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SPECIAL ISSUE
ASSISTANTSHIPS AND FELLOWSHIPS
IN MATHEMATICS IN 1970-1971



OF THE

AMERICAN MATHEMATICAL SOCIETY

Edited by Everett Pitcher and Gordon L. Walker

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FOREWORD

This is the eleventh annual Special Issue of these Notices. This year the Special Issue contains a list of assistantships and fellowships available in mathematics, a selected list of stipends, articles on the tax status of grants, and an index of abstracts.

The list of assistantships and fellowships available in mathematics for 1970-1971 includes 412 departments of mathematics, statistics, computer science, and related mathematical disciplines, representing 324 universities and colleges. Colleges and universities have been grouped alphabetically within states, with Canadian institutions listed at the end.

The Special Issue is published as a service to the mathematical community, and in the past it has evoked enthusiastic response from both students and mathematics departments. The Society wishes to express its appreciation to those individuals associated with the institutions listed in this issue for their kind and generous helpin assembling this information.

ASSISTANTSHIPS AND FELLOWSHIPS IN MATHEMATICS IN 1970-1971

TYPE

STIPEND

TUITION

of financial assistance (with

Amount 9 or

if not included

SERVICE REQUIRED

Type

number anticipated in 1970-1971)

(dollars) 12 mo.

in stipend

Hrs/Week

ALABAMA

Auburn University

AUBURN, ALABAMA 36830 L.P. Burton, Head Department of Mathematics Applications must be filed by February 10, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2863
Baccalaureate Degrees by Department: 89
Master's Degrees by Department: 17

PH.D. Degrees awarded during last three years by field specialization: Algebra and Number Theory, 3; Geometry and Topology, 3; Analysis and Functional Analysis, 4; Probability and Statistics, 1; Applied Mathematics, 1; TOTAL: 12

Teaching Assistantship (40)	2520-4800	9	\$120/qtr.	5-10	Teaching or Equivalent
NASA, NSF Traineeship (10) NDEA Fellowship (3)	2400-2800* 2400**	12 12			

- * Plus dependency allowance and possible supplement for teaching.
- ** Plus dependency allowance.

Auburn University

AUBURN, ALABAMA 36830
Leland H. Williams, Director
Computer Center
Applications must be filed by March 15, 1970

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 3; Analysis and Functional Analysis, 4; Probability and Statistics, 1; Applied Mathematics, 1. TOTAL: 12

Research Assistantship (3)	5220-6240		\$120/qtr.	26	Research in info. proc.
Computer Service (5)	2340-3000	9	\$120/qtr.	13	Programming, Consulting, etc.

University of Alabama in Birmingham

BIRMINGHAM, ALABAMA 35233 Arthur C. Segal, Acting Chairman Department of Mathematics Applications must be filed by June 1, 1970

Teaching Assistantship (5-10) 2500 9 5 Teaching

TYPE of financial assistance (with STIPEND

Amount 9 or

TUITION if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

in stipend

Hrs/Week

University of Alabama in Birmingham

BIRMINGHAM, ALABAMA 35233 B.J. Trawinski, Director Graduate Program in Biostatistics Applications must be filed by February 1, 1970

Fellowship (6) *	2400-2800	9	+tuition	None
Research Assistantship (2)	2500-3000	12		part-time acad. yr.
Summer Fellowships (3)	am ount variable		+ tuition	full-time summer

^{*} Certain fellowships have dependents' allowances.

University of Alabama in Huntsville

HUNTSVILLE, ALABAMA 35807 J. Hoomani, Chairman Department of Mathematics Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 107 Baccalaureate Degrees by Department: 20 Master's Degrees by Department: 7

Teaching Assistantship 2700 (plus 6 Teaching tuition & fees)

University of Alabama, Tuscaloosa

UNIVERSITY, ALABAMA 35486 Robert L. Plunkett, Head Department of Mathematics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 2282 Baccalaureate Degrees by Department: 100 Master's Degrees by Department: 21

PH.D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 3; Analysis and Functional Analysis, 8; Computer Science and Numerical Analysis, 1; Applied Mathematics, 9; TOTAL: 21

Fellowship (8) 24	00-2800 12		NONE	NONE
Teaching Fellowship (6) 40	00-4000 9	\$212.50/sem	6	Teaching
Teaching Assistantship (30) 23	50-3150 9	\$212.50/sem	6	Teaching
Research Assistantship*				0
Scholarship (4) 17	50-2000 9	\$212.50/sem	NONE	NONE

^{*} Unknown at time of preparation.

ALASKA

University of Alaska

COLLEGE, ALASKA 99701 Robert W. Brown, Head Department of Mathematics Applications must be filed by May 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 3 Master's Degrees by Department: 2

Teaching Assistantship (6) 3150-3600 \$200/vr 4 Teaching number anticipated in 1970-1971)

(dollars)

12 mo.

TUITION if not included in stipend

SERVICE REQUIRED

Hrs/Week

Туре

ARIZONA

Arizona State University

TEMPE, ARI ZONA 85281 Nevin Savage, Chairman Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3029
Baccalaureate Degrees by Department: 39
Master's Degrees by Department: 14

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Toplogy, 7; Logic, 2; Analysis and Functional Analysis, 2; Differential Equations, 1. TOTAL: 18

Fellowship (8) Teaching Assistantship (49) Scholarship (10)	2400-2800* 2800-3500 Out of State	12 9	\$160/sem.	6	Teaching
	Fees				

^{*} Supplementary Teaching may be available.

Northern Arizona University

FLAGSTAFF, ARIZONA 86001 Charles E. Little, Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 900
Baccalaureate Degrees by Department: 23
Master's Degrees by Department: 13

Teaching Assistantship (6)	2250	9	res. \$272	10	Tutorial
			non. \$862		

Note on tuition: all graduate assistants pay fees of \$272 per year. Some waivers of non-resident fees (an extra \$590 per year) are granted-generally all our non-resident G.A.'s receive these waivers.

University of Arizona

TUCSON, ARIZONA 85721
Paul C. Fife, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 2950

Baccalaureate Degrees by Department: 38

Master's Degrees by Department: 32

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 7; Logic, 1; Analysis and Functional Analysis, 5; Probability and Statistics, 1; Applied Mathematics, 5. TOTAL: 20

Fellowship (6)	2000-3000	9-12		
Teaching Assistantship (60)	2400-3600	9-12	18	Teaching, etc.
Research Assistantship (10)	2400-3600		18	Research, etc.
Scholarship Tuition (6)				•

ARKANSAS

Arkansas State University

STATE UNIVERSITY, ARKANSAS 72467 J.L. Linnstaedter, Division Chairman Division of Mathematics and Physics Applications must be filed by April 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department:

Master's Degrees by Department:

5

Fellowship (2)	2400-3000	9	\$300
Teaching Assistantship (6)	2400-3000	9	\$300

TYPE STIPEND TUITION
of financial assistance (with Amount 9 or if not included SERVICE REQUIRED number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week T

University of Arkansas

FAYETTEVILLE, ARKANSAS 72701
James E. Scroggs, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1572
Baccalaureate Degrees by Department: 25
Master's Degrees by Department: 30

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 4; Analysis and Functional Analysis, 1; TOTAL: 7

Fellowship (10)	2400-3400	12		
Teaching Assistantship(30)	1350-3000	9	\$300	3-6 sem. hr./wk
Research Assistantshin (2)	3600	12	\$300	20hrs

CALIFORNIA

California Institute of Technology

PASADENA, CALIFORNIA 91109
Marshall Hall, Jr., Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 157
Baccalaureate Degrees by Department: 22
Master's Degrees by Department: 4

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 10; Geometry and Topology, 1; Analysis and Functional Analysis, 6; Probability and Statistics, 1; Computer Science and Numerical Analysis, 2. TOTAL; 20

Fellowship (11)	2400-2800	12	
Teaching Fellowship (5)	3400-3800	12	4 class hrs.
Teaching Assistantship (11)	2500-3000	9	4 class hrs.
Research Assistantship (2)	3000-3630	12	15 acad. yr/
			30 summer
Scholarship	2425		

The \mathcal{U} niversity of \mathcal{A} rizona \mathcal{D} epartment of \mathcal{M} athematics

 \mathscr{L} njoy the scenic southwest with its mild climate and abundant outdoor activities while studying mathematics at the University of Arizona.

The Department of Mathematics at the University of Arizona has received a generous Science Development Grant from the National Science Foundation. Funds from this grant will be used to establish graduate fellowships and to acquire special prominent lecturers who will conduct seminars for the benefit of the faculty and especially the graduate students. This seminar program will include the following topics: hydrodynamics, bifurcation, and stability theory (Spring, 1970); abstract harmonic analysis (Fall, 1970); near rings, rings, and group theory (Fall, 1970); fixed point theory (Spring, 1971). Graduate and research assistantships and some additional fellowships are also available.

 \mathcal{T} he department is now located in its own new, ultra-modern building which includes computer and library facilities for graduate instruction. Masters and doctoral programs are offered in a variety of pure and applied fields, including differential equations, algebra, number theory, topology, probability and statistics, analysis, functional analysis, continuum mechanics, and numerical analysis.

 \mathscr{A} pplication for assistantships and fellowships should be made prior to March 15. Applications for admission and any financial support may be obtained by writing to:

Professor Paul C. Fife, Acting Head Professor P. K. Bhattacharya Department of Mathematics University of Arizona Tucson, Arizona 85721

or

TYPE of financial assistance (with STIPEND

Amount 9 or

TUITION if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

12 mo. in stipend Hrs/Week

Type

California Institute of Technology

PASADENA, CALIFORNIA 91109 G.B. Whitham, Chairman Applied Mathematics Committee Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969 Master's Degrees by Department:

Teaching

PH.D. Degrees awarded during last three years by field of specialization: Applied Mathematics, 10. TOTAL: 10

Fellowship (5)	2400-2800	12	+ Tuition	
Teaching Assistantship (7)	2500-3000	9	*	4 class hrs.
Research Assistantship (2)	2400-2800	9	*	

^{*} Tuition Scholarship is usually awarded with Teaching Assistantship.

California State College at Hayward

HAYWARD, CALIFORNIA 94542 Bruce E. Trumbo, Chairman Department of Statistics

Teaching Assistantship (5)	2500-3500	9	15
		J	10
Reader (8)	1000-2500	12	15

California State College at Long Beach

LONG BEACH, CALIFORNIA 90804 C.W. Austin, Chairman Department of Mathematics Applications must be filed by April 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 3675 Baccalaureate Degrees by Department: 76 Master's Degrees by Department:

4-7

Teaching Assistantship (8) 1952-3416 9 \$68.50*

California State College at Long Beach

LONG BEACH, CALIFORNIA 90801 Herbert Stone, Chairman Department of Statistics

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department:

Teaching Assistantship (6)

9

12

California State College at Los Angeles

LOS ANGELES, CALIFORNIA 90032 E.J. Eckert, Chairman Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Department: Master's Degrees by Department:

Graduate Assistant (10)

3060-3336

10000

\$60 per qtr. *

Teaching

^{*} Plus non-resident tuition of \$30 per unit to maximum of \$445

^{*} Non-resident additional fee of \$20.00 per unit. Maximum of \$297.00 per quarter.

Department of Mathematics Applications must be filed by February 15, 1970

2400-2800+ 12 Fellowship (15) dependency allow. 10 Research Assistantship (2) 2400 up 12

Fresno State College

FRESNO, CALIFORNIA 93726 Burke Zane, Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 300 Baccalaureate Degrees by Institution: 10 Baccalaureate Degrees by Department:

Tuition grants to needy (5)

TYPE STIPEND TUITION of financial assistance (with Amount 9 or if not included SERVICE REQUIRED number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week Туре

Loyola University of Los Angeles

LOS ANGELES, CALIFORNIA 90045 B.R. Wicker, Chairman Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1968 Baccalaureate Degrees by Institution: 2400 Baccalaureate Degrees by Department: 25 Master's Degrees by Department: 2

Graduate Assistant (6)

1840

None

Teaching Lab.

Sacramento State College

SACRAMENTO, CALIFORNIA 95819 John L. Wulff, Chairman Department of Mathematics and Statistics Applications must be filed by April 15, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Insitution: 2660 Baccalaureate Degrees by Department: 35 Master's Degrees by Department: 4

Teaching Assistantship (6) Graduate Assistant (6)

2800 2100

10

20

Lab. Assistant

and Reading

San Diego State College

SAN DIEGO, CALIFORNIA 92115 C. V. Holmes, Chairman Department of Mathematics Applications must be filed by March 31, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Insitution: Baccalaureate Degrees by Department: Master's Degrees by Department:

3739 134 33

Teaching Assistantship (20)

2928-3221

\$67.50

per. sem.

Teaching

Teaching

THE CLAREMONT COLLEGES

Claremont Graduate School was awarded an N.S.F. Departmental Development Grant to develop a new Ph.D. program in mathematics. This grant makes possible a number of fellowships. C.G.S. offers the Ph.D. in 14 fields and the M.A. in 23 fields. Claremont Men's College, Harvey Mudd College, Pitzer College, Pomona College, and Scripps College have long been known for the quality of their faculties and graduates. The following members of the Graduate Faculty in Mathematics (C.G.S. mathematicians and most of those at the other Claremont Colleges) are grouped by major fields of interest, with the institution of their Ph.D. indicated.

Algebra: B. Beechler (Iowa), G. Bradley (Caltech), M. Henriksen (Wisconsin), J. Lucke (Duke), A. Pixley (Berkeley). Analysis: S. Busenberg (Ill. Inst. Tech.), J. Ferling (U.S.C.), E. Fickas (Berkeley), H. Hamilton (Brown), E. Tolsted (Brown), A. White (Stanford). Functional Analysis: S. Grabiner (Harvard), R. Ives (U. Wash.), R. C. James (Caltech), H. Mullikin (Wisconsin), G. Orland (Berkeley). Differential Equations: R. Borrelli (Berkeley), C. Coleman (Princeton), K. Cooke (Stanford). Geometry and Topology: J. Greever (Virginia), R. Williamson (Berkeley), P. Yale (Harvard). Probability and Statistics: D. Bentley (Stanford), H. Krieger (Caltech), J. Myhre (Stockholm), H. M. Walker (Columbia). Number Theory: L. Durst (Caltech). Computer Science: F. Weingarten (Oregon State). Philosophy of Mathematics: G. Henry (C.G.S.). Visiting Professors and Guest Lecturers for 1969-71: R. D. Anderson, Mary Cartwright, E. Hewitt, W. Jurkat, J. Kelley, V. Klee, J. Korevaar, W. A. J. Luxemburg.

For application blanks and a booklet of information, write to

Professor R. C. James Claremont Graduate School Claremont, California 91711

TYPE of financial assistance (with

STIPEND Amount 9 or

TUITION if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dellars) 12 mo.

in stipend

Hrs/Week

Type

San Francisco State College

SAN FRANCISCO, CALIFORNIA 94132 Newman Fisher, Chairman Department of Mathematics Applications must be filed by - open

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 2500 Baccalaureate Degrees by Department: 50 Master's Degrees by Department:

Graduate Assistant (3)

\$116

5

3

San Jose State College

SAN JOSE, CALIFORNIA 95114 Lester H. Lange, Chairman Department of Mathematics Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 3606 Baccalaureate Degrees by Department: 96 Master's Degrees by Department: 12

Teaching Fellowship (9)

2200-2310

9/sem.

\$70

Teaching

Stanford University

STANFORD, CALIFORNIA 94305 Ralph Phillips, Chairman Department of Mathematics Applications must be filed by January 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1449 Baccalaureate Degrees by Department: Master's Degrees by Department: 18

PH. D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 6; Logic, 8; Analysis and Functional Analysis, 19; Probability and Statistics, 7; Computer Science and Numerical Analysis, 1; Applied Mathematics, 13; Combinatorial Analysis, 1. TOTAL: 55

Fellowship (15)

2400-2800 ** 12

Graduate Assistantship (35) *

2600-2850

- * Graduate Assistants serve for one quarter as Teaching Fellows, for one quarter as Teaching Assistants, and for one quarter as Research Assistants.
- ** In many cases Fellows serve as Teaching Assistants or Teaching Fellows for one quarter for an additional stipend of \$800-\$1,000.
- *** In general additional stipends of \$800 are available for study in the summer quarter.
- **** 3 hrs./week teaching for two quarters; one quarter research with no formal duties.

Stanford University

STANFORD, CALIFORNIA 94305 George E. Forsythe, Chairman Department of Computer Science Applications must be filed by January 15, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 15. TOTAL: 15

Fellowship (10)	2400-2800	12	None		
Teaching Fellowship (1)	3000-3000	9	None	20	Actual hours
Teaching Assistantship (9)	2790-3060	9	None	20	Actual hours
Research Assistantship (42)	2790-3195	9	None	20	Actual hours

TYPE STIPEND TUITION
of financial assistance (with Amount 9 or if not included SERVICE REQUIRED
number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week Type

Stanford University

STANFORD, CALIFORNIA 94305 Rupert G. Miller, Jr., Chairman Department of Statistics Applications must be filed by January 15, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1449
Baccalaureate Degrees by Department: 5
Master's Degrees by Department: 46

PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 23. TOTAL: 23

Fellowship (20)	2400	9	7
Teaching Assistantship (6)	2400	9	7
Research Assistantship (13)	2400	9	7

University of California, Berkeley

BERKELEY, CALIFORNIA 94720
J.W. Addison, Jr., Chairman
Department of Mathematics
Applications for fellowships must be filed by
December 15, 1969 and for assistantships by February
1, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 4479

Baccalaureate Degrees by Department: 135

Master's Degrees by Department: 56

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 19; Geometry and Topology, 35; Logic, 15; Analysis and Functional Analysis, 47; Applied Mathematics, 12. TOTAL: 128

Fellowship (25)	2400-3000*	9	**		
Teaching Fellowship (4)***	3402-3501	9	**	16-20	Teaching
Teaching Assistantship (48)	3402-3501	9	**	14	Teaching
Research Assistantship (30)	3600-3720	12	**		Ü
50% Time Associates (9)	3576-3762	9	**	14	Teaching
50% Time Acting/	4182	9	**	14	Teaching
Instructorship (6)					9

^{*}Plus allowance for dependents.

University of California, Berkeley

BERKELEY, CALIFORNIA 94720 E.L. Scott, Chairman Department of Statistics Applications for assistantships must be filed by February 1, 1970 and for fellowships by December 15, 1969 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 4479
Baccalaureate Degrees by Department: 9
Master's Degrees by Department: 14

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 22; Biostatistics, 3. TOTAL: 25

Fellowship (23)	2000-3600	9 &		variable	
		12			
Teaching & Research Assistantship combination (36)	3051-3100	9	20	variable	

^{**} University Registration fees, \$100 per quarter; Berkeley Campus fees, \$5.50 per quarter; Non-resident tuition fee, \$400 per quarter (a limited number of waivers are available); foreign student health insurance charge, \$9 per quarter.

^{***} Community Teaching Fellows for teaching minority groups in public schools. We also have a few similar postitions in the SEED project.

TYPE	STIPEND		TUITION		
of financial assistance (with	Amount	9 or	if not included	SERVICE	REQUIRED
number enticipated in 1970-1971)	(dollars)	12 ma	in etinard	Hre/Wook	Type

University of California, Davis

DAVIS, CALIFORNIA 95616
E.B. Roessler, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1646
Baccalaureate Degrees by Department: 55
Master's Degrees by Department: 4

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Analysis and Functional Analysis, 5; Probability and Statistics, 2. TOTAL: 11

Fellowship (8) Teaching Fellowship (2)	2000-2800 3400	12 9	\$1200 \$1200		
Teaching Assistantship (24)	3400	9	\$1200 \$1200	16	Teaching, office
Scholarship (1)	1200-2000	9	\$1200		hrs., grading

University of California, Irvine

IRVINE, CALIFORNIA 92664
Ray A. Kunze, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 568
Baccalaureate Degrees by Department: 42
Master's Degrees by Department: 11

PH. D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 1; Analysis and Functional Analysis, 2. TOTAL: 3

Fellowship (7)	2400-2800*	12	**	variable	Res. for Ph.D
Teaching Fellowship (2)	3402-3501	9	**	20	Community Teaching
Teaching Assistant (14)	3402-3501	9	**	20	Teaching
Research Assistantship (4)	3600-3720	12	**	20	Research

^{*} Minimum/maximum plus \$500 each dependent.

University of California, Los Angeles

LOS ANGELES, CALIFORNIA 90024 Earl A. Coddington, Chairman Department of Mathematics Applications must be filed by January 31, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 7176
Baccalaureate Degrees by Department: 149
Master's Degrees by Department: 37

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 7; Geometry and Topology, 7; Logic, 5; Analysis and Functional Analysis, 11; Probability and Statistics, 6; Computer Science and Numerical Analysis, 6; Applied Mathematics, 1; Diff. Equations, 3; Riemann Surfaces, 4; Convexity, 4; Diff. Inequalities, 2. TOTAL:56

Fellowship (20)	1800-2400	9/12	Non-resident fee \$400/gtr.		
Teaching Fellowship (4) Teaching Assistantship (43)	3447-4152 3447-4152	9 mos. 9 mos.	Non-resident fee \$400/atr.	20	Teaching
Research Assistantship (10)	4050-4476		ree \$400/qtr.		

^{** \$400} per qtr. non-resident; resident incidental fee \$100--usually waived for above titles.

