	6000	12	750*		

*$1950 for foreign students.

DEPARTMENT OF COMPUTER SCIENCE — Applications due: 2/1/78
J.N.P. Hume, Chairman

Bachelor's by dept. 46
Master's by dept. 21

Ph.D. (1974-1977 incl.) CS 25. Total: 25

Fellowship (7)	2900-4800	12		
Teaching Assistantship (120)	540-621/mo.	9	*	4
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 — Applications due: 4/15/78
W.F. Forbes, Dean

Bachelor's by inst. 3632
Bachelor's by dept. 505
Master's by dept. 101

Ph.D. (1974-1977 incl.) A&NT 3, G&T 4, A&FA 4, P 3, S 8, CS 26, AM 4, Other 12. Total: 64

Teaching Assistantship (200)	860-3648	12	*	10	
Research Assistantship (125)	200-5400	12	*		Teaching
Scholarship (41)	500-2000	12	*		Research
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 — Applications due: 8/15/78
D. Borwein, Head

Bachelor's by inst. 4742
Bachelor's by dept. 65
Master's by dept. 4

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

Teaching/Research Assistantship (14)	5000-6000	12	680*	0-6	**

*$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

Ph.D. (1974-1977 incl.) A&FA 1, S 1, AM 3. Total: 5

Teaching Assistantship (20-25)	2900	9	370/term*	10	Teaching
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 — Applications due: 3/15/78
Martin E. Muldoon, Chairman

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, Mérida, 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 Visting 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 Instuctorships. 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 is 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, Gaustadelleen 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 Eupope; 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'Echanges 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 OPF, 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 Locater 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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