TYPE	STIPEND		TUITION		
of financial assistance (with	Amount	9 or	if not included	SERVIC	E REQUIRED
number anticipated in 1970-1971)	(dollars)	12 mo.	in stipend	Hrs/Week	Туре

University of California, Riverside

RIVERSIDE, CALIFORNIA 92502	NUMBER OF DEGREES AWARDED IN 1969	
F.T. Metcalf, Chairman	Baccalaureate Degrees by Institution:	646
Department of Mathematics	Baccalaureate Degrees by Department:	36
Applications must be filed by February 1, 1970	Master's Degrees by Department:	15

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology, 4; Analysis and Functional Analysis, 4; Probability and Statistics, 4; Computer Science and Numerical Analysis, 1; Applied Mathematics, 5. TOTAL: 23

Fellowship (8)	2200-2800	11	
	2200 2000		
Teaching Fellowship (6)	3402-3501	q	6
reacting removating (o)	D402 0001	U	9
Teaching Assistantship (14)	3402-3501	Q.	6
reaching Assistantiship (14)	3404-3301	J	o

University of California, San Diego

LA JOLLA, CALIFORNIA 92037	NUMBER OF DEGREES AWARDED IN 1969	
Helmut Röhrl, Chairman	Baccalaureate Degrees by Institution:	206
Department of Mathematics	Baccalaureate Degrees by Department:	21
Applications must be filed by February 15, 1970	Master's Degrees by Department:	13

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Analysis and Functional Analysis, 4. TOTAL: 6

Teaching Fellowship 4158 9	
Teaching Assistantship 3402 9 1/2 time Teachin	g
Research Assistantship 3600-3720* 11 1/2 time	

^{*}In summer additional compensation of \$600 may be received.

University of California, Santa Barbara

SANTA BARBARA, CALIFORNIA 93106 David L. Outcalt, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1939

Baccalaureate Degrees by Department: 48

Master's Degrees by Department: 9

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology, 4; Analysis and Functional Analysis, 1. TOTAL: 11

Fellowship (10)	2400-2800	12	\$981/yr		
Teaching Fellowship	4158	9)	(for out-		
Teaching Assistantship (19)	3402-3501	9 }	of -state	6	Teaching
Research Assistantship (8)	3600-3720	11)	students)		, and the second
Community Teaching Fellows (4)	3402-3501	9´	,		

TYPE	STIPEND		STIPEND TUITION		
of financial assistance (with	Amount	9 or	if not included	SERVICE	REQUIRED
number anticipated in 1970-1971)	(dollars)	12 mo.	in stinend	Hrs/Week	Type

University of Southern California

LOS ANGELES, CALIFORNIA 90007
H.A. Antosiewicz, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1462
Baccalaureate Degrees by Department: 34
Master's Degrees by Department: 15

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 6; Analysis and Functional Analysis, 2; Probability and Statistics, 1. TOTAL: 11

Fellowship (6)	2400-2800	12		
Teaching Fellowship (4)	2550-2850	9	4 units	Teaching
Teaching Assistantship (10)	3000-3400	9	4-6 units	Teaching
Research Assistantship (10)	3000-3400	9	20 hrs.	Research
Teaching/Research	3000-3400	9	4 units	Teaching/
Assistantships (8)				Research

COLORADO

Colorado School of Mines

GOLDEN, COLORADO 80401

Joseph R. Lee, Head

Department of Mathematics

Applications must be completed before March 15.1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution

Baccalaureate Degrees by Department:

Master's Degrees by Department:

 Fellowship (3)
 2400
 9
 Included

 Teaching Assistantship (5)
 2600
 9
 Included
 15
 Teaching

 Research Assistantship (3)
 2000-3000
 9
 \$300-1100
 20-30
 Research

230

19

1

Colorado State College

FORT COLLINS, COLORADO 80521

Milton E. Rose, Head

Department of Mathematics & Statistics

Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 2247

Baccalaureate Degrees by Department: 106

Master's Degrees by Department: 78

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Analysis and Functional Analysis, 3; Probability and Statistics, 8; Applied Mathematics, 1. TOTAL: 13

Fellowship (6) (Math)	2400-3500	12		
(10) (Stat)	2400-4500	12	12	Res.;class work
Teaching Assistantship (5)	2430-2700	9	12	Teaching (Stat)
(5)	3000	9	10	Teaching(Com.Sci)
(20)	2400-3600	9	varies	Teaching (Math.)
Research Assistantship (2)	2400-4200	9-12	20	Research (Stat)
Scholarship (1)	tuition waive	er		

STIPEND Amount 9 or (dollars) 12 mo. TUITION if not included in stipend

SERVICE REQUIRED
Hrs/Week Ty

University of Colorado

BOULDER, COLORADO 80302 S.M. Ulam, Associate Chairman Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2999
Baccalaureate Degrees by Department: 78
Master's Degrees by Department: 19

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 9; Logic, 3; Analysis and Functional Analysis, 7; Probability and Statistics, 1; Computer Science and Numerical Analysis, 1; Applied Mathematics, 1. TOTAL: 22

Fellowship (25)	2500-2800	9			Full time study
Teaching Assistantship (70)	2650-2650	9	In State	6	Teaching
Research Assistantship (5)	2850-2850		NONE	20	Research

University of Colorado

BOULDER, COLORADO 80302 E.R. Krueger, Acting Chairman Institute for Computing Science Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2999
Master's Degrees by Department: 1

Teaching Assistantship (7)	2650	9	No	20
Programming Assistant (3)	2800	9	Yes	20

University of Denver

DENVER, COLORADO 80210
Herbert J. Greenberg, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1310
Baccalaureate Degrees by Department: 35
Master's Degrees by Department: 8

Fellowship (3)				
Teaching Assistantship (12)	2500-2900	9	5-7	Teaching Asst.
Research Assistantship (7)	3800-4400	12	1/2 time	Research Asst.

Western State College of Colorado

GUNNISON, COLORADO 81230
William E. Dorgan, Chairman
Division of Natural Science and Mathematics
Applications must be filed by April 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 396
Baccalaureate Degrees by Department: 25

Teaching Assistantship (1)	1800	9	Instate \$		One 3 hour class
			Outstate	\$834	

CONNECTICUT

Central Connecticut State College

NEW BRITAIN, CONNECTICUT 06050 Richard L. Mentzer, Chairman Department of Mathematics Applications must be filed by May 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 789

Baccalaureate Degrees by Department: 60

Master's Degrees by Department: 24

6

Teaching Assistantship (4)

1000-2000 9 None

University of Bridgeport

BRIDGEPORT, CONNECTICUT 06602 H. Margaret Elliott, Chairman Department of Mathematics Applications must be filed by April 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 960
Baccalaureate Degrees by Department: 19

Teaching Assistantship (2) \$2000+ 12 6 Teaching or other equivalent service

Resident Assistantships Tuition, Room and Board, small stipend 6 Teaching or other equivalent service Resident Asst. for a dorm

University of Connecticut

STORRS, CONNECTICUT 06268
Elliot S. Wolk, Head
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2177
Baccalaureate Degrees by Department: 77
Master's Degrees by Department: 5

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 1; Logic, 1. TOTAL: 4

Fellowship (5)	2400-3000	9				
Teaching Fellowship (8)	2910-3750	9	\$290	3	Teaching	
Teaching Assistantship (10)	2910-3750	9	\$290	4-6	Teaching	
Research Assistantship (2)	2910-3750	9	\$290	10-20	Research	
Scholarship (3)	750-1000	9	\$290			

University of Connecticut

STORRS, CONNECTICUT 06268
Gottfried E. Noether, Head
Department of Statistics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2177
Master's Degrees by Department: 1

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 7. TOTAL: 7

Fellowship (7)	2000-3600	variable	\$290*		
Teaching Fellowship (3)	2910-3750	9	\$290*	4	discussion
Teaching Assistantship (4)	2910-3750	9	\$290*	8	discussion
Research Assistantship (1)	2910-3750	9	\$290*		

^{*}plus \$300 for out-of-state

STIPEND TUITION if not included of financial assistance (with Amount 9 or

SERVICE REQUIRED number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week Туре

University of Hartford

WEST HARTFORD, CONNECTICUT 06117 Cecilia Welna, Chairman Department of Mathematics Applications must be filed by April 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 226 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department:

11

Fellowship (2) 2400 9 6

Wesleyan University

MIDDLETOWN, CONNECTICUT 06457 W. Wistar Comfort, Chairman Department of Mathematics Applications must be filed by March 15, 1969 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 300 Baccalaureate Degrees by Department: 5 Master's Degrees by Department: 2

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Geometry and Topology, 4; Analysis and Functional Analysis, 1. TOTAL 7

2450-2800 9 waived ≨ 5 Quiz Section Fellowship (3) ≦5 Teaching Assistantship (11) 2450-2800 9 waived and/or Research Assistantship (3) 2450-2800 waived Paper Grading

Remark: Dependency allowances, and summer stipends, are frequently available upon request.

Four Teaching Assistantships have been made available as of January 1, 1970. Applicants should write the Chairman immediately.

Yale University

NEW HAVEN, CONNECTICUT 06520 William S. Massey, Chairman Department of Mathematics Applications must be filed by January 20, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1017 Baccalaureate Degrees by Department: 30 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 9; Geometry and Topology, 6; Analysis and Functional Analysis, 14. TOTAL: 29

1800-1800 Fellowship (5) 9 1800-1800 9 Research Assistantship (17) 2400-2800 12 1800-2100 9 NSF Traineeships (7) 2400-2800 12

Note: 3rd and 4th year students may earn \$600-1000 additional for teaching.

THE UNIVERSITY OF HARTFORD · · · WEST HARTFORD, CONNECTICUT

offers M. A. and M. A. T. degree programs in Mathematics.

Teaching fellowships are available paying \$2400 for a nine month period. For teaching fellows, tuition and fees are waived.

For further information write to:

Dr. Cecilia Welna, Chairman **Department of Mathematics University of Hartford** West Hartford, Connecticut 06117 STIPEND

Amount 9 or

TUITION if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

12 mo.

in stipend

Hrs/Week

Type

Yale University

NEW HAVEN, CONNECTICUT 06520 Leonard J. Savage, Chairman Department of Statistics Applications must be filed by January 20, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 3. TOTAL: 3

Fellowship (15)

12

Included

None

DELAWARE

University of Delaware

NEWARK, DELAWARE 19711 Russell Remage, Jr., Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1246 Baccalaureate Degrees by Department: 37 Master's Degrees by Department: 17

PH.D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 2. TOTAL: 2

Fellowship (9)	
Teaching Assistantship (25)	
Research Assistantship (5)	

400-2800	12
500-3000	9
000-4500	12

DISTRICT OF COLUMBIA

American University

2

4

WASHINGTON, D.C. 20016 Steven H. Schot, Chairman Department of Mathematics and Statistics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 1153 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: Master's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Probability and Statistics, 1. TOTAL: 2

Fellowship (1)	2800	12	\$12/cr.	None
Teaching Assistantship (3)	2800	10	\$12/cr.	15 hrs. per.wk.

Catholic University of America

WASHINGTON, D.C. 20017 Raymond W. Moller, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 535 Baccalaureate Degrees by Institution: 10 Baccalaureate Degrees by Department: 11 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Analysis and Functional Analysis, 8; Probability and Statistics, 6. TOTAL: 16

Fellowship (8) 1800–2800 Teaching Assistantship (10) 2400 Research Assistantship (2) 3000 Scholarship (2) Tuition only	9-12 9 9 Half (\$1000)	None 7 None None	Teaching
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TYPE of financial assistance (with STIPEND

TUITION

if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

Amount (dollars)

9 or 12 mo

in stipend

Hrs/Week

George Washington University

WASHINGTON, D.C. 20006 Hewitt Kenyon, Chairman Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1374 Baccalaureate Degrees by Department: 10 Master's Degrees by Department: 2

PH. D. Degrees awarded during last three years of field of specialization: Geometry and Topology, 1; Logic, 1. TOTAL: 2

Fellowship (2) 2400-2800 9 Teaching Assistantship (8) 2500+tuition 9 Teaching Research Assistantship (1)

George Washington University

WASHINGTON, D.C. 20006 S. Kullback, Chairman Department of Statistics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1374 Baccalaureate Degrees by Department: Master's Degrees by Department:

PH. D. Degrees awarded during last three years of field of specialization: Probability and Statistics, 6. TOTAL:

Georgetown University

WASHINGTON D.C. 20007 Arnold Stokes, Chairman Department of Mathematics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 906 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 7. TOTAL: 7

Fellowship (3)	2800-3200	12	None	None	
Teaching Fellowship (11)	2600-3000	9	None	10-12	Teaching one
Fellow Computer Center (1)	2600-3000	9	None	10	course

FLORIDA

Florida Atlantic University

BOCA RATON, FLORIDA 33432 John M. Freeman, Chairman Department of Mathematics Applications must be filed by April 1, 1970 Late applications will be considered

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 19

Teaching Assistantship (6-8)	2500-3000	9	\$150/qtr.	3-6	Teaching
	-000		φ=00/ qυ= .	0 0	I Cucining
Research Assistantship (4)	2500-3000	Q.	\$150/atr.	12-20	Research
Hesearca Assistantiship (+)	2000-0000	J	φ±30/ qtr.	12-20	research

Florida Institute of Technology

MELBOURNE, FLORIDA 32901 D.R. Clutterham, Head Department of Mathematical Sciences Applications must be filed by February 1970 NUMBER OF DEGREES AWARDED IN 1969 90 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 18 Master's Degrees by Department: 8

Teaching 12 - 16incl. 5000 Teaching Assistantship (8)

Florida State University

TALLAHASSEE, FLORIDA 32306 O.G. Harrold, Chairman Department of Mathematics Applications must be filed by January 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 3442 Baccalaureate Degrees by Department: 73 Master's Degrees by Department: 22

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 11; Geometry and Topology, 6; Analysis and Functional Analysis, 8. TOTAL: 25

Fellowship (15)	2400-3600	9 or	None		
Teaching Assistantship (25) Research Assistantship (5)	2850-3000 3000-3600	9 9 or 12	None None	20 20	Teaching Research

Florida State University

TALLAHASSEE, FLORIDA 32306 E.P. Miles, Jr, Director Computing Center Applications must be filed by March 1, 1970

Marshing Assistantship (4)	3800-4300	12	6	20
Teaching Assistantship (4)	3000-4300	12	0	
Research Assistantship (6)	3800-4300	12		20
Research Assistantship (0)	3000-1000			

Florida State University

TALLAHASSEE, FLORIDA 32306 Ralph A. Bradley, Head Department of Statistics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 3442 Baccalaureate Degrees by Department: 2 8 Master's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 15. TOTAL: 15

	,				
Fellowship (26) *	2400-2800	12	None		
Teaching Assistantship (4)	2700-3150	9	\$175/qtr.	20	Teaching
Research Assistantship (8)	3600-4200	12	175/qtr.	20	Research

^{*}Some fellowships and traineeships have additional dependents' allowances.

University of Florida

GAINESVILLE, FLORIDA 32601 A.R. Bednarek, Chairman Department of Mathematics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 3561 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 70 11 Master's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Analysis and Functional Analysis, 1; Applied Mathematics, 1; Topological Algebra, 5. TOTAL: 11

- 11 1 (14)	2400-3150	12	\$175/qtr.		Non-working
Fellowship (14)		14			Non-working
Teaching Fellowship (4)	2400-3000	12	\$175/qtr.		MOII-WOLKING
			01 FF /mtm	15-20	Teaching
Tooching Aggistantship (45)	2574-3420	9	\$175/qtr.	15-20	1000000

TYPE STIPEND TUITION
of financial assistance (with Amount 9 or if not included SERVICE REQUIRED number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week Type

University of Florida

GAINESVILLE, FLORIDA 32601 William Mendenhall, Chairman Department of Statistics NUMBER OF DEGREES AWARDED BY 1969
Baccalaureate Degrees by Institution: 3561
Baccalaureate Degrees by Department: 6
Master's Degrees by Department: 5

Fellowship (2) (NSF)	2400-2680 12	Yes		None
(2) (G.S.)	2700-3150 9	No		None
Teaching Assistantship (15)	350-400/mo. 9	No	20	Teaching & Tutoring
Research Assistantship (3)	350-400/mo. 9	No	20	Consulting &

University of Miami

CORAL GABLES, FLORIDA 33124 Edwin N. Duda, Acting Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2151
Baccalaureate Degrees by Department: 38
Master's Degrees by Department: 13

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory,2; Geometry and Topology, 3; Analysis and Functional Analysis, 1. TOTAL: 6

Fellowship (15)	2000-3000 *	9	Waived		
Teaching Assistantship (40)	2500-3000	9	Waived	6	Teaching
Research Assistantship (5)	3150-4350	9-12	Waived	15	Research

^{*} Excluding dependency allowances.

University of South Florida

TAMPA, FLORIDA 33620 Jogindar S. Ratti, Chairman Department of Mathematics Applications must be filed by April 15, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2190
Baccalaureate Degrees by Department: 44
Master's Degrees by Department: 1

Teaching Assistantship (20)	2700-3600	9	Yes	6	hrs.
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GEORGIA

Emory University

ATLANTA, GEORGIA 30322
Trevor Evans, Chairman
Department of Mathematics
Applications must be filed by August 18, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 531
Baccalaureate Degrees by Department: 28
Master's Degrees by Department: 7

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology, 1; Analysis and Functional Analysis, 4; TOTAL: 10

Fellowship (16)	2000-2500	9 or 12	Waived
Teaching Assistantship (16)	2150-4500	9	Waived

TYPE

STIPEND

9 or

12 mo.

TUITION

Amount (dollars) if not included in stipend

SERVICE REQUIRED
Hrs/Week T

.

Emory University

of financial assistance (with

number anticipated in 1970-1971)

ATLANTA, GEORGIA 30322
W. Buell Evans, Acting Chairman
Department of Statistics and Biometry
Applications must be filed by February, 1970

PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 1. ${\tt TOTAL:}\ 1$

Fellowship (5)

2000

10

\$660/qtr.

Georgia Institute of Technology

ATLANTA, GEORGIA 30332 B.M. Drucker, Director Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1139
Baccalaureate Degrees by Department: 26
Master's Degrees by Department: 5

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 1; Applied Mathematics, 2. TOTAL: 4

Teaching Assistantship (20) NSF Traineeship (3) 2150-4125

9

\$405

5-10

Georgia Institute of Technology

ATLANTA, GEORGIA 30332 Vladimir Slamecka, Director School of Information/Computer Science Applications must be filed by April 15, 1970 for Financial Aid March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1133
Master's Degrees by Department: 51

PH.D. Degrees awarded during last three years by field of specialization: TOTAL: 56

Fellowship (5)	2650-5000	12	Yes	None Regu	ired	-
Teaching Assistantship (8) (pre-M.S.)	8400	12	Yes	13*	Teaching	
Research Assistantship (12)	8400	12	Yes	13*	Research	
Research Associateship (8) (pre-doctoral)	11000	12	(partial)	13*	Research	

^{*} Appointments normally made on a one-third time basis.

Georgia Southern College

STATESBORO, GEORGIA 30458 Earl Lavender, Acting Head Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 925
Baccalaureate Degrees by Department: 42

Research Assistantship (5) 1900-2100 9 \$90 10

TYPE STIPEND TUITION of financial assistance (with Amount 9 or if not included SERVICE REQUIRED number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week

Georgia State University

ATLANTA, GEORGIA 30303 Jan List Boal, Head Department of Mathematics Applications must be filed by May 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1095 Baccalaureate Degrees by Department: Master's Degrees by Department:

73

Teaching Assistantship (3) 2200-2400 \$7 per qt. hr. 10 Teaching one course or equivalent

University of Georgia

ATHENS, GEORGIA 30602 J.G. Horne, Head Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969 3269 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 78 Master's Degrees by Department: 5

PH. D. Degrees awarded during last three years of field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 9; Analysis and Functional Analysis, 1; Applied Mathematics, 1. TOTAL: 13

2600-4000 \$159/qtr. Teaching Assistantship (30) 9 mo. 5-8 2400-3200 9/12 12 Research Assistantship (15) \$159/qtr. Scholarship (10) 2400-2800 9 mo.

West Georgia College

CARROLLTON, GEORGIA 30117 C.R. Pittman, Acting Head Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 432 Baccalaureate Degrees by Department: 11

Teaching Assistantship (5) 2000 5 Teaching must pay

HAWAII

University of Hawaii

HONOLULU, HAWAII 96822 Herbert S. Bear, Jr., Chairman Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1590 Baccalaureate Degrees by Department: 50 Master's Degrees by Department: 2

Teaching Assistantship (15) 3300-3800 exempt 6 Teaching Part-time Instructor (3) 3800-5000 9 partly 6 Teaching exempt

TYPE of financial assistance (with number anticipated in 1970-1971)

STIPEND (dollars)

Amount 9 or

12 mo.

TUITION

if not included in stipend

SERVICE REQUIRED

Hrs/Week

Type

IDAHO

Idaho State University

POCATELLO, IDAHO 83201 John Hilzman, Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 560 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 12 Master's Degrees by Department:

Teaching Assistantship (5)

2200-2300

None

5

Teaching

University of Idaho

MOSCOW, IDAHO 83843 Howard E. Campbell, Head Department of Mathematics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1108 Baccalaureate Degrees by Department:

Master's Degrees by Department:

6

26 10

6

PH.D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 1. TOTAL: 1

Teaching Assistantship (13) Scholarship (2)

2200-3000

\$500

Teaching

NASA, NSF

500 2400*2800*

*plus dependency allowance

Ph. D. PROGRAM AT HAWAII

STARTS SEPTEMBER, 1970 T. A.'s \$3300—\$3800 **TUITION EXEMPT**

A number of half-time instructorships are available for suitably qualified advanced Ph. D. candidates:

\$3,800—\$5,000

WRITE:

Department of Mathematics University of Hawaii Honolulu, Hawaii 96822

TYPE	STIP	END	TUITION		
of financial assistance (with	Amount	9 or	if not included	SERVICE	E REQUIRED
number anticipated in 1970-1971)	(dollars)	12 mo.	in stipend	Hrs/Week	Туре

ILLINOIS

Bradley University

PEORIA, ILLINOIS 61606
Marvin G. Moore, Head
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1000
Baccalaureate Degrees by Department: 20

Teaching Assistantship (2) 2100 9 6 Teaching

Chicago State College

CHICAGO, ILLINOIS 60621
F. Lane Hardy, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 658
Baccalaureate Degrees by Department: 22
Master's Degrees by Department: 10

Teaching Assistantship (2) 3000-6000 10 Waived Full 30 Teaching & Half 15 Tutoring

DePaul University

CHICAGO, ILLINOIS 60614
Michael Wichman, Acting Chairman
Department of Mathematics
Applications must be filed by

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1022
Baccalaureate Degrees by Department: 37
Master's Degrees by Department: 8

Teaching Assistantship (2) 2200 9 20

Eastern Illinois University

CARLESTON, ILLINOIS

A.J. DiPietro, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1000
Baccalaureate Degrees by Department: 80
Master's Degrees by Department: 7'

Teaching Assistantship (2)	3600	9	\$65/qtr.	6	Teaching
Scholarship (3) Other (10) *	1870 3100-5000	12 12		4-8	Teaching
Graduate Assistant (5)	3100	12		12	Miscellaneous

^{*} Participants in the Specialist in College Teaching degree program.

түре	STIPE	ND	TUITION			
of financial assistance (with	Amount	9 or	if not included	SERV	VICE REQUIRE	D
number anticipated in 1970-1971)	(dollars)	12 mo.	in stipend	Hrs/Week		Туре
Illinois Institute of Tech	nology					
CHICAGO, ILLINOIS 60616 Haim Reingold, Chairman Department of Mathematics Applications must be filed by April	l 1, 1970		Baccalaure Baccalaure	DEGREES AW. eate Degrees by eate Degrees by Degrees by Dep	y Department:	9 647 59 16
PH.D. Degrees awarded during las Geometry and Topology, 2; Analys Mathematics, 5. TOTAL: 22						
Fellowship (18) 36	500	12				
Teaching Assistantship (40) 27	700 800	9 12		6-7	Teaching	
Illinois Institute of Tech	nology					
CHICAGO, ILLINOIS 60616 Peter G. Lykos, Acting Head Information Science Center Applications must be filed by Febr	uary 1, 197	70		DEGREES AW. ate Degrees b	ARDED IN 196 y Institution:	9 647
	·					
Teaching Assistantship (10) 24	:00 :00 :00	9 9 9		20 20 20	Research Teaching Research	
Illinois State University						
NORMAL, ILLINOIS 61761			NUMBER OF	DEGREES AW.	ARDED IN 196	9
Clyde T. Mc Cormick, Head			Baccalaure	ate Degrees b	y Institution:	1684
Department of Mathematics Applications must be filed by Marc	h 1, 1970			ate Degrees by Degrees by Dep		116 24
Teaching Fellowship (4) 36	000	9		6-7		
	.60	9		10		
Northeastern Illinois St	ate Coll	ege				
CHICAGO, ILLINOIS 60625			NUMBER OF	DEGREES AWA	ARDED IN 196	9
Louis M. Weiner, Chairman				ate Degrees b		674
Department of Mathematics Applications must be filed by Marc	h 15, 1970			ate Degrees by egrees by Dep		45 49
Teaching Assistantship (1) \$2	75 per mo.	12	incl.	15	Tutoring	
Northern Illinois Univer	rsity					
DE KALB, ILLINOIS 60115					ARDED IN 196	9
Donald R. Ostberg, Head				ate Degrees by		3067
Department of Mathematics Applications must be filed by July	15, 1970			ate Degrees by egrees by Dep		113 22
Teaching Assistantship (30)	2340-2880			12	6 3	
Summer Assistantship (17)	520	2		6	3	

STIPEND

Amount 9 or

TUITION if not included in stipend

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

12 mo.

Hrs/Week

Type

Northwestern University

EVANSTON, ILLINOIS 60201 Ralph P. Boas, Chairman Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1204 32 Baccalaureate Degrees by Department: Master's Degrees by Department: 46

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 7; Geometry and Topology, 3; Analysis and Functional Analysis, 6; Probability and Statistics, 1; Applied Mathematics, 2. TOTAL: 19

Teaching Fellowship (62)	2300 + Tuition 9	\$1590-1800	4-8	
		\$1 800		
Research Assistantship (13)	2300 + Tuition 9	\$1590-1800	4-8	
- ()		\$1800		

Southern Illinois University

CARBONDALE, ILLINOIS 62901 John M. H. Olmsted, Chairman Applications must be filed by February 1, 1970; late applicants will be considered for 1970-71 vacancies occuring after May 1.

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 2300 Baccalaureate Degrees by Department: 74 25 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, Analysis and Functional Analysis, 1. TOTAL: 2

Fellowship (3)	2250-2700	9	\$5-25 fees		
Teaching Assistantship (45)	2610-3240	9	\$5-25 fees	6-7	Teaching
NSF + NASA Traineeship (4)	2400-3400	12	\$5-25 fees		

Southern Illinois University

EDWARDSVILLE, ILLINOIS 62025 Robert N. Pendergrass, Chairman Faculty of Mathematical Studies Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 989 Baccalaureate Degrees by Department: 51 Master's Degrees by Department: 8

Fellowship (2)	2250-2700	9		
Teaching Assistantship (24)	2700-3600	9	16	Teaching
Research Assistantship (2)	2250-2700	- 9	16	Research
Scholarship (4)				

University of Chicago

CHICAGO, ILLINOIS 60637 Richard K. Lashof, Chairman Department of Mathematics Applications must be filed by January 1, 1970 for foreign. February 1, 1970 for U.S. and Canadian NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 476 Baccalaureate Degrees by Department: 28 Master's Degrees by Department: 18

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 29; Geometry and Topology, 13; Analysis and Functional Analysis, 15; Applied Mathematics, 2. TOTAL: 59

University Fellowship (10)	1800	9 or 12	None
Teaching Assistantship (10)	2400		None
Research Assistantship (20)	2400	12	o maniable meneral
Federal (35)	2250	12	variable research
Misc. (10)		9 or 12	

STIPEND

Amount 9 or

TUITION if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

12 mo.

in stipend

Hrs/Week

Tuna

University of Chicago

CHICAGO, ILLINOIS 60637 Robert L. Ashenhurst, Chairman Department of Information Sciences Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Master's Degrees by Department:

2

Fellowship (8)	1800-2550	eith	er		
Teaching Assistantship (4)	300/mo.	9		6	Teaching
Research Assistantship (17)	410/mo.	9	\$310(1cs)	up to 20	Research

University of Chicago

CHICAGO, ILLINOIS 60637
Williams H. Kruskal, Chairman
Department of Statistics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 476
Baccalaureate Degrees by Department: 4
Master's Degrees by Department: 4

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 7. TOTAL: 7

Fellowship (19)	1800-5000	9	5	Research
Teaching Assistantship (5)	1800-2700	9	5	Teaching
Research Assistantship (5)	1800-2700	9	5	Research

University of Illinois

URBANA, ILLINOIS 61801
Paul T. Bateman, Head
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 4710
Baccalaureate Degrees by Department: 175
Master's Degrees by Department: 146

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 19; Geometry and Topology, 8; Logic and Sets, 5; Analysis and Functional Analysis, 23; Probability and Statistics, 7; Computer Science and Numerical Analysis, 1; Applied Mathematics, 8. TOTAL: 71

Fellowship	2400-3000	12		
Teaching Fellowship (40)	3000-3500	12	2	Teaching
Teaching Assistantship (130)	2900	9	6	for half-time
Research Assistantship (15)	2900	9	15	for half-time
Tuition waiver (5)		12		None

University of Illinois

URBANA, ILLINOIS 61801
John R. Pasta, Chairman
Department of Computer Science
Applications must be filed by February 15, 1970

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 2. TOTAL: 2

Fellowship (10)	2000-2400	9	
	2500-3400	11	
Teaching Assistantship (10)	2880-3780	9	20
Research Assistantship (20)	2880-3780	9	20

TYPE of financial assistance (with	STIP:	END 9 or	TUITION if not included	SERVICE 1	REQUIRED	
number anticipated in 1970-1971)	(dollars)	12 mo.	in stipend	Hrs/Week	Туре	
University of Illinois at CHICAGO, ILLINOIS 60680 Joseph Landin, Head Department of Mathematics Applications must be field by Feb. (fellowships). September 1, 1970	ruary 1, 1	970	NUMBER Baccal: Baccal	OF DEGREES AWAR aureate Degrees by I aureate Degrees by I 's Degrees by Depar	nstitution Department:	99 11

Western Illinois University

MACOMB, ILLINOIS 61455

Joseph B. Harkin, Chairman

Department of Mathematics

Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1800

Baccalaureate Degrees by Department: 70

Master's Degrees by Department: 7

Fellowship (2)	2400	12		
Teaching Assistantship (10)	2430	9	12	Tutoring

INDIANA

2081

59

38

69

28

Ball State University

MUNCIE, INDIANA, 47306
Earl H. McKinney, Head
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department:
Master's Degrees by Department:

Teaching Assistantship (8) 2500-2800	9	\$340/yr.	15-20	Teaching

Indiana University

BLOOMINGTON, INDIANA 47401

George Springer, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 4
Baccalaureate Degrees by Department: Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 7; Geometry and Topology, 2; Analysis and Functional Analysis, 11; Probability and Statistics, 1; Computer Science and Numerical Analysis, 1. TOTAL: 22

	0000 0000	9&12	*	.,	
Fellowship (25) Teaching Fellowship (10)	2000-3200 3000-3600	9&12	*	3	Teaching
Teaching Assistantship (130)	2700-3600	9&12	\$73/sem.	5 15	Teaching Research
Research Assistantship (10)	2900-3600 600-1800	9&12 varies	\$73/sem. \$73/sem.	varies	Assisting
Part-time Assistantship (10) Academic Year Institute (13)	2850	9	\$73/sem.	varies	***
Summer Fellowships (20)	600	8wks.			**

^{*} Many provide exemption from all fees; other \$73/semester for usual course load.

^{**} Participation in a seminar the purpose of which is to provide insight into the learning and teaching of undergraduate mathematics.

^{***} Allowance for dependents and travel provided.

TYPE

STIPEND

ND 9 or TUITION

if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

of financial assistance (with

Amount 9 or (dollars) 12 mo.

in stipend

Hrs/Week

ype

Indiana State University

TERRE HAUTE, INDIANA 47809
Vesper D. Moore, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 2760
Baccalaureate Degrees by Department: 137
Master's Degrees by Department: 27

Teaching Fellowship (4)	2200-2500	9	20	Teaching & Res.*
Research Assistantship (12)	1800-2200		20	Research
Summer Fellowships (6)	500	10 wks.	15	Research

^{* 6} classroom hours.

Purdue University

LAFAYETTE, INDIANA 47907 M. Jerison, Head Division of Mathematical Sciences Applications for assistantships must be filed by March 15, 1970 and for fellowships by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3433
Baccalaureate Degrees by Department: 153
Master's Degrees by Department: 93

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 11; Geometry and Topology, 1; Logic, 2; Analysis and Functional Analysis, 15; Probability and Statistics, 3; Applied Mathematics, 11. TOTAL: 43

Fellowship (20)	2400-4000	9 or 12			
Teaching Assistantship (110)	2800-3500	9	\$120	6	Teaching
Research Assistantship (15)	2200-3500	9	\$120		Research

Purdue University

LAFAYETTE, INDIANA 47906 S.D. Conte, Head Department of Computer Science Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3433
Baccalaureate Degrees by Department: 46
Master's Degrees by Department: 45

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 20. TOTAL: 20

Fellowship (8)	2400-4000			
Teaching Assistantship (28)	2800-3400	9	\$60	20
Research Assistantship (28)	2800-3600	9	\$60	20

Purdue University

LAFAYETTE, INDIANA 47907 Shanti S. Gupta, Chairman Department of Statistics Applications must be filed by February 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3713
Master's Degrees by Department: 17

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 18. TOTAL: 1

Fellowship (6)	2400-2800	12			
Teaching Assistantship (35)	2800-3300	10	\$120	20	Teaching
Research Assistantship (10)	2500-3000	10	\$120	20	Research
Scholarship (4) *	See below *				
Other (1) **	**				

- * These students have financial support from the IIE, Bureau of the Census and the Department of Defense.
- ** Self supported which is not administered by the University.

number anticipated in 1970-1971)

STIPEND Amount 9 or

12 mo.

(dollars)

TUITION if not included in stipend

SERVICE REQUIRED

Hrs/Week

Type

University of Notre Dame

NOTRE DAME, INDIANA 46556
O. Timothy O'Meara, Chairman
Department of Mathematics
Applications must be filed by February 20, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1477
Baccalaureate Degrees by Department: 15
Master's Degrees by Department: 51

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 12; Geometry and Topology, 4; Logic, 5; Analysis and Functional Analysis, 2. TOTAL: 23

		_		
Fellowship (6)	3360	12		
Teaching Fellowship (6)	4560	12	2	Teaching
Teaching Assistantship (40)	2400-3000	9	4	Teaching
NSF (T)*, NDEA (12) *	2400-2800	12		
Summer Support (32)	600	2	0-6	Teaching

^{*}These may be supplemented with half-time Teaching Assistantships- additional stipend \$1000.

IOWA

Drake University

DES MOINES, IOWA 50311
B. E. Gillam, Head
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1278
Baccalaureate Degrees by Department: 13

Teaching Assistantship (6)

2000-2200 9

6

Iowa State University

AMES, IOWA 50010
Wilfred E. Barnes, Head
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2448
Baccalaureate Degrees by Department: 57
Master's Degrees by Department: 13

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology, 5; Analysis and Functional Analysis, 7; Computer Science and Numerical Analysis, 10; Applied Mathematics, 1 TOTAL: 20

Fellowship (6)	2400-2800				None	
Teaching Assistantship (60) Research Assistantship (4)	2700-3150 2700-3300	9 9-12	\$105/qtr. \$105/qtr.	6	Teaching Research	

Iowa State University

AMES, IOWA 50010
Robert M. Stewart, Chairman
Department of Computer Science
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2448
Baccalaureate Degrees by Department: 13
Master's Degrees by Department: 13

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory,6; Geometry and Topology, 5; Analysis and Functional Analysis, 7; Computer Science and Numerical Analysis,10; Applied Mathematics, 1. TOTAL: 29

Fellowship (4)	12	None		
		None		
Teaching Assistantship (20)	11	\$105/qtr.	0.0	m 1: a
	11	φ103/ qt1.	3-6	Teaching Contact Hrs.
Research Assistantship (15)	17	\$105/atr.	0.0	
- research risbistantiship (10)	11	φιυσ/qtr.	20	Research

TYPE

STIPEND

9 or

12 mo

TUITION

of financial assistance (with number anticipated in 1970-1971)

Amount (dollars) if not included

SERVICE REQUIRED

in stipend

Iowa State University

AMES, TOWA 50010

T.A. Bancroft, Head Department of Statistics

Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 2448

Baccalaureate Degrees by Department: Master's Degrees by Department:

13 14

PH. D. Degrees awarded during last three years by field of specilization: Probability and Statistics, 24.

Fellowship (8)	2400-2800	12			
Teaching Assistantship (10)	2655-2835	9	\$105	22	Teaching
Research Assistantship (12)	2655-2835	9	\$105	22	Research or Consulting
Traineeships (NIH) (6)	2400-2800	12			

University of Iowa

IOWA CITY, IOWA 52240

Robert H. Oehmke, Chairman Department of Mathematics

Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 2476

Baccalaureate Degrees by Department: Master's Degrees by Department: 16

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 8; Geometry and Topology, 3; Analysis and Functional Analysis, 10. TOTAL: 21

Fellowship (8) Teaching Fellowship (6)	2400-3000 3600	9 12		20	Teaching &
Teaching Assistantship (50) Scholarship (23)	2750-3300 270-450	9	\$710	20	Research Teaching

University of Iowa

IOWA CITY, IOWA 52240

Arthur C. Fleck, Acting Chairman Department of Computer Science

Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 2476

Baccalaureate Degrees by Department: 79 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 3. TOTAL: 3

Teaching Fellowship (1)				· · · · · · · · · · · · · · · · · · ·	_
Teaching Assistantship (11)	2500-3600	9	20		
Research Assistantship (1)			20	20	

University of Iowa

IOWA CITY, IOWA 52240 Robert V. Hogg, Chairman Department of Statistics

Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 2476

Baccalaureate Degrees by Department: Master's Degrees by Department: 13

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 11. TOTAL: 11

Fellowship (6) Teaching Fellowship (4)	2400-3000 3600	12 12		20	Teaching &
Teaching Assistantship (10) Research Assistantship (7)	2750-3300 2750-3300	9 9	\$710 \$710	20 20	Research Teaching Teaching

number anticipated in 1970-1971)

STIPEND Amount 9 or

(dollars)

12 mo

TUITION if not included

SERVICE REQUIRED

in stipend H

Hrs/Week

Туре

KANSAS

Fort Hays Kansas State College

HAYS, KANSAS 67601 Wilmont Toalson, Adviser Department of Mathematics Applications must be filed by March 1, 1970. NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees Institution: 1160
Baccalaureate Degrees by Department: 66
Master's Degrees by Department: 8

 Fellowship (2)
 500
 9
 \$121.50
 12

 Teaching Assistantship (2)
 1800
 9
 \$121.50
 20

Kansas State College of Pittsburg

PITTSBURG, KANSAS 66762 Helen F. Kriegsman, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1050
Baccalaureate Degrees by Department: 52
Master's Degrees by Department: 20

Teaching Assistantship (4) 2053 9 \$505/yr. 6 Teaching

Kansas State University

MANHATTAN, KANSAS 66502 John E. Maxfield, Head Department of Mathematics Applications must be filed for fellowships by February 15, 1970 for assistantships anytime. NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2062
Baccalaureate Degrees by Department: 40
Master's Degrees by Department: 2

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3. ${\tt TOTAL: 3}$

Teaching Fellowship (5)	2340-3500	either	\$147	4	Teaching
Teaching Assistantship (22)	2340-3500	either	\$147	4	Teaching
Research Assistantship (5)	2340-3500	either	\$147	4	Teaching

University of Kansas

LAWRENCE, KANSAS 66044
G. Baley Price, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 2611

Baccalaureate Degrees by Department: 71

Master's Degrees by Department: 23

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 12; Geometry and Topology, 6; Analysis and Functional Analysis, 6. TOTAL: 24

Fellowship (8)	2400-2800	12			
Teaching Fellowship (1)	2600-3200	9		3	Teaching
Teaching Assistantship (72)	2600-3200	9	\$18 sem. hr.	5 - 6	Teaching
Research Assistantship (2)	2200-2900	9	\$18 sem. hr.	20	Research

^{*} Fees during 1970-1971 are expected to be approximately \$18 per semester hour of credit earned. Graduate students usually enroll in 6 or 9 semester hours of courses each semester.

TYPE of financial assistance (with number anticipated in 1970-1971)

STIPEND 9 or Amount (dollars) 12 mo.

TUITION if not included in stipend

SERVICE REQUIRED

Hrs/Week

1143

39

10

Wichita State University

WICHITA, KANSAS 67208 William M. Perel, Chairman Department of Mathematics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department:

Master's Degrees by Department:

Teaching Assistantship (12-14)

2600-2800

\$11/hr. 6-10 Teaching or Tutoring

KENTUCKY

Eastern Kentucky University

RICHMOND, KENTUCKY 40475 Bennie R. Lane, Chairman Department of Mathematics Applications must be filed by April 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department:

3

Teaching Assistantship (3)

\$200

Teaching

2200

Morehead State University

MOREHEAD, KENTUCKY 40351 Billy R. Nail, Chairman Division of Mathematical Sciences Applications must be filed by April 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1011 Baccalaureate Degrees by Department:

Teaching Assistantship (4)

2200

9

In-state

Assisting Faculty

Member

Murray State University

MURRAY, KENTUCKY 42071 Harold G. Robertson, Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 1314 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department:

Teaching Assistantship (6)

2000-2700

\$120

12 - 20

20

1 or 2 Courses



LOUISIANA POLYTECHNIC INSTITUTE

The Mathematics Department of Louisiana Polytechnic Institute offers the B.S., M.S. and Ph.D. degrees. The mathematics faculty, including Ph.D.'s in Analysis, Algebra, Geometry, Topology, Probability, and

Statistics, is experienced, competent and personally interested in its students.

The Mathematics Department which is housed in a new building has a calculator laboratory furnished with new electronic desk calculators. Computer facilities consist of an IBM 1620 and an IBM 360.

Fifteen assistantships and part-time teaching jobs are available and range in pay from \$1800 to \$3000 for nine months. Apply by February 1 to W. B. Temple, Head, Department of Mathematics, Ruston, Louisiana, 71270.

TYPE STIPEND TUITION of financial assistance (with Amount 9 or if not included SERVICE REQUIRED number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week **University of Kentucky** LEXINGTON, KENTUCKY 40506 NUMBER OF DEGREES AWARDED IN 1969 James H. Wells, Chairman 2184 Baccalaureate Degrees by Institution: Department of Mathematics and Applied Mathematics Baccalaureate Degrees by Department: 48 Master's Degrees by Department: 21 Applications for fellowships must be filed by February 1, 1970 and for assistantships by March 1, 1970 PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 8; Analysis and Functional Analysis, 14; Applied Mathematics, 2. TOTAL: 25 12 2400-3600 Fellowship (10) \$140 5-6 Teaching Assistantship (55) 2800-3200 10 18 \$140 2600-2800 10 Research Assistantship (24) **University of Kentucky** NUMBER OF DEGREES AWARDED IN 1969 LEXINGTON, KENTUCKY 40506 Baccalaureate Degrees by Institution: 2184 R.L. Anderson, Chairman Department of Statistics Applications for assistantships must be filed by April 1, 1970 and for fellowships by February 1, 1970 Fellowship (2) 2400 9 Teaching 2800-3400 9 15 Teaching Assistantship (8) Research Research Assistantship (3) 3600 12 *Waiver of Out-of-State fees. University of Louisville NUMBER OF DEGREES AWARDED IN 1969 LOUISVILLE, KENTUCKY 40208 Baccalaureate Degrees by Institution: 822 Roger H. Geeslin, Chairman Baccalaureate Degrees by Department: 35 Department of Mathematics Applications must be filed by March 15, 1970 Master's Degrees by Department: 4

2750-2950 waived Teaching Teaching Assistantship(6)

Western Kentucky University

BOWLING GREEN, KENTUCKY 42101 Robert C. Bueker, Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1342 Baccalaureate Degrees by Department:

Teaching Teaching Assistantship (8) 2000-2900 \$12/hr. 8

LOUISIANA

Francis T. Nicholls State College

THIBODAUX, LOUISIANA 70301 M.M. Ohmer, Chairman Department of Mathematics Applications must be filed by February 28, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department:

Teaching Assistantship (5) 2000-2400 9 6

TYPE	STIPENI)	TUITION			
of financial assistance (with	Amount 9	or	if not included	SER	VICE REQUIRED	
number anticipated in 1970-1971)	(dollars) 12	mo.	in stipend	Hrs/Week	Туре	
Louisiana Polytechnic I	nstitute					
RUSTON, LOUISIANA 71270 W.B. Temple, Head Department of Mathematics Applications must be filed by Feb	ruary 15, 197	0	Baccala Baccala	aureate Degre	es by Department:	1302 12 6
Teaching Assistantship (20)	800-3000	9	Waived	2-6		
Louisiana State Univer	sity			·		
BATON ROUGE, LOUISIANA 708 L.I. Wade, Chairman Department of Mathematics Applications must be filed by Man			Baccala Baccala	aureate Degre	es by Department:	2363 35 47
PH.D. Degrees awarded during l Geometry and Topology, 6; Analy	ast three year sis and Funct	s by fie ional An	ld of specializatio alysis, 8. TOTAI	n: Algebra an L: 27	d Number Theory, 1	.3;
Teaching Assistantship (45)	2000-3600 3600-4500 5000-7000	12 12 9	\$0-55/sem. \$55/sem. \$85/sem.	None 6 15	Teaching Teaching	
Louisiana State Univer	sity in No	ew Or			a DDVD IV 1000	•
NEW ORLEANS, LOUISIANA 701 Prem. K. Kulshrestha, Acting Department of Mathematics Applications must be filed by Apr	g Chairman		Bacca Bacca	alaureate Degr alaureate Degr	S AWARDED IN 1969 ees by Institution: ees by Department: y Department:	584 22 7
Teaching Assistantship (5)	2400-2600	9	•	5-6	Teaching	
McNeese State Colleg	e					
TAND GUADING TOURGANA 70						

LAKE CHARLES, LOUISIANA 70601
Patrick L. Ford, Head
Department of Mathematical Sciences

Teaching Assistantship (12)	2400	9	\$20 approx.	6	Teaching
		mo.			

Northeast Louisiana State College

MONROE, LOUISIANA 71201
Richard D. Finley, Head
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 770

Baccalaureate Degrees by Department: 20

Master's Degrees by Department: 9

Teaching Assistantship (20) Lab. Asst. (4)	2400 2000	9	None None	6 12-15	Teaching
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STIPEND 9 or of financial assistance (with Amount number anticipated in 1970-1971) (dollars) 12 mo.

TUITION if not included in stipend

SERVICE REQUIRED Hrs/Week Type

Northwestern State College

NATCHITOCHES, LOUISIANA 71457 Russell Whittington, Jr., Head Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969

Master's Degrees by Department:

8

Teaching

Teaching Assistantship (10)

600-2400

9 mos.

Waived for 3-6

out of state students. No tuition for instate

Southeastern Louisiana College

HAMMOND, LOUISIANA 70401 Robert C. Brown, Head Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 684 18

Applications must be filed by March 15, 1970

2400

51.50 each semester

Teaching

Tulane University

Teaching Assistantship (5)

NEW ORLEANS, LOUISIANA 70118 Paul S. Mostert, Chairman Department of Mathematics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 852

Baccalaureate Degrees by Department: Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Geometry and Topology, 11; Analysis and Functional Analysis, 8. TOTAL: 23

Fellowship (22) 2400-3000 9-12 Waived Teaching Assistantship (12) 2400-2800 Waived 6 9 Teaching Research Assistantship (2) 2600 9 Waived 10 Research Scholarship (2) Exchange (1) Waived Teaching Apprenticeship (5) 2400 9 Waived 0 - 4Grading and/or Teaching

University of Southwestern Louisiana

LAFAYETTE, LOUISIANA 70501 David R. Andrew, Head Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: . 1127 Baccalaureate Degrees by Department: Master's Degrees by Department:

2000-3000 Teaching Assistantship (25)

6

Teaching

TYPE of financial assistance (with STIPEND

TUITION if not included

SERVICE REQUIRED

Teaching

number anticipated in 1970-1971)

Amount 9 or (dollars)

in stipend

Hrs/Week

6

MAINE

University of Maine

ORONO, MAINE 04473 John C. Mairhuber, Chairman Department of Mathematics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1343 Baccalaureate Degrees by Department: 63 Master's Degrees by Department: 10

Teaching Assistantship (4) Scholarship (3)

2300-2500

Tuition

Only

9

NSF Traineeship

2400-2600

MARYLAND

Johns Hopkins University

BALTIMORE, MARYLAND 21218 J. H. Sampson, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 389 Baccalaureate Degrees by Department: 11 Master's Degrees by Department: 3

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 1; Analysis and Functional Analysis, 4. TOTAL: 8

Fellowship (6) Teaching Assistantship (27) * Research Assistantship (4) *

2200-3500 1900-2350 600-2000

9 to 12

9 to 12

* Teaching assistants can hold Research Assistantships.

Johns Hopkins University

BALTIMORE, MARYLAND 21205 Alan Ross, Chairman Department of Biostatistics Applications must be filed by April 1970

PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 6. TOTAL: 6

Fellowship (17 Scholarship (1)

2400-2800 1800

12 yes 12 yes

12 hrs./wk. 12 hrs./wk.

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 6. TOTAL:

Morgan State College

BALTIMORE, MARYLAND 21212 Walter R. Talbot, Chairman Department of Mathematics Applications must be filed by January 20, 1970

NSF Academic Yr.

3000

9

Institute (20)

TYPE of financial assistance (with STIPEND

Amount. 9 or TUITION

if not included

SERVICE REQUIRED Hrs/Week

number anticipated in 1970-1971) (dollars) 12 mo. in stipend

75

University of Maryland

COLLEGE PARK, MARYLAND 20742 J.K. Goldhaber, Chairman

Department of Mathematics Applications must be filed by March 1, 1970

Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department:

NUMBER OF DEGREES AWARDED IN 1969

Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology, 3; Logic, 2; Analysis and Functional Analysis, 12; Probability and Statistics, 4; Computer Science and Numerical Analysis, 1; Applied Mathematics, 18. TOTAL: 46

Fellowship (35)	2400-4000	9-12	usually included; \$34-40/sem. hr.		
Teaching Assistantship (125)	2800-3000	9	·	4-6	Teaching or Grading
Research Assistantship (5)	3100-3600	9		6-10	Research
	4000-4692	12	•		

University of Maryland

COLLEGE PARK, MARYLAND 20742 William F. Atchison, Chairman Department of Computer Science Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 4695 Master's Degrees by Department:

Teaching Assistantship (22)	2800-3000	9		4-6	Teaching
Research Assistantship (9)	3400-3850	9	\$38/sem.hr.		

University of Maryland, Baltimore County

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

- FIELDS-

Real & Complex Analysis, Functional Analysis, Ordinary and Partial Differential Equations, Dynamical Systems, Control Theory, Fluid Dynamics, Numerical Analysis, Mathematical Physics.

- FELLOWSHIPS AND TEACHING ASSISTANTSHIPS -

At least \$2,800 with Remission of Fees.

- APPLY TO -

Dr. R. C. Roberts, Chairman Division of Mathematics **University of Maryland Baltimore County** Baltimore, Maryland 21228

UNIVERSITY OF MARYLAND

DEPARTMENT OF MATHEMATICS

The Department of Mathematics offers strong programs leading to the M. A. and Ph. D. degrees in the fields of Algebra, Applied Mathematics, Real and Complex Function Theory, Functional Analysis, Geometry, Logic, Number Theory, Numerical Analysis, Probability, Statistics and Topology. The M. A. is offered under either a thesis or a non-thesis option.

The courses offered are numerous and varied. Approximately 115 graduate and advanced undergraduate courses are given each year. Many of these are selected topics courses. More than ten seminars meet regularly, and one or more weekly colloquia attract visiting mathematicians from all parts of the world.

Opportunities for financial aid are ample. Under a grant from the National Science Foundation, the Department of Mathematics now offers annually fifteen Graduate Fellowships at \$3600 to qualified beginning graduate students and eight Senior Fellowships at \$4000 to advanced students. Fellowships from various government agencies and private organizations, and research assistantships, as well as about 125 teaching assistantships, are also available.

INSTITUTE FOR FLUID DYNAMICS AND APPLIED MATHEMATICS

Many students working for a degree in the area of applied mathematics find their thesis advisers from among the faculty of the Institute for Fluid dynamics and Applied Mathematics. The faculty of the Institute, while engaged primarily in research, teach many courses in the Mathematics Department and conduct various specialized seminars. The fields of applied mathematics in which the Institute is particularly well represented include partial differential equations, ordinary differential equations, control theory, numerical analysis, and approximation theory.

COMPUTER SCIENCE CENTER

As an independent academic unit of the University, the Center offers M. S. and Ph. D. degrees in Computer Science.

Specialization is possible in the areas of numerical analysis; theory of computability; automata theory; programming languages; systems programming; picture processing and pattern recognition; automation and simulation of computer design; information storage; retrieval and dissemination; and mathematical and computational linguistics.

The Center provides computing service for all academic activities at the University. Present computer equipment includes a UNIVAC 1108 and an IBM 7094 as well as low and high speed remote terminals distributed over the University's College Park, Baltimore and Catonsville campuses.

SPECIAL EVENTS

Year in Several Complex Variables

1969-70

includes many related colloquia and seminars, culminating with:
 International Conference in Several Complex Variables

April 6-17, 1970

Year in Topological Dynamics

1970 - 71

- includes a large number of related meetings and seminars.

International Conference on Approximation Theory and Related Topics

October 26-30, 1970

The University of Maryland campus is only 8 miles from downtown Washington, with its many cultural and scholarly institutions, such as the Library of Congress. In addition, the concentration of government and industry in the Washington-Baltimore area creates a considerable demand for skilled mathematicians and computer scientists.

See the University of Maryland's listings for further details on financial aid. For further information and application forms write to:

Graduate Committee
Department of Mathematics

Admissions and Financial Awards Committee Computer Science Center

University of Maryland College Park, Maryland 20742

TYPE of financial assistance (with STIPEND

Amount 9 or

TUITION if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

12 mo.

in stipend

Hrs/Week

University of Maryland, Baltimore County

BALTIMORE, MARYLAND 21228 Richard C. Roberts, Chairman Department of Mathematics

Applications must be filed by March 15, 1970 (February 1, 1970 for foreign students)

Fellowship (4) Teaching Assistantship (6) 2800-3000 2800

Teaching or Grading

MASSACHUSETTS

Boston College

CHESTNUT HILL, MASSACHUSETTS 02167

G.G. Bilodeau, Chairman Department of Mathematics

Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Department:

Master's Degrees by Department:

53

Fellowship (1) Teaching Fellowship (14) Teaching Assistantship (3) Scholarship (2)

2400-2600 9 2400-2600 9 2200 9 tuition

12

Teaching Varied

Boston University

BOSTON, MASSACHUSETTS 02215 Robin E. Esch, Chairman

Department of Mathematics

Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED BY 1969 1000

Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department:

Master's Degrees by Department:

55

PH. D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 1; Probability and Statistics, 1; Computer Science and Numerical Analysis, 3; Applied Mathematics 2. TOTAL: 7

9

9

9

Fellowship (4) Teaching Fellowship (14) Teaching Assistantship (2)

2400-3300 2800

6 15

Teaching Miscellaneous

Teaching

Brandeis University

WALTHAM, MASSACHUSETTS 02154 Hugo Rossi, Chairman Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 539 Baccalaureate Degrees by Department; 14 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 8; Geometry and Topology, 4; Analysis and Functional Analysis, 6. TOTAL: 18

Fellowship (18) 2400-2600 12 Teaching Assistantship (19) 1100-1400 9 Research Assistantship (20) 800-1700 9 Scholarship-Tuition (25) 2275 Mexican Government (1) 3600 12 NRC (1) 12 TYPE STIPEND TUITION

of financial assistance (with Amount 9 or if not included SERVICE REQUIRED Hrs/Week number anticipated in 1970-1971) (dollars) 12 mo. in stipend Type

Clark University

NUMBER OF DEGREES AWARDED IN 1969 WORCESTER, MASSACHUSETTS 01610 293 Zalman Rubinstein, Chairman Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 19 Department of Mathematics Applications must be filed by February 20, 1970 Master's Degrees by Department:

3

PH. D. Degrees awarded during last three years by field of specialization: Category Theory, 2. TOTAL: 2

Fellowship (4)	2400-3400	12	
Teaching Assistantship (6)	2200-3000	9	6 Teaching
Research Assistantship (1)	2200-3000	9	
Scholarship (2)	1000	9	
Computer Fellowship (2)	2500	9	Half-time
Computer Fellowship (2)	1200	Summer	Full-time

Harvard University

NUMBER OF DEGREES AWARDED IN 1969 CAMBRIDGE, MASSACHUSETTS 02138 Baccalaureate Degrees by Institution: 1500 John T. Tate, Chairman Baccalaureate Degrees by Department: 36 Department of Mathematics Master's Degrees by Department: 16 Applications must be filed by January 20, 1970

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 13; Geometry and Topology, 9; Logic, 2; Analysis and Functional Analysis, 10; Applied Mathematics, 1. TOTAL: 35

Teaching Fellowship (34)	1375-1700	9	\$600-2400*	3	Teaching
Research Assistantship (2)	varies			varies	Research
Scholarship (10)	1000-4400	9	\$600-2400		

^{*}Teaching Fellows are eligible for Staff Tuition Scholarships which cover most tuition expenses.

Harvard University

NUMBER OF DEGREES AWARDED IN 1969 CAMBRIDGE, MASSACHUSETTS 02138 1375 Baccalaureate Degrees by Institution: Géorge Carrier, Chairman Baccalaureate Degrees by Department: 26 Committee on Applied Mathematics Master's Degrees by Department: Applications must be filed by January 20, 1970

PH.D. Degrees awarded during last three years by field os specialization: Applied Mathematics, 6. TOTAL: 6*

Teaching Fellowship (50)	1375-1750	9	Waived	10-20
Teaching Assistantship (5)	1000	9	Varies	10-20
Research Assistantship (100)	1500-4200	12	Varies	10-20
Scholarship (69)	up to 4500	9	\$2400	

^{*} See note under the Division of Engineering and Applied Physics below.

Harvard University

CAMBRIDGE, MASSACHUSETTS 02138 NUMBER OF DEGREES AWARDED IN 1969 Harvey Brooks, Chairman Baccalaureate Degrees by Institution: 1375 Baccalaureate Degrees by Department: Division of Engineering and Applied Physics 13 Applications must be filed by January 20, 1970 Master's Degrees by Department: 53

PH.D. Degrees awarded during last three years by field of specialization: Logic, 3; Computer Science and Numerical Analysis, 15; Applied Mathematics, 8; Control Theory, 5; Engineering and Applied Physics, 102. TOTAL: 133

NOTE: Students in Applied Mathematics may work either under the Committee on Applied Mathematics or the Division of Engineering and Applied Physics, the latter being more specialized. Assistantships and Fellowships listed above under the Committee apply also to the Division.

Harvard University

CAMBRIDGE, MASSACHUSETTS 02138
Arthur P. Dempster, Chairman
Department of Statistics
Applications must be filed by December 15, 1969

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department:
Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 15. TOTAL: 15

Fellowship (13)	2000-4000	9		
1 (-/		3		
Teaching Fellowship (7)	550-700	5	10	Teaching
Research Assistantship (5)	variable	5		Research
Other (6)				

1375

1 2

Massachusetts Institute of Technology

CAMBRIDGE, MASSACHUSETTS 02139
Norman Levinson, Chairman
Department of Mathematics
Applications must be filed by January 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 70
Master's Degrees by Department: 10

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology, 12; Logic, 10; Analysis and Functional Analysis, 14; Computer Science and Numerical Analysis, 4; Applied Mathematics, 7; Operations Research, 2; Probability, 1; Combinatorial Analysis, 1. TOTAL: 57

Fellowship (46)	1800-2800	9	Scholarship	
	2400-2800	12	-	
Half-time Teaching				
Assistantship (30)	2880	9	Scholarship	6 Teaching or 16 grading papers
Full-time Teaching Assistantship (16)	3762	9	Scholarship	30
Research Assistantship (14)	4608	9	\$2150	16
Traineeship (11)	1800-2100	9	Scholarship	
	2400-2800	12	•	

Southeastern Massachusetts University

NORTH DARTMOUTH, MASSACHUSETTS 02747

Fred Wolock, Chairman
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 450

Baccalaureate Degrees by Department: 18

Teaching Assistantship (4)	3000	9	Fees	6	Teaching

Tufts University

MEDFORD, MASSACHUSETTS 02155

James W. Schlesinger, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 779

Baccalaureate Degrees by Department: 34

Master's Degrees by Department: 1

Teaching Assistantship (3) Scholarship (5)	Tuition + 1200 Tuition	9	3	Teaching
NSF Traineeship (1)	2400-2800	12	3	Teaching

TYPE	STIPE	ND	TUITION			
of financial assistance (with	Amount	9 or	if not included	SER	VICE REQUIRED	
number anticipated in 1970-1971)	(dollars)	12 mo.	in stipend	Hrs/Week	Тур	
University of Massachu	setts					
AMHERST, MASSACHUSETTS 010 W. L. Strother, Chairman Department of Mathematics and Applications must be filed by Febr	Baccalau B ac calau	NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 2622 Baccalaureate Degrees by Department: 78 Master's Degrees by Department: 12				
PH.D. Degrees awarded during la Geometry and Topology,2; Analys					d Number Theory,	6;
Fellowship (10)	2600	9 **				
Teaching Fellowship (20) * Teaching Assistantship (40)	3000-3600 2700-3000			3-6 6	Teaching Teaching	
* includes 15 lecturerships (for s	tudents with	M.A. onl	y)	•		
** occasionally some summer emp	olovment is	available a	it extra compensa	tion.		
Worcester Polytechnic	nstitute	!				
WORCESTER, MASSACHUSETTS John P. van Alstyne, Acting H Department of Mathematics Applications must be filed by Mar	ead		NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 315 Baccalaureate Degrees by Department: 27			
Teaching Assistantship (5) 2	400	9	Remitted	20	Teaching, Tutori Paper Grading,	
	1	MICH	IGAN			
Andrews University						
BERRIEN SPRINGS, MICHIGAN Edward J. Specht, Chairman Department of Mathematics Applications must be filed by Febr		70	NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 281 Baccalaureate Degrees by Department: 7 Master's Degrees by Department: 4			
Teaching Assistantship (4)	100 2500		4000			

BERRIEN SPRINGS, MICHIGAN 49104 Edward J. Specht, Chairman Department of Mathematics Applications must be filed by February 15, 1970		Baccala Baccala	ureate Degr ureate Degr	S AWARDED IN 1969 rees by Institution: rees by Department: by Department:	281 7 4	
Teaching Assistantship (4)	2100-2500	9	\$660	10	Teaching	

Eastern Michigan University

•	•									
YPSILANTI, MICHIGAN 48197 Robert S. Pate, Head Department of Mathematics Applications must be filed by March 1, 1970			NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 198 Baccalaureate Degrees by Department: 5 Master's Degrees by Department: 1							
Teaching Assistantship (8)	3000	9	18							

Michigan State University

EAST LANSING, MICHIGAN 48823 Charles P. Wells, Chairman Department of Mathematics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 6505
Baccalaureate Degrees by Department: 155
Master's Degrees by Department: 26

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 10; Geometry and Topology, 16; Analysis and Functional Analysis, 3; Computer Science and Numerical Analysis, 4; Applied Mathematics, 1. TOTAL: 34

Fellowship (20)	1800-2800	9 or 12	 	None	None
Teaching Assistantship (105) Research Assistantship (13) Scholarship (7)	2700-3100 3500-3800 500	12	\$13/cr. \$13/cr.	4-6 2-3 None	Teaching Teaching/Research None

Michigan State University

EAST LANSING, MICHIGAN 48823 Harry G. Hedges, Chairman Department of Computer Science Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 6505

Baccalaureate Degrees by Department: 21

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 3. TOTAL: 3

Fellowship (4)	3000	12			
Teaching Assistantship (10)	2800-3100	9	13/cr. \$13/cr.	20	Teaching/Consulting
Research Assistantship (5)	2800-3100	9	13/ cr. \$13/cr.	20	Research/
			, -,	*	Programming

Michigan State University

EAST LANSING, MICHIGAN 48823
James Stapleton, Chairman
Department of Statistics and Probability
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 6505
Master's Degrees by Department: 17

PH. Degrees awarded during last three years by field of specialization: Probability and Statistics, 5. TOTAL: 5

Fellowship (13)	2400	12			
Teaching Assistantship (23)	2790-3150	9	\$13/cr.	4	
Research Assistantship (2)	4200-4500	12	, -,		Thesis Research

Michigan Technological University

HOUGHTON, MICHIGAN 49931 H. L. Hunzeker, Head Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Department: 16
Master's Degrees by Department: 4

Teaching Assistantship (14) 2550-2700 9 5

TYPE	STIPEND TUITION				
of financial assistance (with	Amount	9 or	if not included	SERVICE	REQUIRED
number anticipated in 1970-1971)	(dollars)	12 mo.	in stipend	Hrs/Week	Type

Northern Michigan University

MARQUETTE, MICHIGAN 49855 Donald D. Heikkinen, Head Department of Mathematics Applications must be filed by March 15, 1970

1800-2400

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1845 Baccalaureate Degrees by Department: 50 Master's Degrees by Department: 15

35

5

Teaching Assistantship (6)	2400-2600	9	Tuition exemption	6	Teaching
Tutorial Assistant (3)	5500-5800	9	exemption	12	Teaching or Research

Oakland University

ROCHESTER, MICHIGAN 48063 NUMBER OF DEGREES AWARDED IN 1969 G. Philip Johnson, Chairman Baccalaureate Degrees by Institution: 569 Department of Mathematics Baccalaureate Degrees by Department: Master's Degrees by Department:

Teaching Assistantship (8) 2700 approx. \$2700 approx. Teaching

University of Detroit

Teaching Fellowship (15)

DETROIT, MICHIGAN 48221	NUMBER OF DEGREES AWARDED IN 1969	
Karl W. Folley, Chairman	Baccalaureate Degrees by Institution:	1050
Department of Mathematics	Baccalaureate Degrees by Department:	45
Applications must be filed by March 15, 1970	Master's Degrees by Department:	36

University of Michigan

ANN ARBOR, MICHIGAN 48104 William J. Leveque, Chairman Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 4695 Baccalaureate Degrees by Department: 143 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 14; Geometry and Topology, 15; Logic, 1; Analysis and Functional Analysis, 24; Probability and Statistics, 4; Computer Science and Numerical Analysis, 4; Applied Mathematics, 5; Combinatoric, 1; Programming, 3; TOTAL: 71

Fellowship (70) *	1800-3000	9	None	full time study or rese	earch	
Teaching Fellowship (110)**	1813-3510	9	\$436-540	4-6	Teaching	
Teaching Assistantship (45)	600-1800	9	\$540-1648	4-12	Assisting	
Research Assistantship (15)	2416-4028	9	\$436-1648	full time study or research		
Scholarship (7) ***	up to 2000	9	\$436-1648	full time study		

^{*} All types, including institutional, NSF, NDEA and Actuarial Science Fellowships. Some are available on a 12 month basis with proportionately higher stipends.

^{*} May be waived in certain cases.

^{**} Approximately 30 will be combination appointments consisting of 4-hour fellowship and a supplementary University Fellowship or research assistantship.

^{***} Primarily for students in actuarial science.

TYPE STIPEND TUITION
of financial assistance (with Amount 9 or if not included SERVICE REQUIRED number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week Type

University of Michigan

ANN ARBOR, MICHIGAN 48104
Bruce W. Arden, Acting Chairman
Department of Computer and Communication Sciences
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 4695
Master's Degrees by Department: 18

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 24. TOTAL: 24

Fellowship (20)	2400	9 or 12	Inc.		
Teaching Fellowship (20)	1000-2500	9	In-State	2-4	Teaching
Teaching Assistantship (2)	2700-8000	12	Student pays	half-full time	
Research Assistantship (15)	2700	12	Student pays	20	Researchers

Wayne State University

DETROIT, MICHIGAN 48202
Martin Wechsler, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970
Late applicants will be considered

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 3487

Baccalaureate Degrees by Department: 80

Master's Degrees by Department: 38

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 2; Analysis and Functional Analysis, 10; Probability and Statistics, 4. TOTAL: 19

Fellowship (12)	2400	9			
Teaching Fellowship (25)	3200-4500	9	\$450	6	Teaching
Teaching Assistantship (30)	3000-3800	9	\$450	6	Teaching

WESTERN MICHIGAN UNIVERSITY GRADUATE STUDY IN MATHEMATICS

The Department has 65 graduate students currently enrolled in programs leading to the regular M.A. (Mathematics), M.S. (Statistics), and Ph.D. degree, and also to the rather unique Specialist in Arts (Sp.A.) degree. This latter degree is designed for the preparation of liberal arts college and community college mathematics teachers. It involves a year of course work beyond the M.A. level and an expository thesis. The M.A. and Sp.A. programs conform rather closely to C.U.P.M. recommended guidelines for the First and Advanced Graduate Components.

Advanced graduate course work is available, and active faculty research is being pursued, in the following fields: algebra, analysis, graph theory, number theory, probability, and topology. All of these are possible concentration areas for Ph.D. or Sp.A. candidates.

Substantial student financial support is available under graduate assistantships, fellowships, and N.S.F. Traineeships.

For information, write to:

A. Bruce Clarke, Head Department of Mathematics Western Michigan University Kalamazoo, Michigan 49001

TYPE	STIP	END	TUITION			
of financial assistance (with	Amount	9 or	if not included		RVICE REQUIRED	
number anticipated in 1970-197	l) (dollars)	12 mo.	in stipend	Hrs/Week	Тур	oe
Western Michigan Un	iversity					
KALAMAZOO, MICHIGAN 4900 A. Bruce Clarke, Head Department of Mathematics	1.		Baccala	ureate Degre	AWARDED IN 196 es by Institution: es by Department:	3700 82
Applications must be filed by M	arch 1, 1970			's Degrees by		32
Fellowship (25)	[2600-3700	8	\$420	0-3	Tooching	
- , ,	2400-4400	12	\$630	0-3	Teaching Teaching	
Teaching Fellowship (24)	2800-3000	8	\$360	6	Teaching	
	7	MINN'	ESOTA			
Bemidji State College						
BEMIDJI, MINNESOTA 56601 W. Richard Slinkman, Chair Department of Mathematics		r Science	Baccal Baccal	aureate Degre	AWARDED IN 196 ees by Institution: ees by Department: Department:	733 32 3
Teaching Assistantship (2)	2500-2500	9	*	6	Teaching	
*\$9.00 per credit hour reside \$19.00 per credit hour nonres plus \$39.50 in fees if registere or \$14.75 in fees if registered	sident d for 9 or mo					
Mankato State Colleg	(e					
MANKATO, MINNESOTA 56001 Francis C. Hatfield, Chairm Department of Mathematics, Computer Science	nan Astronomy a	and	Baccal Baccal	aureate Degre	AWARDED IN 196 es by Institution: es by Department:	1800 124 12
Applications must be filed by A	pril 1, 1970				- •	
Teaching Assistantship (15)	1800-3600	9	\$9/cr.	10-20	4-8	
St. Cloud State College	ge					
ST. CLOUD, MINNESOTA 5630 Alyn N. Dull, Chairman Department of Mathematics Applications must be filed by M			Baccal Baccal	aureate Degre	S AWARDED IN 196 ees by Institution: ees by Department: Department:	874
Teaching Assistantship (2)	1800	9	not included	d 8	Non Teacl	hing

TYPE STIPEND TUITION
of financial assistance (with Amount 9 or if not included SERVICE REQUIRED number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week Type

University of Minnesota

MINNEAPOLIS, MINNESOTA 55455 Edgar Reich, Head Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 8448
Baccalaureate Degrees by Department: 157
Master's Degrees by Department: 18

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Geometry and Topology, 4; Logic,2; Analysis and Functional Analysis, 17; Probability and Statistics, 4; Computer Science and Numerical Analysis, 1; Applied Mathematics, 3. TOTAL: 35

Fellowship (21)	2400-3500	9-12	\$561		
Teaching Associateship (40)	3420-5130	9-12	\$561	5-7	Teaching
Teaching Assistantship (70)	3060-4590	9-12	\$561	5-7	Teaching
Research Assistantship (8)	2925 approx.	9			Special duties

University of Minnesota

MINNEAPOLIS, MINNESOTA 55455
E. Bruce Lee, Acting Head
Department of Computer, Information,
& Control Sciences

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 8448
Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 1. TOTAL: 1

Fellowship (5)	3500-4000	9-12	\$500	0-10	Varies
Teaching Fellowship (5)	3500-4000	9-12	\$500	10-15	Varies
Teaching Assistantship (10)	3000-3500	9-12	\$500	10-15	Varies
Research Assistantship (8)	3000-3500	9-12	\$500	10-15	Varies
Scholarship			\$500		
Other			\$500		

University of Minnesota

MINNEAPOLIS, MINNESOTA 55455 B.W. Lindgren, Chairman Department of Statistics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 5299

Baccalaureate Degrees by Department: 3

Master's Degrees by Department: 2

PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 9. TOTAL: 9

Fellowship (5)	2400-2800	12			
Teaching Assistantship (14)	3060-3780	9	Resident	10-20	Teaching & Grading
Research Assistantship (2)	3900	12	Resident	10-12	Research

Winona State College

WINONA, MINNESOTA 55987 R.L. Lokensgard, Chairman Department of Mathematical Sciences NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 583
Baccalaureate Degrees by Department: 36
Master's Degrees by Department: 11

Teaching Assistantship (2) 1200 9 3 Teaching

Mississippi State University

STATE COLLEGE, MISSISSIPPI 39762 Roy D. Sheffield, Head Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department:
Master's Degrees by Department:

Teaching Assistantship (14)

1350-2700

9 \$24 per credit hr. 3-6 Teaching

Papers and Etc.

1600

18

3

University of Mississippi

UNIVERSITY, MISSISSIPPI 38677
Thomas A. Bickerstaff, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 900
Baccalaureate Degrees by Department: 98
Master's Degrees by Department: 10

3-8

PH.D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 1. TOTAL: 1

Fellowship (6)	1800-2800	9	None
Teaching Fellowship (4)	2800-3200	9	None
Teaching Assistantship (20)	1200-3000	9	None

MISSOURI

Central Missouri State College

WARRENSBURG, MISSOURI 64093 H. Keith Stumpff, Head Department of Mathematics Applications must be filed by March 30, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1350
Baccalaureate Degrees by Department: 50
Master's Degrees by Department: 14

Teaching Assistantship (4)

1800-3600

9 mo. \$255 yr.

5-10 Teaching

Northeast Missouri State College

KIRKSVILLE, MISSOURI 63501
Dale Woods, Head
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1142
Baccalaureate Degrees by Department: 44
Master's Degrees by Department: 21

Teaching Fellowship (8)

1200

\$14 sem.hr.

5

TYPE	STIP	END	TUITION		
of financial assistance (with	Amount	9 or	if not included	SERVICE	REQUIRED
number anticipated in 1970-1971)	(dollars)	12 mo	in stinend	Hrs/Week	Tyne

St. Louis University

ST. LOUIS, MISSOURI 63103 Francis Regan, Chairman Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Department: 42
Master's Degrees by Department: 37

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology, 5; Analysis and Functional Analysis, 7; Probability and Statistics, 3; Computer Science and Numerical Analysis, 3. TOTAL: 23

Teaching Fellowship (14)	2500	9	Some include	6	Teaching
Teaching Assistantship (4)	3200	9	tuition Free tuition	up to 9	Teaching

University of Missouri

COLUMBIA, MISSOURI 65201 J.L. Zemmer, Chairman Department of Mathematics Applications for fellowships must be filed by February 21, 1970 and for assistantships by March 21, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 2829
Baccalaureate Degrees by Department: 61
Master's Degrees by Department: 19

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology, 1; Analysis and Functional Analysis, 4; Probability and Statistics, 4. TOTAL: 15

Fellowship (5)	2400-4400	12	None	None	
Teaching Fellowship (10)	2800-3400	9	*	3-5	Teaching
Teaching Assistantship (60)	2800-3400	9	*	5-7	Teaching

^{*} Fees are \$220/semester.

University of Missouri

COLUMBIA, MISSOURI 65201
Paul Blackwell, Chairman
Department of Computer Science
Applications must be filed by February 21, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2829

Combined Fellowship/ (4)	2800-3100	9	None *	0	Fellowship
Teaching Assistantship				6	semester Assistantship
*There is no tuition, but there	omo foreh:-b +-	4-1			semester

^{*}There is no tuition, but there are fees which total approximately \$220 per semester.

University of Missouri

COLUMBIA, MISSOURI 65201 Frederick Williams, Chairman Department of Statistics Applications must be filed by February 21, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2829
Master's Degrees by Department: 5

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology, 1; Analysis and Functional Analysis, 4; Probability and Statistics, 4. TOTAL: 15

Fellowship (3) Teaching Fellowship (3) Teaching Assistantship (10) Research Assistantship (6)	2000-2800 + 2800-3600 2800-3500 2800-5000	9-12 9-12 9 9-12	None * None * None *	3 6 12-20	Teaching Teaching Research.
*Fees of \$480 per year.				Full time in summer	Consulting

TYPE of financial assistance (with

number anticipated in 1970-1971)

Amount

STIPEND

TUITION if not included

SERVICE REQUIRED

12 mo. (dollars)

in stipend

Hrs/Week

University of Missouri, Kansas City

KANSAS CITY, MISSOURI 64110 Paul Liebnits, Chairman Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 27 Master's Degrees by Department: 3

PH.D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 1. TOTAL: 1

3150-3350 10 Variable Teaching Assistantship (20) \$445 NDEA TITLE IV 2000 plus 400 9 None Fellowship (1) per dependent 2400 plus 500 9 None NSF Traineeship (1) per dependent

University of Missouri, Rolla

ROLLA, MISSOURI 65401 Glen Haddock, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 739 Baccalaureate Degrees by Department: 37 35 Master's Degrees by Department:

6-7 credit hrs. Teaching Assistantship (27) 3500-3750 \$165 per. sem. 16 2200-2800 9 \$165 per. sem. Research Assistnatship (3)

UNIVERSITY OF MISSOURI-KANSAS CITY GRADUATE STUDY IN MATHEMATICS 1970 - 1971

The University of Missouri-Kansas City offers the Master of Arts, Master of Science and Doctor of Philosophy degrees in mathematics. The doctoral program was initiated in the fall of 1967 and evolved from a master's program offered for seventeen years. Doctoral research is now being conducted in point-set topology, complex analysis, and ring theory.

The Linda Hall Library of Science and Technology, one of the finest science libraries in the nation with a separate endowment of twenty-five million dollars, is adjacent to our campus. Linda Hall Library has an outstanding mathematical collection including subscriptions to more than 300 current mathematical journals. The University has full access to its holdings and services.

The Department of Mathematics invites applications for graduate assistantships with stipends starting at \$3,150 for nine months. Fees, amounting to \$445 per year, are not included in these stipends.

Some NSF traineeships and NDEA Title IV fellowships will be available, and each applicant for a graduate assistantship will be considered for these awards.

For information and application forms write:

Paul Liebnitz, Chairman Department of Mathematics University of Missouri-Kansas City Kansas City, Missouri 64110

TYPE of financial assistance (with number anticipated in 1970-1971)

STIPEND Amount 9 or (dollars) 12 mo TUITION if not included in stipend

SERVICE REQUIRED

Hrs/Week

Туре

University of Missouri, Rolla

ROLLA, MISSOURI 65401
B.E. Gillett, Chairman
Department of Computer Science
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 739
Baccalaureate Degrees by Department: 23
Master's Degrees by Department: 25

Fellowship (1)	2500-3500	9		None	None
Teaching Assistantship (14)	3500-3750	9	\$330 per.yr.	20	
Research Assistantship (4)	3500-3750	9	\$330 per yr.	20	

Washington University

ST. LOUIS, MISSOURI 63130
Leon Cooper, Chairman
Department of Applied Mathematics
and Computer Science
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1008
Baccalaureate Degrees by Department: 7

PH. D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 2; Applied Mathematics, 1; Operations Research, 10. TOTAL: 13

Fellowship (8)	2400-3200	12	None	None	
Teaching Assistantship (5)	2500-2500	9	None	20	Teaching
Research Assistantship (15)	variable	9 or 11	variable	20	Research
Scholarship (5)			None	None	
Traineeship (21)	2500-2500	9	None	20	Teaching/Research

WASHINGTON UNIVERSITY

Graduate Study Leading to the Degrees of:

M. S. in Applied Mathematics and Computer Science D. Sc. in Applied Mathematics and Computer Science

Fields of Study: Applied Analysis

Computer Science Numerical Analysis Operations Research Probability and Statistics

Financial Assistance: Fellowships and Traineeships Providing Tuition Remission and a Stipend of \$2,500.

Inquiries should be addressed to:

Professor Leon Cooper, Chairman
Department of Applied Mathematics and Computer Science
School of Engineering and Applied Science
Washington University
St. Louis, Missouri 63130

of financial aggistance /ith	BIIF	END	TUITION		
of financial assistance (with	Amount	9 or	if not included		VICE REQUIRED
number anticipated in 1970-19	71) (dollars)	12 mo.	in stipend	Hrs/Week	Туре
Washington Universi	ity				
ST. LOUIS, MISSOURI 63130 Guido Weiss, Chairman Department of Mathematics Applications must be filed by		970	Baccalar Baccalar	ireate Degrees	WARDED IN 1969 by Institution: 1038 by Department: 16 epartment: 7
PH.D. Degrees awarded durin Geometry and Topology, 2; An	g last three ye alysis and Fun	ars by fie ctional An	ld of specializatio	on: Algebra an L: 7	d Number Theory, 2;
Fellowship (11)	2400-340	0 12	Full-tuition	3	Grading
Teaching Assistantship (30) Research Assistantship (5)	2500-360 2600-340		Full-tuition Full-tuition	9	Teaching & Gradin Research
Montana State Unive	ersity	MON	TANA		
BOZEMAN, MONTANA 59715 Louis C. Barrett, Chairma Department of Mathematics			Baccal	aureate Degree	AWARDED IN 1969 es by Institution: 1008 es by Department: 26
•		70		's Degrees by	Department: 5
Applications must be filed by 1 PH. D. Degrees awarded durin Geometry and Topology, 1; An Science and Numerical Analys	February 1, 19 og last three ye alysis and Fun	ars by fie	Master ld of specialization	n: Algebra an	d Number Theory.1:
Applications must be filed by 1 PH. D. Degrees awarded durin Geometry and Topology, 1; An	February 1, 19 og last three ye alysis and Fun	ars by fie	Master ld of specialization	n: Algebra an	d Number Theory.1:
Applications must be filed by 1 PH. D. Degrees awarded durin Geometry and Topology, 1; An Science and Numerical Analys Teaching Assistantship (14) Traineeship (5)	February 1, 19 g last three ye alysis and Fun is, 1. TOTAL 2400-3000 2400	ears by fie ectional An	Master ld of specializatio alysis, 1; Probabi	n: Algebra an lity and Statist	d Number Theory,1; cics, 2; Computer
Applications must be filed by 1 PH. D. Degrees awarded durin Geometry and Topology, 1; An Science and Numerical Analys Teaching Assistantship (14)	February 1, 19 g last three ye alysis and Fun is, 1. TOTAL 2400-3000 2400	ears by fie ctional An : 6	Master Id of specializatio alysis, 1; Probabi \$43 per. qtr. NUMBER Baccal Baccal	n: Algebra an lity and Statist 6-7 OF DEGREES aureate Degree	AWARDED IN 1969 es by Institution: 976 es by Department: 14

NEBRASKA

Chadron State College

CHADRON, NEBRASKA 69337 Arthur W. Struempler, Chairman Department of Mathematics Applications must be filed by April 15, 1970

NUMBER OF DEGREES AWARDED IN 1969 352 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: Master's Degrees by Department: 1

Teaching Assistantship (2) 2000

^{**}Nonresident

TYPE	STIPE	CND	TUITION		
of financial assistance (with	Amount	9 or	if not included		E REQUIRED
number anticipated in 1970-1971)	(dollars)	12 mo.	in stipend	Hrs/Week	Туре
Creighton University					
OMAHA, NEBRASKA 68131 Derek J.H. Fuller, Chairman Department of Mathematics Applications must be filed by Marc	eh 15, 1970		Bacca Bacca	OF DEGREES AV laureate Degrees laureate Degrees r's Degrees by De	by Institution: 590 by Department: 23
Teaching Fellowship (3) Graduate Assistant (2)	2400-2500 2200-2400		Included Included	6 20	Teaching Computer
Kearney State College					
KEARNEY, NEBRASKA 68847 L.M. Larsen, Head Department of Mathematics			Baccalau Baccalau	F DEGREES AWAI reate Degrees by reate Degrees by Degrees by Depar	Institution: 890 Department: 48
Teaching Assistantship (6-7)	2000	9		6-15	6-(15 other)
University of Nebraska					
LINCOLN, NEBRASKA 68508 Edwin Halfar, Chairman Department of Mathematics Applications should be filed by Ma			Bacca Bacca Maste	R OF DEGREES A alaureate Degrees alaureate Degrees er's Degrees by D	by Institution: 2600 by Department: 33 epartment: 12
PH.D. Degrees awarded during la Geometry and Topology, 1; Logic TOTAL: 17.	ast three ye ,1; Analysi	ars by field s and Funct	l of specializatio ional Analysis,	on: Algebra and Nu 6; Probability and	umber Theory, 7; Statistics, 2.
Fellowship (7) Teaching Assistantship (50)	2000-240 2700-360		\$18.75/ sem.hr.	6 max.	Teaching
University of Nebraska	at Oma	ha			
OMAHA, NEBRASKA 68101 Paul A. Haeder, Chairman			Bacc	R OF DEGREES A alaureate Degrees alaureate Degrees	

Department of Mathematics Applications must be filed by March 1, 1970

Baccalaureate Degrees by Department: 30 4 Master's Degrees by Department:

Teaching 6 Teaching Assistantship (8) 2400 9

NEVADA

University of Nevada

RENO, NEVADA 89507 E. Maurice Beesley, Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 663 16 Master's Degrees by Department:

Teaching and 20 Teaching Assistantship (6) 2500-2700 paper grading (dollars)

Amount 9 or

12 mo.

TUITION if not included in stipend

SERVICE REQUIRED

Hrs/Week

39

4

1

NEW HAMPSHIRE

Dartmouth College

of financial assistance (with

number anticipated in 1970-1971)

HANOVER, NEW HAMPSHIRE 03755 Donald L. Kreider, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 707 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 1; Logic, 1; Analysis and Functional Analysis, 2. TOTAL: 6

Fellowship (12)	2600-3200	12	0-4	Teaching
Teaching Fellowship (15)	2000-2400	9	0-4	Teaching
Research Assistantship (3)	2000-2400	9	0-4	Research

University of New Hampshire

DURHAM, NEW HAMPSHIRE 03824 M. Evans Munroe, Chairman Department of Mathematics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 815 Baccalaureate Degrees by Department: 47 Master's Degrees by Department: 33

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 2; Analysis and Functional Analysis, 1. TOTAL: 4

Fellowship (5) Teaching Assistantship (10) Research Assistantship (4)	2400-3000 2400-2400 2400-2800	12 9 9	None None None	6	Teaching
Scholarship (4)	Tuition only	9	None		

NEW JERSEY

Fairleigh Dickinson University (Madison Campus)

MADISON, NEW JERSEY 07940 H.A. Elkholy, Chairman Department of Mathematics and Physics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 527 13 Baccalaureate Degrees by Department: Master's Degrees by Department:

2000 Teaching Teaching Assistantship (3)

Montclair State College

UPPER MONTCLAIR, NEW JERSEY 07043 Paul C. Clifford, Chairman Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969 870 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 11 Master's Degrees by Department:

Teaching, Teaching Assistantship (1) 2000 9 Assistant

TYPE STIPEND TUITION
of financial assistance (with Amount 9 or if not included SERVICE REQUIRED
number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week Type

Princeton University

PRINCETON, NEW JERSEY 08540 Elias M. Stein, Chairman Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution:

Baccalaureate Degrees by Department: Master's Degrees by Department: 772

24 12

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 7; Geometry and Topology, 7; Logic, 3; Analysis and Functional Analysis, 9; Probability and Statistics, 2; Mathematical Physics, 3. TOTAL: 30

Fellowship NSF (35) Teaching Fellowship (4)	2400-2800 2400-2800	either 9	* \$1100		6 10	
Teaching Assistantship (8) Research Assistantship (10) Princeton Fellowships (9) Danforth (2)	3400 3200 2200-2600 2800	9 9 9	\$1100 \$1100 \$1950 \$1950	10	10	

^{*} Tuition paid by NSF + NSF Traineeship. Note: Teaching Assistants who have not passed General Exam receive automatic rebate in tuition fee of \$850; after passing General rebate is \$1225. Same for Res. Assts.

Princeton University

PRINCETON, NEW JERSEY 08540 John W. Tukey, Chairman Department of Statistics Applications must be filed by January 15, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 772
Baccalaureate Degrees by Department: 6
Master's Degrees by Department: 2

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 1. TOTAL:1

Fellowship (7)	2400-2800	9		None	
Teaching Assistantship (3)	3400	9	\$1100	6	Teaching
Research Assistantship (6)	3200	9	\$1100	20	Research
Princeton Fellowship (2)	4150-4550	9	\$ 1950	None	

RUTGERS UNIVERSITY

THE STATE UNIVERSITY OF NEW JERSEY

GRADUATE FELLOWSHIPS AND ASSISTANTSHIPS IN MATHEMATICS SPECIAL THREE-YEAR RESEARCH ASSISTANTSHIPS FOR OUTSTANDING STUDENTS STIPEND: \$4100 per year plus tuition

Additional three-year Research Assistantships with stipends of \$3183 per year plus tuition are available. Fellowships are awarded by the Mathematics Department under traineeship programs sponsored by the National Science Foundation, the National Defense Education Act, and the National Aeronautics & Space Administration. Teaching Assistantships are available: the stipend will be \$3183 plus tuition. Assistantships require five hours per week of teaching or its equivalent. Scholarships providing free tuition are also available.

GRADUATE PROGRAM

A full program in mathematics is offered leading to the M.S., M.S.T., and Ph.D. degrees. Rutgers has received a National Science Foundation Science Development Grant to develop a center of excellence in mathematics. The department sponsors some 150 seminars each year, many of which are presented by visiting specialists. The mathematics library contains approximately 10,000 volumes and receives more than 260 journals of interest to mathematicians. This collection will be housed in the new Mathematical Sciences building presently under construction.

Applications for admission will be accepted until July 15, 1970. Students desiring financial support should submit their applications before March 1, 1970. For information and application forms, write to

Admissions Office Rutgers University New Brunswick, New Jersey 08903

An equal opportunity employer

TYPE

STIPEND

Amount 9 or

TUITION

if not included

SERVICE REQUIRED

of financial assistance (with number anticipated in 1970-1971)

(dollars) 12 mo.

in stipend

Hrs/Week

Туре

Rutgers, The State University

NEW BRUNSWICK, NEW JERSEY 08903 Kenneth G. Wolfson, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Master's Degrees by Department: 4

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology, 4; Logic, 2; Analysis and Functional Analysis, 5. TOTAL: 17

Fellowship Gen. Univ. (10) * Teaching Assistantship (25) Research Assistantship (30) Scholarship (open) Fellowship (NASA, NDEA, NSF) (20)	2000-2000 3200-3200 3200-3500 2000-2800**	9 9 9	Full tuition Full tuition Full tuition Full tuition Full tuition Full tuition	5-6	Teaching	
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^{*} Not available to 1st yr. students.

Rutgers, The State University

NEW BRUNSWICK, NEW JERSEY 08903 Arthur Cohen, Acting Director Department of Statistics NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3370

Baccalaureate Degrees by Department: Master's Degrees by Department:

29

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 16. TOTAL: 16

Fellowship (5)	13,000	1-9		5	Teaching
		4,12			
Teaching Assistanship (9)	28,647	9	\$440	15	Teaching
Research Assistantship (5)	15,915	9	\$440	15	Research,
					Consulting
CIBA	3183	9	\$440	15	Research,
					Consulting

Seton Hall University

SOUTH ORANGE, NEW JERSEY 07079 Joseph W. Andrushkiw, Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 950

Baccalaureate Degrees by Department: 30

Master's Degrees by Department: 7

Teaching Assistantship 2000-2400 9 6 Teaching

Stevens Institute of Technology

HOBOKEN, NEW JERSEY 07030
Roger S. Pinkham, Head
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 350
Master's Degrees by Department: 43

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Analysis and Functional Analysis, 4; Probability and Statistics, 1; Computer Science and Numerical Analysis, 1, Applied Mathematics, 6. TOTAL: 13

Fellowship	2400-2800	9	No
Teaching Assistantship	2600-2900	9	10
Assistantship	3700	9	16

^{**} Additional allowance for dependents.

9

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H.SQIAPH	NAW	VIAVICA	Intuar	JIT W
Eastern	7 J C M	MICAICO	OHIVEL	31 L Y

PORTALES, NEW MEXICO 88130 C.K. Wilson, Chairman Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 502
Baccalaureate Degrees by Department: 16
Master's Degrees by Department: 9

Teaching Assistantship (6)

2000

In-state

Teaching

New Mexico Highlands University

LAS VEGAS, NEW MEXICO 87701

Kim A. Kirkpatrick, Acting Head

Department of Physics and Mathematics

Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 200
Baccalaureate Degrees by Department: 4
Master's Degrees by Department: 1

Teaching Assistantship (5)

2000

12

_

12

6

New Mexico Institute of Mining and Technology

SOCORRO, NEW MEXICO 87801 Ralph W. Ball, Chairman Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 70
Baccalaureate Degrees by Department: 12

Applications must be filed by March 1, 1970

Teaching Assistantship (6)

2600-2750 9 \$90

5-6

Course hrs. of Teaching

New Mexico State University

LAS CRUCES, NEW MEXICO 88001 Edward D. Gaughan, Chairman Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 721
Baccalaureate Degrees by Department: 22
Master's Degrees by Department: 10

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 8; Geometry and Topology, 1; Analysis and Functional Analysis, 5; Computer Science and Numerical Analysis, 1; Applied Mathematics, 11; Others, 1. TOTAL: 27

Fellowship (12) Teaching Assistantship (35)

2900-3300

Both 9

9

414

20

Teaching

New Mexico State University

LAS CRUCES, NEW MEXICO 88001
J. Mack Adams, Head
Department of Computer Science
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 721
Master's Degrees by Department: 3

Fellowship (1) 2900-2900 12 Yes No duties
Teaching Assistantship (3) 2700-2700 9 Yes 20 Teaching/Research

TYPE of financial assistance (with number anticipated in 1970-1971)

STIPEND Amount 9 or (dollars) 12 mo TUITION if not included in stipend

SERVICE REQUIRED Hrs/Week Ty

University of New Mexico

ALBUQUERQUE, NEW MEXICO 87106 L.H. Koopmans, Chairman Department of Mathematics and Statistics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1492
Baccalaureate Degrees by Department: 14
Master's Degrees by Department: 14

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Geometry and Topology, 2; Analysis and Functional Analysis, 1; Probability and Statistics, 4; Applied Mathematics, 7; Combinatorial Analysis, 1. TOTAL: 21

12

Fellowship (12) Teaching Assistantship (30) 2000-3400 2300-3000

Waived

20

Teaching

Some people on fellowships can be given a teaching course per semester for 600/700 extra.

NEW YORK

City University of New York, Brooklyn College

BROOKLYN, NEW YORK 11210
James Singer, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department:
Master's Degrees by Department:

Teaching Fellowship (3) Teaching Assistantship (5) 4000-4500 14/h-20/h

9

exempt \$35/credit 6 6-12 Teaching Teaching 2500

150

5

The Doctoral Program in Mathematics of

The City University of New York

is at the Graduate Center Building of CUNY in mid-Manhattan, opposite the Public Library and Bryant Park. This program is now in its sixth year.

Advanced students have office space and others have carrels in the excellent departmental library. The student body is small enough to facilitate close contact with the staff.

Currently, the staff consists of Eldon Dyer, Executive Officer; Louis Auslander, Michel L. Balinski, Charles Barton, Edgar A. Feldman, Alex Heller, Alan J. Hoffman (Adjunct), Raymond Hoobler, Harvey M. Hyman, Richard E. Isaac, Stanley Kaplan, Linda Keen, Joseph Lewittes, Martin Moskowitz, Burton Randol, Richard Sacksteder, Robert Schatten, Raymond Smullyan, Fred Supnick, Alphonse T. Vasquez, Leo Zippin.

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

Executive Officer in Mathematics

THE CITY UNIVERSITY OF NEW YORK

Graduate Center 33 West 42nd Street New York, New York 10036 TYPE

of financial assistance (with

number anticipated in 1970-1971)

STIPEND

Amount 9 or

TUITION if not included

SERVICE REQUIRED

(dollars) 12 mo. in stipend Hrs/Week

Type

City University of New York, Graduate Division

NEW YORK, NEW YORK 10036 Eldon Dyer, Chairman Department of Mathematics Applications must be filed by February 1, 1970

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology, 8; Analysis and Functional Analysis, 6; Computer Science and Numerical Analysis, 5. TOTAL: 24

Fellowship (8)	2000-3000	9		
Teaching Fellowship (8)	2200-3400	9	4	Teaching
Teaching Assistantship (15)	2200-3400	9	4	Teaching
Research Assistantship (15)	3600	12		Guided Research
Scholarship (10)				

City University of New York, Baruch College

NEW YORK, NEW YORK 10468 Herbert Arkin, Chairman Department of Statistics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 822
Baccalaureate Degrees by Department: 22

Baccalaureate Degrees by Department: 22
Master's Degrees by Department: 19

Teaching Assistantship (1)	5500-5925	12	20	Laboratory
December 4 majorant also (0)	0040 4000	0	1.5	Supervisor
Research Assistantship (6)	3340-4090	9	15	Research

ADELPHI UNIVERSITY GARDEN CITY, N. Y. 11530

The Department of Mathematics offers work in pure and applied mathematics leading to the M.S. and Ph.D. degrees. Fields of research are: analysis, numerical analysis, differential and integral equations, homological algebra, group theory, differential topology, category theory, applied mathematics (fluid dynamics, celestial mechanics, elasticity theory, electromagnetic theory, magnetohydrodynamics).

The M.S. Degree is also offered in Applied Science. An In-Service N.S.F. Institute offers courses which lead to the M.S. for high school teachers of mathematics. A computing center (CDC 3300) is available.

Applications for graduate scholarships, assistantships and transeeships are invited. Full-time graduate students have ample opportunity for close personal contact with the faculty. Living accommodations are available near the campus. Adelphi University is within easy (40 minutes) commuting distance from New York City by car or by train.

For Further Information Write To

Professor F. V. Pohle (Chairman), Department of Mathematics Adelphi University, Long Island, Garden City New York, 11530; (516) PI-7-2200

STIPEND Amount 9 or (dollars) 12 mo.

TUITION if not included in stipend

SERVICE REQUIRED Hrs/Week Туре

City University of New York, Hunter College

NEW YORK, NEW YORK 10021 Ada Peluso, Acting Chairman Department of Mathematics Applications must be filed by April 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 60 Master's Degrees by Department: 20

Teaching Assistantship (2)

3000-4000

q

6

City University of New York, Lehman College

NEW YORK, NEW YORK 10468 Israel H. Rose, Chairman Department of Mathematics Applications must be filed by April 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1325 Baccalaureate Degrees by Department: 73 Master's Degrees by Department: 2

Teaching Assistantship (3)

3000-5000

\$25/credit*

3-6(2nd term only)

Teaching

4

City University of New York, Queens College

FLUSHING, NEW YORK 11367 Joseph Hershenov, Chairman Department of Mathematics Applications must be filed by April 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 3014 Baccalaureate Degrees by Department: 142Master's Degrees by Department:

Teaching Assistantship (2)

Approx. 5700*

9 \$25/cr.hr.

Columbia University

NEW YORK, NEW YORK 10027 Edgar R. Lorch, Chairman Department of Mathematics Applications must be filed by January 12, 1970 NUMBER OF DEGREES AWARDED IN 1969 901 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 30 Master's Degrees by Department: 14

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 12; Geometry and Topology, 3; Analysis and Functional Analysis, 6; Others, 4. TOTAL: 25

Fellowship (20–25) Teaching Fellowship (25–30	3300-3300 3300-3300	12	N/A	12-15 12-15	Teaching for 2 yrs. Teaching for 2 yrs.
Teaching Assistantship (N/A)					
Research Assistantship (9)	3300-3300				·
Scholarship	3300-3300				

^{*}Waived in many cases.

^{*}New contract has just recently been signed with UFCT the salary for this classification (Teaching Assistant)

STIPEND

Amount 9 or

THITION if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

12 mo.

in stipend

Hrs/Week

Columbia University

NEW YORK, NEW YORK 10027 Myron F. Rosskopf, Chairman Department of Mathematical Education Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Master's Degrees by Department:

36

PH.D. Degrees awarded during last three years by field of specialization: Mathematical Education, 7. TOTAL: 7

Fellowship (4)	2400	optional	
Research Assistantship (3)		optional	24
Scholarship (1)		9	

Columbia University

NEW YORK, NEW YORK 10027 Herbert E. Robbins, Chairman Department of Mathematical Statistics Applications must be filed by January 12, 1970 NUMBER OF DEGREES AWARDED IN 1969 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 14. TOTAL: 14

Fellowship (23)	275/mo.	9-12	None	Up to 10 hrs. Teaching
,				required of all students in
				2nd and 3rd years.
Research Assistantship (4)	275/mo.	9-12	None	

Cornell University

ITHACA, NEW YORK 14850 W.H. J. Fuchs, Chairman Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 2485 Baccalaureate Degrees by Department: 45 Master's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 9; Geometry and Topology, 3; Logic, 5; Analysis and Functional Analysis, 6; Probability and Statistics, 5. TOTAL: 28

Fellowship (20)	1850-3000	9	None	None
Teaching Fellowship (46)	2600-2700	9	None	3-4 class Teaching
				hrs.
Research Assistantship (15)	4600	9	2350	For advanced students only

Cornell University

ITHACA, NEW YORK 14850 Juris Hartmanis, Chairman Department of Computer Science Applications must be filed by January 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Master's Degrees by Department:

9

PH. D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 3. TOTAL: 3

Fellowship (15)	2400-3000	9	Paid		
Teaching Assistantship (20)	2700	9	Paid	16	Teaching
Research Assistantship (14)	2600	9	Paid	16	Research

TYPE	STIPE		TUITION		n nneumnn
f financial assistance (with	Amount	9 or	if not included		E REQUIRED
umber anticipated in 1970-1971)	(dollars)	12 mo.	in stipend	Hrs/Week	Type
C. W. Post College					
GREENVALE, NEW YORK 11548 Bernard Seckler, Chairman			Bacca	R OF DEGREES A daureate Degrees daureate Degrees	
Department of Mathematics Applications must be filed by Mar	ch 1, 1970		Maste	er's Degrees by D	epartment:
Graduate Assistantship (5)	2000-250	0	Tuition Waived	18	
Fordham University					
NEW YORK, NEW YORK 10458 Hing Tong, Chairman Department of Mathematics			Bacca Bacca	alaureate Degrees alaureate Degrees	by Department: 31
		970	Most	er's Degrees by D	epartment: 11
Applications must be filed by Fel	oruary 1, 1	310	Wast	er's Degrees by D	cparement.

Hofstra University

Teaching Assistantship (7)

NSF Trainee (3)

HEMPSTEAD, NEW YORK 11550 Robert Bumcrot, Chairman Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969 650 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 20 Master's Degrees by Department:

8

Miscellaneous

3

Fellowship (1-2)	2500	9	\$62/hr.	up to 10	Various
Teaching Fellowship (1-2)	600-2400	9	\$62/hr.	2-6	Teaching

2400-3000

2400-2800

9

9

Free tuition

Free tuition

New York University

NEW YORK, NEW YORK 10012 Jurgen K. Moser, Director Courant Institute of Mathematical Sciences Applications must be filed by January 15, 1970

NUMBER OF DEGREES AWARDED IN 1969 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 12; Geometry and Topology, 3; Analysis and Functional Analysis, 21; Probability and Statistics, 5; Computer Science and Numerical Analysis, 8; Applied Mathematics, 16. TOTAL: 65

Fellowship (70)	3300-3700	12	Individual	Individual
Research Assistantship (40)	3300-3700	12	Individual	Individual

New York University, University Heights

BRONX, NEW YORK 10453 J.B. Keller, Chairman Department of Mathematics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 3000 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 23 10 Master's Degrees by Department:

Fellowship (10)	2400-3600	12	
Teaching Fellowship (12)	3000-3600	12	6

TYPE of financial assistance (with

STIPEND Amount 9 or TUITION if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

12 mo.

in stipend

Hrs/Week

Туре

400

20

20

New York University

NEW YORK, NEW YORK 11023 Ernest Kurnow, Chairman Department of Quantitative Analysis NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department:
Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: $^{\circ}$ Probability and Statistics, 9. TOTAL: 9

Teaching Fellowship (2)	3250-3250	9	No*	12	Teaching
Research Assistantship (8)	2000-2500	9	No*	12	Research
Scholarship (15)	free tuition				

^{*}Free tuition

Polytechnic Institute of Brooklyn

BROOKLYN, NEW YORK 11201
H. Hochstadt, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:

Baccalaureate Degrees by Institution: 350
Baccalaureate Degrees by Department: 41
Master's Degrees by Department: 15

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 9; Analysis and Functional Analysis, 12; Probability and Statistics, 3. TOTAL: 24

Fellowship (3)	2400	9	Remitted	None	
Teaching Fellowship (12)	2430	9	Remitted	4-6	Teaching
Teaching Assistantship (2)	4600	12	\$2200	20	Research

Pratt Institute

BROOKLYN, NEW YORK 11205
A.B. Finkelstein, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969

6

Baccalaureate Degrees by Institution: 559
Baccalaureate Degrees by Department: 8
Master's Degrees by Department: 8

Teaching Assistantship (2) 2200 9 None

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

	STIPEN	D	TUITION			
of financial assistance (with Amount 9 or			if not included		E REQUIRED	
number anticipated in 1970-1971)	(doilars) 1	2 mo.	in stipend	Hrs/Week	Туре	
Rensselaer Polytechnic TROY, NEW YORK 12181 George H. Handelman, Chairma Department of Mathematics			Bacca Bacca	R OF DEGREES A Maureate Degrees Maureate Degrees er's Degrees by D	by Department:	800 37 29
PH.D. Degrees awarded during la Geometry and Topology, 1; Analys Applied Mathematics, 10; Operati	sis and Funct	ional Ana	llysis, 2; Compu	ter Science and N	umber Theory, 2; umerical Analysis	,2;
Fellowship (6)	2400-2800	12	None	None		
Teaching Fellowship (4) Teaching Assistantship (8) Scholarship(1-2)	2400-2800 2400-2800 None	12 9	None None None	None 6-8 None	in first year Teaching	
BUFFALO, NEW YORK 14222 Rudolph J. Cherkauer, Chairm	an		Bacca	OF DEGREES A	by Institution:	
		0	Bacca Bacca		by Institution: by Department:	1321 46 17
Rudolph J. Cherkauer, Chairma Department of Mathematics Applications must be filed by Febr		9	Bacca Bacca	laureate Degrees laureate Degrees	by Institution: by Department:	46
Rudolph J. Cherkauer, Chairm Department of Mathematics	2500-2700	9	Bacca Bacca Maste	laureate Degrees laureate Degrees r's Degrees by De	by Institution: by Department: epartment:	46
Rudolph J. Cherkauer, Chairman Department of Mathematics Applications must be filed by February Feaching Fellowship (3) State University of New FREDONIA, NEW YORK 14063 Frank R. Olson, Chairman Department of Mathematics	2500-2700 V York at	9	Bacca Bacca Maste nia NUMBEF Bacca Bacca	laureate Degrees laureate Degrees r's Degrees by De 3-6	by Institution: by Department: epartment: Teaching WARDED IN 1969 by Institution: by Department:	46 17 550 16
Rudolph J. Cherkauer, Chairman Department of Mathematics Applications must be filed by February Feaching Fellowship (3) State University of New FREDONIA, NEW YORK 14063 Frank R. Olson, Chairman	2500-2700 V York at	9	Bacca Bacca Maste nia NUMBEF Bacca Bacca	laureate Degrees laureate Degrees r's Degrees by De 3-6 R OF DEGREES A laureate Degrees laureate Degrees	by Institution: by Department: epartment: Teaching WARDED IN 1969 by Institution: by Department:	46 17 550 16
Rudolph J. Cherkauer, Chairman Department of Mathematics Applications must be filed by February Feaching Fellowship (3) State University of New FREDONIA, NEW YORK 14063 Frank R. Olson, Chairman Department of Mathematics Applications must be filed by Marchard Feaching Assistantship (6)	2500-2700 V York at ch 10, 1970 2200-2600	9 Fredo	Bacca Bacca Maste nia NUMBEF Bacca Bacca	laureate Degrees laureate Degrees r's Degrees by De 3-6 R OF DEGREES A daureate Degrees daureate Degrees er's Degrees by D	by Institution: by Department: epartment: Teaching WARDED IN 1969 by Institution: by Department: epartment: Recitations	46 17 550 16
Rudolph J. Cherkauer, Chairman Department of Mathematics Applications must be filed by February Feaching Fellowship (3) State University of New FREDONIA, NEW YORK 14063 Frank R. Olson, Chairman Department of Mathematics Applications must be filed by March	2500-2700 V York at ch 10, 1970 2200-2600	9 Fredo	Bacca Bacca Maste nia NUMBEH Bacca Maste NUMBEH Bacca Maste	laureate Degrees laureate Degrees r's Degrees by De 3-6 R OF DEGREES A daureate Degrees daureate Degrees r's Degrees by D 6-8	by Institution: by Department: epartment: Teaching WARDED IN 1969 by Institution: by Department: epartment: Recitations Grading WARDED IN 1969 by Institution: by Department:	46

State University College at Oswego

OSWEGO, NEW YORK 13126
Richard D. Mayer, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1150
Baccalaureate Degrees by Department: 34
Master's Degrees by Department: 4

Teaching Assistantship (6) 2500 9 None 4 1/2 hrs.

number anticipated in 1970-1971)

STIPEND

Amount

TUITION if not included

SERVICE REQUIRED

(dollars)

in stipend

Hrs/Week

State University College of New Paltz

NEW PALTZ, NEW YORK 12561 Arthur W.J. Ullman, Chairman Department of Mathematics Applications are offered on a first come basis NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1298 Baccalaureate Degrees by Department:

Teaching Assistantship (5)

1500-3000

12

Max. 6

Teaching

State University of New York at Albany

ALBANY, NEW YORK 12203 Vincent F. Cowling, Chairman Department of Mathematics

Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1230 Baccalaureate Degrees by Department: 130 Master's Degrees by Department: 13

Fellowship (2) 3000-4000 9-1 None 20 Research 12 - 120 Teaching Fellowship (1) 2800 9 None Teaching 2800-3000 Teaching Assistantship (16) 9 None 20 Teaching 2500-3000 12 None 20 Research Research Assistantship (2)

State University of New York at Albany

ALBANY, NEW YORK 12203 E.D. Reilly, Jr. Chairman Department of Computer Science Applications must be filed by April 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Master's Degrees by Department:

Teaching Assistantship (4) 2700 Teaching 2 sections 9 20 Research Assistantship (4) 2700 9 20 Programming

State University of New York at Buffalo

BUFFALO, NEW YORK 14226 K.D. Magill, Jr. Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1185 Baccalaureate Degrees by Department: 74 Master's Degrees by Department: 19

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 1. TOTAL: 3

Fellowship (12)	2000-4000	9-12	Waived		
Teaching Assistantship (60)	2600-3417	9	Waived	4	Teaching
Research Assistantship (6)	3000-4000	9-12	Waived		Research
Scholarship (3)	2000-3000	9	Waived		

TYPE of financial assistance (with

number anticipated in 1970-1971)

(dollars)

STIPEND Amount 9 or

12 mo.

TUITION if not included in stipend

SERVICE REQUIRED

Hrs/Week

State University of New York at Buffalo

BUFFALO, NEW YORK 14214 Seymour Geisser, Chairman Department of Statistics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Master's Degrees by Department:

1185

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 3. TOTAL: 3

Fellowship (7)	2400-3600	12		
Teaching Assistantship (13)	2600-3000	9	10	Teaching and Research
Research Assistantship (4) Biometric Traineeships (6)	3600-4800 2400-4800	$\frac{12}{12}$	10	Research

STATE UNIVERSITY OF NEW YORK **BINGHAMTON**

The Mathematics Department of the State University of New York at Binghamton is growing rapidly, and can now offer graduate students both an unusual amount of personal attention from an active faculty and a lively research atmosphere. A number of research seminars in algebra, analysis, and topology are in current operation. Doctoral research is possible in the fields of algebra, differential equations, functional analysis, graph theory, and topology. The department is especially strong in general topology.

Further information about the program may be obtained by writing to The Department of Mathematics.

FINANCIAL AID

SPECIAL FELLOWSHIPS AND GRADUATE ASSISTANTSHIPS WITH STI-PENDS UP TO \$3,250 PLUS REMISSION OF TUITION ARE AVAILABLE. SOME PART-TIME INSTRUCTORSHIPS WITH CONSIDERABLY HIGHER STIPENDS ARE ALSO HELD BY GRADUATE STUDENTS.

New York State residents may qualify for awards for graduate study at The State University of New York at Binghamton under the New York State Scholar Incentive Award program. For information and application forms, write to Regents Examination and Scholarship Center, State Education Department, Albany, New York, 12201.

Application forms for admission to the Graduate School and for Assistantships and Fellowships may be obtained from the Graduate Admissions Office, State University of New York at Binghamton, Binghamton, New York, 13901.

TYPE STIPEND

Amount 9 or

12 mo.

(dollars)

TUITION

if not included in stipend

ed

SERVICE REQUIRED

Hrs/Week

Туре

State University of New York at Stony Brook

STONY BROOK, NEW YORK 11790 James Simons, Chairman Department of Mathematics

number anticipated in 1970-1971)

of financial assistance (with

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department:
Master's Degrees by Department:

988 64 4

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 2; Analysis and Functional Analysis, 1. TOTAL: 6

Fellowship (20)	*	Voluntary teaching
Teaching Assistantship (58)	*	4 Teaching
Research Assistantship (6)	*	Voluntary teaching
Scholarship (4)	*	Voluntary teaching

^{*} Every successful applicant is automatically considered for financial assistance, unless he specifically requests otherwise.

There is no separate application for financial assistance that must be completed.

State University of New York at Stony Brook

STONY BROOK, NEW YORK 11790
Irving Gerst, Chairman
Department of Applied Analysis
Applications must be completed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 988
Baccalaureate Degrees by Department: 68
Master's Degrees by Department: 8

PH. D. Degrees awarded during last three years by field of specialization: Applied Mathematics, 4. TOTAL: 4

Fellowship (8)	2400-3300	9	Free		
Teaching Fellowship (2)	3000	9	Free	5	Teaching
Teaching Assistantship (23)	2626-2754	9	Free	20	Teaching
Research Assistantship (25)	2626-2754	9	Free	20	Research

STATE UNIVERSITY OF NEW YORK BINGHAMTON

RESEARCH ASSOCIATESHIPS IN MATHEMATICS

1970 - 71

We invite applications for Research Associateships in mathematics. These are one-year appointments with possible renewal for a second year. Stipends: \$10,000 for the academic year. Teaching load: two courses one semester and full-time research for one semester.

Applicants should have received the Ph.D. degree in mathematics by September, 1970. For information, write to: Professor L. F. McAuley, Department of Mathematics. Deadline for applications is March 15, 1970.

TYPE of financial assistance (with

STIPEND

Amount 9 or

TUITION if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

12 mo.

in stipend

Hrs/Week

Type

Syracuse University

SYRACUSE, NEW YORK 13210
Donald E. Kibbey, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2230
Baccalaureate Degrees by Department: 35
Master's Degrees by Department: 18

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 9; Geometry and Topology, 4; Analysis and Functional Analysis, 6; Computer Science and Numerical Analysis, 1. TOTAL: 20

Fellowship (20)	2000-2800	either	None	
Teaching Assistantship (60)	2400	9	6	Teaching

Syracuse University

SYRACUSE, NEW YORK 13210

W. Semon, Director

Department of Systems & Information Science Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Master's Degrees by Department:

20

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 2. TOTAL: 2

Fellowship (10)	2000-2400	9	
Teaching Assistantship (16)	2400	9	
Research Assistantship (14)	4000	12	20*

^{* 40} hours per week-Summer

University of Rochester

ROCHESTER, NEW YORK 14627 J.H.B. Kemperman, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1062
Baccalaureate Degrees by Department: 27
Master's Degrees by Department: 15

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 7; Geometry and Topology, 5; Analysis and Functional Analysis, 6; Probability and Statistics, 1. TOTAL: 19

Fellowship (15)	2000-2800*	12	Waived		
Teaching Assistantship (30)	2600-2800	9	Waived	4**	

^{*} Dependency Allowance in some cases

An urban university in a suburban setting...within easy travel distance of some of the world's richest cultural and research resources.

The Mathematics faculty is actively engaged in research relating to fluid dynamics, diffraction theory, graph theory, statistics, operations research, ordinary differential equations, control theory, functional analysis, point set topology, and elasticity.

Graduate work leading to the Master of Arts is offered in both pure and applied mathematics.

Approximately twelve graduate assistantships will be available for the academic year 1970-71.

Interested students are requested to write:

Michael F. Capobianco, Chairman Department of Mathematics—St. John's University Jamaica, New York 11432

^{**} Hours of classroom teaching

TYPE

STIPEND

TUITION

of financial assistance (with Amount 9 or if not included SERVICE REQUIRED number auticipated in 1970-1971) (dollars) 12 mo. in stipend

University of Rochester

ROCHESTER, NEW YORK 14627 W.J. Hall, Chairman Department of Statistics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Department:1062

m 1. 1. 1. 1. 10	2222				
Teaching Assistantship (8)	2600	9	None	12	Teaching, Grading etc.
Other (5)	2400 up	12	None		

Yeshiva University

NEW YORK, NEW YORK 10033 Lewis Coburn, Chairman Department of Mathematics Belfer Graduate School of Science Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Logic, 5; Analysis and Functional Analysis, 9. TOTAL: 14

Fellowship (20)	2400-4000	12			
Teaching Fellowship (4)	2400-4500	12		4	Teaching
Teaching Assistantship (6)	1250-5250	12	\$1250	4 .	Teaching
Research Assistantship (10)	1250-5250	12	\$1250	6	=

NORTH CAROLINA

Appalachian State University

BOONE, NORTH CAROLINA 28607 Ray L. Graham, Acting Chairman Department of Mathematics Applications must be filed by April 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1004 Baccalaureate Degrees by Department: 46 Master's Degrees by Department: 10

Teaching Assistantship (7) 1800-3600 15 Teaching

Duke University

DURHAM, NORTH CAROLINA 27706 Seth Warner, Chairman Department of Mathematics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 990 Baccalaureate Degrees by Department: 55 Master's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology, 3; Logic, 1; Analysis and Functional Analysis, 5; Probability and Statistics, 2. TOTAL: 16

Fellowship (13)	2400-3300	12			
Teaching Assistantship (14)	3300-3600	9	\$1368	8	Teaching
Research Assistantship (4)	3000-5900	9-11	\$1026-1710	0-20	Research

Amount 9 or

TUITION
if not included

d

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

12 mo.

in stipend

Hrs/Week

Type

East Carolina University

GREENVILLE, NORTH CAROLINA 27834
Tullio J. Pignani, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1626
Baccalaureate Degrees by Department: 67
Master's Degrees by Department: 4

Fellowship (9)	2000	9	\$117/qtr.	5	Teaching
Computer Assistants (2)	2000	9	\$ 117/qtr.	10	Assist in Computer
					Lab

North Carolina State University

RALEIGH, NORTH CAROLINA 27607 Nicholas J. Rose, Chairman Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1663
Baccalaureate Degrees by Department: 60
Master's Degrees by Department: 25

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 1; Analysis and Functional Analysis, 3; Probability and Statistics, 1; Applied Mathematics, 6. TOTAL: 14

Fellowship (4)	2400-3200	12	Yes		
Teaching Assistantship (50)	1900-3200	9	\$352	6-12	Teaching or Prof's
Research Assistantship (2)	2400-3200	9	\$352	8-12	Asst. Research

North Carolina State University

RALEIGH, NORTH CAROLINA 27607 D.D. Mason, Chairman Department of Experimental Statistics Applications for Fellowships must be filed by February 15, 1970 for Assistantships by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1663
Baccalaureate Degrees by Department: 5
Master's Degrees by Department: 17

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 21. TOTAL: 21

Fellowship (30)	2400-3600	12	0-20	Teaching
Teaching Assistantship (6)	2700-3600	9	0-20	Teaching
Research Assistantship (12)	2700-3600	12	0-20	Research

University of North Carolina

CHAPEL HILL, NORTH CAROLINA 27514
Fred B. Wright, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2528
Baccalaureate Degrees by Department: 94
Master's Degrees by Department: 13

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 3; Analysis and Functional Analysis, 8. TOTAL: 12

Fellowship (17)	2000-4000	9		•	·· ···································	
Teaching Fellowship (2)	3600 none	9	*	3	Teaching	
Teaching Assistantship (30)	3600 none	9	*	6	Teaching	
*Approximately \$100 tuition plus		-				

TYPE of financial assistance (with STIPEND

TUITION if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

Amount (dollars)

9 or 12 mo.

in stipend

Hrs/Week

University of North Carolina

CHAPEL HILL, NORTH CAROLINA 27514 B.G. Greenberg, Chairman Department of Biostatistics

NUMBER OF DEGREES AWARDED IN 1969 Baccalaurate Degrees by Institution: 2528 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Applied Mathematics, 1; Biostatistics, 1; Public Health, 2. TOTAL: 4

Fellowship (22)	2400-2600	12		
Research Assistantship (3)		12	20	Research, some teaching
Scholarship (20)	2400-2600	12		teaching

University of North Carolina

CHAPEL HILL, NORTH CAROLINA 27514 Frederick P. Brooks, Jr., Chairman Department of Computer and Information Science Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 2528 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 2. TOTAL: 2

Fellowship (2)	3200	9	\$175	4	
Teaching Assistantship (20)	3200	9	\$175	20	Teaching, preparation,
Decree Accidental (0)	0000	•	0.1.7.5		etc.
Research Assistantship (8)	3200	9	\$175	20	Research
NSF Traineeships (3)	2800*	12			

^{*} Plus \$500 for each dependent.

UNIVERSITY OF NORTH CAROLINA GRADUATE PROGRAMS IN STATISTICS

M.S. AND Ph. D. PROGRAMS are offered with specialization in

APPLIED PROBABILITY CODING THEORY COMBINATORICS

DESIGN AND ANALYSIS OF EXPERIMENTS INFORMATION THEORY

MULTIVARIATE ANALYSIS NONPARAMETRIC INFERENCE OPERATIONS RESEARCH PROBABILITY THEORY SEQUENTIAL ANALYSIS

STATISTICAL COMMUNICATION THEORY

STATISTICAL INFERENCE STOCHASTIC PROCESSES TIME SERIES ANALYSIS

FINANCIAL ASSISTANCE is available in the form of departmental fellowships and research assistantships with stipends from \$2,800 for the academic year. Holders of these awards pay in-state tuition and fees, a saving of \$500 over the out-of-state charges.

APPLICATION for admission and financial award should be made before February 1, 1970. Forms and further information may be obtained by writing to:

> **Director of Graduate Admissions** Department of Statistics University of North Carolina Chapel Hill, North Carolina 27514

TYPE

of financial assistance (with

Amount

STIPEND 9 or

TUITION if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars) 12 mo in stipend

Hrs/Week

5

University of North Carolina

CHAPEL HILL, NORTH CAROLINA 27514 George E. Nicholson, Jr. Chairman Department of Statistics

NUMBER OF DEGREES AWARDED IN 1969

Master's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 17.

Fellowship (5)	2000-4000	12		3-5	Lab Supervision
Research Assistantship (20)	2800	9	\$332	3-5	Grading Lab Supervision Grading

University of North Carolina at Greensboro

GREENSBORO, NORTH CAROLINA 27412 E.E. Posey, Head Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1000 Baccalaureate Degrees by Department: Master's Degrees by Department:

Teaching Fellowship (15)	2000-3200	9	\$300	3-6	Teaching
reaching removeship (10)	2000 0200		ψυσσ	0 0	1 Cucining
Research Assistantship (2)	1600-2400	9	\$300	Not specific	Research Assistant

Wake Forest University

WINSTON SALEM, NORTH CAROLINA 27109 Ivey C. Gentry, Chairman Department of Mathematics Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 37 Master's Degrees by Department: 5

Fellowship (4)	2200	\$1075	
Teaching Assistantship (2)	3250	\$1075	12
Scholarship (4)	1075	\$1075	

NORTH DAKOTA

North Dakota State University

FARGO, NORTH DAKOTA 58102 Robert F. Tidd, Chairman Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 900 Baccalaureate Degrees by Department: 53 Master's Degrees by Department: 7

Teaching Assistantship (4) 20	000-2500	9	\$2/cr.	Half time	
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University of North Dakota

GRAND FORKS, NORTH DAKOTA 58201 Ronald Bzoch, Chairman Department of Mathematics Applications must be filed by April 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1216 Baccalaureate Degrees by Department: 34 Master's Degrees by Department: 1

Teaching Assistantship (7)	2200	9	None	6	,	Teaching

number anticipated in 1970-1971)

STIPEND

(dollars)

Amount 9 or

12 mo.

TUITION if not included

SERVICE REQUIRED

in stipend Hrs/

Type

OHIO

Bowling Green State University

BOWLING GREEN, OHIO 43402 L.C. Graue, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 2303

Baccalaureate Degrees by Department: 80

Master's Degrees by Department: 10

Fellowship (3) 2400-2600 12 Teaching Assistantship (25) 2300-2800 9 \$150 3-6 Teaching

Case Western Reserve University

CLEVELAND, OHIO 44106
A.J. Lohwater, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1090
Baccalaureate Degrees by Department: 30
Master's Degrees by Department: 13

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 3; Logic, 3; Analysis and Functional Analysis, 13, Probability and Statistics, 4; Computer Science and Numerical Analysis, 7; Applied Mathematics, 2. TOTAL: 33

Fellowship (25)	2300-3000	9		
Teaching Fellowship (15)	2800-3200	9	3-4	Teaching
Research Assistantship (5)	2300-2800	9		

Case Western Reserve University

CLEVELAND, OHIO 44106
Harold B. Houser, Chairman
Department of Biometry
Applications must be filed by April 15, 1970

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 2. TOTAL:2

Fellowship (1)	2400	12	None	None	
Research Assistantship (2)	4000-5000	12	\$2200	20	Research

Case Western Reserve University

CLEVELAND, OHIO 44106
Burton V. Dean, Chairman
Department of Operations Research
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1090
Master's Degrees by Department: 8

PH.D. Degrees awarded during last three years by field of specialization: Operations Research, 31; TOTAL: 31

	1222 2222				None	
Fellowship (12)	1800-2600	9	No		None	
Teaching Fellowship (4)					m 11	
Teaching Assistantship (2)	4050-4450	9	Yes	20	Teaching	
Research Assistantship (25)	4050-4450	9	Yes	20	Research	
Scholarship (3)	2400-2600	9	No		None	
Trainee (3)	2400-2800	12	No		NA	

9 or

TUITION if not included

SERVICE REQUIRED Hrs/Week

number anticipated in 1970-1971)

(dollars) 12 mo.

Amount

in stipend

Туре

Cleveland State University

CLEVELAND, OHIO 44115 W.R. Van Voorhis, Chairman Department of Mathematics Applications must be filed by May 15, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1017 Baccalaureate Degrees by Department: Master's Degrees by Department:

4

Teaching Assistantship (8) N. S. F. In-Service & Summer 2700-3000

John Carroll University

Institutes (35)

CLEVELAND, OHIO 44118 Reverend Raymond W. Allen, Chairman Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 616 Baccalaureate Degrees by Department: Master's Degrees by Department: 5

Teaching Assistantship (4)

2000

None

9

4

Kent State University

KENT, OHIO 44240 Richard K. Brown, Chairman Department of Mathematics Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 3151 Baccalaureate Degrees by Department: 90 Master's Degrees by Department: 10

Teaching Assistantship (20)

2500-3000

included

Teaching

Miami University

OXFORD, OHIO 45056 Elwood Bohn, Chairman Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 2150 Baccalaureate Degrees by Department: 80 Master's Degrees by Department:

Fellowship (9) Teaching Assistantship (26) Computing Lab (varies)

2100-3000 2600-3000 Varies

9 & 12 Waived 9 Waived

9 & 12

varies

Ohio State University

COLUMBUS, OHIO 43210 Arnold E. Ross, Chairman Department of Mathematics Applications must be filed by February 16, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 5449 Baccalaureate Degrees by Department: 67 Master's Degrees by Department: 38

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 7; Geometry and Topology, 6; Logic, 1; Analysis and Functional Analysis, 11; Probability and Statistics, 8; Computer Science and Numerical Analysis, 1; Applied Mathematics, 3; Combinatorics, 1. TOTAL: 38

Fellowship (30)	2400-3000	9	Waived		
Teaching Assistantship (150)	2700-3300	9	Waived	5	Teaching
Research Assistantship (15)	2700-3500	9	Waived	varies	Research

of financial assistance (with	STIPE Amount	9 or		TUITION if not included	SERVI	CE REQUIRED
number anticipated in 1970-1971)	(dollars)	12 m	o	in stipend	Hrs/Week	Туре
Ohio State University						
COLUMBUS, OHIO 43210 Marshall C. Yovits, Chairman Department of Computer & Info Applications for fellowships must February 1, 1970 and for assistan	rmation Sci be filed by			Ba Ba	ccalaureate Deg	ES AWARDED IN 1969 rees by Institution: .5449 rees by Department: 41 by Department: 14
1970. Fellowship (15)	2000-2200	(9	None	None	
reaching Assistantship (25) Research Assistantship (25)	2475 up 3300 up	12	$\frac{9}{2}$	None None	5 20	Teaching Research
Ohio University						
ATHENS, OHIO 45701 Robert G. Helsel, Chairman Department of Mathematics Applications must be filed by Feb. but accepted later if openings stil		70		Ba		ES AWARDED IN 1969 rees by Department: 55 by Department: 19
Teaching Assistantship (20)	2600-3600)	9	Waived	5 or 6	Teaching
Scholarship (5)				Payable		
University of Akron						
AKRON, OHIO 44304 William H. Beyer, Head Department of Mathematics Applications must be filed by Mar	eh 1, 1970			Ba Ba	accalaureate Deg	ES AWARDED IN 1969 grees by Institution: 179 grees by Department: 3 by Department:
Teaching Assistantship (7)	2400-3600	j	9	24 qtr. er. fi \$22/er. hr. c		Teaching and/or assisting full time faculty
University of Cincinnat	i					
CINCINNATI, OHIO 45221	ruary 15, 1	.970		Baccala	OF DEGREES AV ureate Degrees s Degrees by De	
Edward P. Merkes, Head Department of Mathematics Applications must be filed by Feb						
Department of Mathematics	ast three ye	ars b	y fiel	d of specialization	on: Geometry a	nd Topology, 1; Applied
Department of Mathematics Applications must be filed by Feb PH.D. Degrees awarded during la	1500-200 2700-300 2500-280 tuition m	0 0 0	9 9 9	\$25/qtr. \$25/qtr.	None 3/5 6	nd Topology, 1; Applied
Department of Mathematics Applications must be filed by Feb PH.D. Degrees awarded during Is Mathematics, 2. TOTAL: 3 Fellowship (9) Teaching Fellowship (5) Teaching Assistantship (28) Scholarship (26) NASA NDEA	1500-200 2700-300 2500-280	0 0 0 inus 0	9	\$25/qtr.	None 3/5	nd Topology, 1; Applied
Department of Mathematics Applications must be filed by Feb PH.D. Degrees awarded during la Mathematics, 2. TOTAL: 3 Fellowship (9) Teaching Fellowship (5) Teaching Assistantship (28)	1500-200 2700-300 2500-280 tuition m \$75 2000-240 2400-280	0 0 0 inus 0	9 9 9	\$25/qtr.	None 3/5	nd Topology, 1; Applied

Teaching Assistantship (10)	2800	9	None	6	Teaching

Teaching Assistantship (10)

Teaching

Amount 9 or

TUITION if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

12 mo. in stipend

Hrs/Week

Type

University of Toledo

TOLEDO, OHIO 43606
Robert F. Jackson, Chairman
Department of Mathematics
Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1154
Baccalaureate Degrees by Department: 14
Master's Degrees by Department: 5

Fellowship (4)	2500-4000	12	None	
Teaching Assistantship (20)	2500-4000	9	None	6
Scholarship (4)			None	

Wright State University

DAYTON, OHIO 45431 Carl C. Maneri, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 497
Baccalaureate Degrees by Department: 12

Teaching Assistantship (8) 2900-3000 9 \$3.50/qtr. Teaching

Youngstown State University

YOUNGSTOWN, OHIO 44503
Bernard J. Yozwiak, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1400
Baccalaureate Degrees by Department: 37

Teaching Assistantship (4-6) 2600 9 None 5-6

OKLAHOMA

Oklahoma State University

STILLWATER, OKLAHOMA 74074

John Jewett, Head

Department of Mathematics and Statistics

Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 4000
Baccalaureate Degrees by Department: 70
Master's Degrees by Department: 4

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Geometry and Topology, 3; Analysis and Functional Analysis, 4; Probability and Statistics, 9. TOTAL: 20

Fellowship (10) Teaching Assistantship (70)	2400-2800* 2475-2700	12 9	None \$12/sem.hr.	6-8 sem	None n hrs./ sem.	
Research Assistantship (5)	2475-2700	9	\$12/sem. hr.	20	Research	

^{*}Plus dependency allowances.

Oklahoma State University

STILLWATER, OKLAHOMA 74074
Donald D. Fisher, Head
Department of Computing and Information Sciences
Applications must be filed by April, 1970

Teaching Assistantship (6-8) 2250-2700 9 12-15

TYPE of financial assistance (with

STIPEND

(dollars)

Amount 9 or

12 mo.

TUITION if not included

in stipend

SERVICE REQUIRED

Hrs/We

Туре

University of Oklahoma

number anticipated in 1970-1971)

NORMAN, OAKLAHOMA 73069 Gene Levy, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2100
Baccalaureate Degrees by Department: 57
Master's Degrees by Department: 35

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Geometry and Topology, 3; Logic, 1; Analysis and Functional Analysis, 5; Applied Mathematics, 1; Mathematical Education, 6. TOTAL: 20

Fellowship (10)	2400-2800	12			
Teaching Assistantship (75)	2400-3000	9	\$ 12/hr	20	Teaching
Research Assistantship (1)	2400-2800	9		variable	Research

University of Tulsa

TULSA, OKLAHOMA 74104 Thomas W. Cairns, Chairman Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 796

Baccalaureate Degrees by Department: 26

Master's Degrees by Department: 3

Teaching Assistantship (6)	2200-2400	9	15	Teaching
Scholarship (2)	500	9		J

OREGON

Oregon State University

CORVALLIS, OREGON 97331
David S. Carter, Acting Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 2473

Baccalaureate Degrees by Department: 135

Master's Degrees by Department: 23

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology 2; Logic, 1; Analysis and Functional Analysis, 4; Probability and Statistics, 4; Computer Science and Numerical Analysis, 2; Applied Mathematics, 10. TOTAL: 25

Teaching Assistantship (40)	2475-2875	9	\$114	15	Teaching &
					Help Session
Research Assistantship (1-2)	2800	9	\$114		Research

OREGON STATE UNIVERSITY CORVALLIS, OREGON

Oregon State University at Corvallis has programs leading to the M.A., M.S., and Ph.D. degrees in mathematics.

The present research interests of the faculty in pure mathematics are algebraic and differential topology, differential geometry, Riemann surfaces, partial differential equations, convex sets, approximation theory, singular integral operators, harmonic analysis, ergodic theory, operator theory, number theory and matrix theory. Those in applied mathematics are integral equations, numerical analysis, information theory, computer science, mathematical physics, and nonlinear continuum mechanics.

Financial Aid is available in the form of graduate assistantships and fellowships.

For further information and application forms, write to:

Department of Mathematics Graduate Committee Oregon State University Corvallis, Oregon 97331

Amount 9 or

TUITION

if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

12 mo.

in stipend

Hrs/Week

Туре

Oregon State University

CORVALLIS, OREGON 97331 Lyle D. Calvin, Chairman Department of Statistics NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2473
Master's Degrees by Department: 6

PH. D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 4. TOTAL: 4

Fellowship (13) Teaching Assistantship (5)	2400-2800 2700-3300	12 9	38/term	12-15	Lab Supervision,
Research Assistantship (8)	2400-3600	9-12	38/term	12-15	Consulting Research

Portland State College

PORTLAND, OREGON 97207
J. Richard Byrne, Head
Department of Mathematics
Applications must be filed by June 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1449
Baccalaureate Degrees by Department: 60
Master's Degrees by Department: 2

Teaching Assistantship (15) 2800-2800 9 Teaching one four or five credit hour course for the year.

University of Oregon

EUGENE, OREGON 97403 A.F. Moursund, Head Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2386
Baccalaureate Degrees by Department: 71
Master's Degrees by Department: 52

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 19; Geometry and Topology, 4; Analysis and Functional Analysis, 8; Probability and Statistics, 2. TOTAL: 33

Fellowship (8)	2400-2800	12				
Teaching Assistantship (42)	2300-3600	9	105	4-5	Teaching	
Research Assistantship (5)	2300-3600	9	105	8-10	Research	

PENNSYLVANIA

Bryn Mawr College

BRYN MAWN, PENNSYLVANIA 19010
J.C. Oxtoby, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 211
Baccalaureate Degrees by Department: 7

Fellowship (1)	2000	9	included	
Teaching Assistantship (1)	2300	9	included	20
Scholarship (2)	1000	9	included	

TYPE STIPEND TUITION
of financial assistance (with Amount 9 or if not included SERVICE REQUIRED number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week Type

Bucknell University

LEWISBURG, PENNSYLVANIA 17837
Paul Slepian, Chairman
Department of Mathematics

NUMBER OF DEGREES AWARDED in 1969
Baccalaureate Degrees by Institution: 593
Baccalaureate Degrees by Department: 61
Master's Degrees by Department: 98

Fellowship (2)	500	9	Remitted	None	None
Teaching Assistantship (5)	2000-2200	9	Remitted	6-10	None
Scholarship (4)	None	9	Remitted	None	None

Carnegie-Mellon University

PITTSBURGH, PENNSYLVANIA 15213 I.I. Kolodner, Head Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 768
Baccalaureate Degrees by Department: 49
Master's Degrees by Department: 19

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 1; Logic, 1; Analysis and Functional Analysis, 12; Probability and Statistics, 2; Computer Science and Numerical Analysis, 3; Applied Mathematics, 3. TOTAL: 25

Fellowship (10)	1800-3000	9 or 12			
Teaching Fellowship (13)*	2200-2200	9		2	Teaching
Teaching Assistantship (13)	2400-2600	9		4	Teaching
Research Assistantship (10)	2400-2600	9		12	Research
Scholarship (2)	2200	9	\$2200		
Supplemental Assistantships (10)**	400-1000	9 or		2-3	Teaching
* Offered only to first year student	ts.	12			_

^{**} Offered to all Fellowship holders.

Carnegie-Mellon University

PITTSBURGH, PENNSYLVANIA 15213 Morris H. DeGroot, Head Department of Statistics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 768
Master's Degrees by Department: 8

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 2; Logic, 1; Analysis and Functional Analysis, 12; Probability and Statistics, 2; Computer Science and Numerical Analysis, 3; Applied Mathematics, 3. TOTAL: 25

Fellowship (7)	1800-2800	9 or			
Teaching Assistantship (8)	2000-2600	12 9		12 or	Teaching or
,		Ü	****	less	Grading
Research Assistantship (10)	4200-4800	9	\$2200	12 or less	Research

Clarion State College

CLARION, PENNSYLVANIA 16214
Michel G. Ossesia, Chairman
Department of Mathematics
Applications must be filed by August 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 811
Baccalaureate Degrees by Department: 70
Master's Degrees by Department: 1

Teaching Assistantship (8) 1200-2100 9 \$25/sem. hr.

TYPE of financial assistance (with number anticipated in 1970-1971)

STIPEND Amount 9 or (dollars) 12 mo. TUITION
if not included
in stipend

SERVICE REQUIRED
Hrs/Week Ty

Drexel Institute of Technology

PHILADELPHIA, PENNSYLVANIA 19104
Dale W. Lick, Head
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1230
Baccalaureate Degrees by Department: 35
Master's Degrees by Department: 7

Fellowship (8)	2500-4200	9 or 12	None		
Teaching Assistantship (25)	2475-3600	9 or 12	None	6	Teaching
Research Assistantship (2)	2475-3600	9 or 12	None	20	Research

Duquesne University

PITTSBURGH, PENNSYLVANIA 15219 Charles F. Sebesta, Chairman Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1642
Baccalaureate Degrees by Department: 9
Master's Degrees by Department: 6

Teaching Assistantship (4) 2000 9 6-7 6-7

East Stroudsburg State College

EAST STROUDSBURG, PENNSYLVANIA 18301 Samuel P. Wallace, Head Department of Mathematics Applications must be filed by August 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 514
Baccalaureate Degrees by Department: 32

Research Assistantship (2) 1200 9 Yes 15 Teaching Research

DREXEL INSTITUTE OF TECHNOLOGY

TThe Drexel Mathematics Department offers graduate programs leading to the M. S. and Ph. D. degrees. In addition to the regular masters' degree program is a cooperative M. S. program with cooperating industries during the summers. The Ph. D. program is primarily concentrated in the areas of analysis and applied mathematics. Financial aid is available through teaching and research assistantships, fellowships, and traineeships which carry stipends from \$2,475 to \$3,600 and a waiver of tuition and fees.

Interested applicants should request further information from

Dr. Dale W. Lick, Head, Mathematics Department
Drexel Institute of Technology
Philadelphia, Pennsylvania 19104

TYPE of financial assistance (with number anticipated in 1970-1971)

STIPEND Amount 9 or

12 mo.

(dollars)

TUITION if not included in stipend

SERVICE REQUIRED
Hrs/Week Ty

Edinboro State College

EDINBORO, PENNSYLVANIA 16412 Glenn W. Olsen, Head Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 800
Baccalaureate Degrees by Department: 65

Research Assistantship (2)

1200-2100

9

15-20

Library research course assistant

Indiana University of Pennsylvania

INDIANA, PENNSYLVANIA 15701 Melvin R. Woodard, Chairman Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1206
Baccalaureate Degrees by Department: 175
Master's Degrees by Department: 25

Teaching Assistantship (10)

1200-2100

9 mo. No tuition

15

Kutztown State College

KUTZTOWN, PENNSYLVANIA 19530 Edward W. Evans, Head Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 664

Baccalaureate Degrees by Department: 57

Master's Degrees by Department: 9

Teaching Assistantship (1)

1200

No

9

Max of

No teaching, only assisting in grading

22

10

etc.

Lehigh University

BETHLEHEM, PENNSYLVANIA 18015
Everett Pitcher, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970.
Late applications receive consideration.

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Department:

Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 9; Analysis and Functional Analysis, 12; Probability and Statistics, 1; Computer Science and Numerical Analysis, 1; Applied Mathematics, 1. TOTAL: 26

Fellowship (14)	2000-3600	9-12	None	2	Teaching *
Teaching Fellowship (8)	2300	9	None	2	Teaching
Teaching Assistantship (27)	2500-2750	9	None	4	Teaching
Research Assistantship (2)	5400	12	2000	20	Research

^{*} All fellows teach for additional compensation if terms of the fellowship permit.

TYPE STIPEND TUITION

of financial assistance (with Amount 9 or if not included SERVICE REQUIRED number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week Type

Pennsylvania State University

UNIVERSITY PARK, PENNSYLVANIA 16802 Raymond G.D. Ayoub, Head Department of Mathematics Applications must be filed by February 16, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 7500
Baccalaureate Degrees by Department: 55
Master's Degrees by Department: 54

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 11; Geometry and Topology, 3; Logic, 1; Analysis and Functional Analysis, 3; Probability and Statistics, 1; Applied Mathematics, 2. TOTAL: 20

Fellowship (5)	2400-2800	9	None		
Teaching Assistantship (30)	2880	9	None	10	Teaching
Research Assistantship (4)	2880	9	None	4	

Pennsylvania State University

UNIVERSITY PARK, PENNSYLVANIA 16802
William L. Harkness, Acting Head
Department of Statistics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 7500
Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 2. ${\tt TOTAL:}\ 2$

Fellowship (2)	~2800	12		
Teaching Assistantship (7)	2700-2800	9	≦ 20	Teaching

Shippensburg State College

SHIPPENSBURG, PENNSYLVANIA 17257 James L. Sieber, Chairman Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Baccalaureate Degrees by Department:
Master's Degrees by Department:

809

61

10

Teaching Assistantship (2) 1800-1800 9 \$25 credit 20 Assisting

Temple University

PHILADE LPHIA, PENNSYLVANIA 19122 A. Schild, Chairman Department of Mathematics Applications must be filed by April 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Department: 64
Master's Degrees by Department: 9

PH. D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 1. TOTAL: 1

Fellowship (8)	2000-2600	9		
Teaching Assistantship (25)	2400-2800	9	6	Teaching
Research Assistantship (6)	2400-2800	9		
Scholarship (4)		9		

TYPE STIPEND

Amount 9 or

TUITION if not included

SERVICE REQUIRED

of financial assistance (with number anticipated in 1970-1971)

(dollars) 12 mo.

in stipend Hrs/Week

Туре

Temple University (Medical School)

PHILADELPHIA, PENNSYLVANIA 19140

Stanley Schor, Chairman Department of Biometrics

Teaching Assistantship (2)

3000

Yes

9

University of Pennsylvania

PHILADE LPHIA, PENNSYLVANIA 19104
Andrew H. Wallace, Chairman
Department of Mathematics
Applications must be filed by February 1, 1970

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 11; Geometry and Topology, 3; Analysis and Functional Analysis, 2; Applied Mathematics, 3. TOTAL: 19

Fellowship (16)	2700	9	
Teaching Fellowship (31)	2700	9	6
Research Assistantship (3)	2700	9	•

University of Pennsylvania

PHILADELPHIA, PENNSYLVANIA 19104
John W. Carr III, Chairman
Graduate Group in Computer
and Information Sciences
Moore School of Electrical Engineering
Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Master's Degrees by Department:

28

Fellowship (50) 2000 variable tuition pd. Teaching Assistantship (25) 2200-2600 tuition pd. 20 hrs. Asst. to Prof. 2600 Research Assistantship (75) 2200-2600 tuition pd. 20 hrs. Res. Asst. to 2600 Project

Various other fellowships and scholarships, some supported by industrial organization, carrying stipends of different amount in addition to tuition.

TEMPLE UNIVERSITY

PHILADELPHIA

offers an M.A. and Ph.D. program in Mathematics with specialization in Probability and Mathematical Statistics, in addition to its existing programs in Pure Mathematics.

A limited number of assistantships and fellowships is available.

For further information write to:

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

University	of]	Pittsk	ourgh
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PITTSBURGH, PENNSYLVANIA 15213 George Laush, Acting Chairman Department of Mathematics Applications must be filed by January 31, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 90 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Analysis and Functional Analysis, 11; Computer Science and Numerical Analysis, 2; Applied Mathematics, 1. TOTAL: 19

Fellowship (6)	2500-3800	9-12	Incl.		Research Only
Teaching Fellowship (21)	2600-4500	8-12	Incl.	6	Teaching
Teaching Assistantship (21)	2400-4200	8-12	Incl.	6	Teaching

University of Pittsburgh

PITTSBURGH, PENNSYLVANIA 15213 Orrin E. Taulbee, Chairman Department of Computer Science Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 3000 Master's Degrees by Department: 3

Fellowship (1)	6000	12	\$1065 resident		
Teaching Assistantship (10)	2400	8	\$2400 non-resident None	15-18	None Teaching
Research Assistantship (4)	3600	12	None	15-18	Research
Systems Progammers (2)	6000-12000	12	\$5/cr. hr.	37.5	Research

Villanova University

VILLANOVA, PENNSYLVANIA 19085 James O. Brooks, Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 1727 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 21 38 Master's Degrees by Department:

9 Teaching Assistantship (12) 2400 Teaching up to 6

West Chester State College

WEST CHESTER, PENNSYLVANIA 19380 Albert E. Filano, Interim Dean Department of Mathematics Applications must be filed by April 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: Master's Degrees by Department: 7

Teaching Assistantship (5) 2900 \$20/s.c. Teaching

Wilkes College

WILKES-BARRE, PENNSYLVANIA 18702 Bing K. Wong, Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 461 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department:

Teaching Assistantship (2-4) 1350 5

PUERTO RICO

University of Puerto Rico

MAYAGUEZ, PUERTO RICO 00708
Eugene A. Francis, Chairman
Department of Mathematics
Applications must be filed by April 30, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 470
Baccalaureate Degrees by Department: 25
Master's Degrees by Department: 8

Teaching Assistantship (15) 2100-2400 12 \$5 6 Teaching

RHODE ISLAND

Brown University

PROVIDENCE, RHODE ISLAND 02912 John Wermer, Chairman Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 851

Baccalaureate Degrees by Department: 19

Master's Degrees by Department: 23

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 6; Analysis and Functional Analysis, 5; Applied Mathematics, 1. TOTAL: 14

Fellowship (10)	2000-2800	9		
Teaching Assistantship (14)	2400-2800	9	4-7	Teaching
Research Assistantship (8)	3800-4800	12		3

Brown University

PROVIDENCE, RHODE ISLAND 02912
J.P. LaSalle, Chairman
Division of Applied Mathematics
Applications must be filed by January 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 851
Baccalaureate Degrees by Department: 33
Master's Degrees by Department: 6

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 5; Applied Mathematics, 27. TOTAL: 32

Fellowship (30)	Tuition plus 2300-2800	9			
Teaching Assistantship (11)	Tuition plus 2800	9		6	Teaching
Research Assistantship (15)	2550-3900	9	\$250-1750		Research
Scholarship (2)	Tuition	9			

University of Rhode Island

KINGSTON, RHODE ISLAND 02881 V. Lakshmikantham, Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1200
Baccalaureate Degrees by Department: 25
Master's Degrees by Department: 8

Teaching Fellowship (2)	3000	9	None		Student (full time)
Teaching Assistantship (14)	2300	9	None	5	Teaching

Amount 9 or TUITION

if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

12 mo.

in stipend

Type

University of Rhode Island

KINGSTON, RHODE ISLAND 02881

William J. Hemmerle

Department of Computer Science and Experimental Statistics

Teaching Assistantship (5)	2500	9	20
Research Assistantship (7)	2500	9	20

SOUTH CAROLINA

The Citadel

CHARLESTON, SOUTH CAROLINA 29409 George E. Reves, Head

Department of Mathematics Applications must be filed by July 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 475

Baccalaureate Degrees by Department: 15 27 Master's Degrees by Department:

Fellowship (30) * None None None

Clemson University

CLEMSON, SOUTH CAROLINA 29631 John Kennelly, Head

Department of Mathematics Applications must be filed by March 1, 1970. NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution:

Baccalaureate Degrees by Department: 35 Master 's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 2; Analysis and Functional Analysis, 4; Probability and Statistics, 1. TOTAL: 7

Fellowship (7) *	12	
	14	
Teaching Assistantship (55)	3600-4000 12	\$54/sem.
Research Assistantship (6)	3200~3600 12	\$54/sem

^{\$2400} for 1st year graduate students, \$2600 for 2nd year graduate students, \$2800 for 3rd year graduate students, plus \$500 per dependent.

University of South Carolina

COLUMBIA, SOUTH CAROLINA 29208 James H. Wahab, Head Department of Mathematics Applications must be filed by March 1, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1604 Baccalaureate Degrees by Department: 12 Master's Degrees by Department: 35

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Analysis and Functional Analysis, 1; Foundations, 1. TOTAL: 8

Fellowship (6)	2000-2800	9		None	
Teaching Fellowship (10)	7200-8200	9	\$30/sem.	12	Classroom Teaching or equivalent
Teaching Assistantship (40)	2500-4000	9	\$30/sem.	5/6	4
NSF-AYI (30)	3075-4495	9	None	None	
NSF-AYI (15)	600-1080	2	None	None	

^{*} In-Service Institute for teachers giving the following support: Tuition grant, Approx. \$130.00 Travel Allowance, book cost.

TYPE of financial assistance (with number anticipated in 1970-1971)

STIPEND Amount 9 or (dollars) 12 m TUITION if not included in stipend

SERVICE REQUIRED
Hrs/Week Ty

Winthrop College

ROCK HILL, SOUTH CAROLINA 29730 B.G. Hodges, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 667

Baccalaureate Degrees by Department: 26

Master's Degrees by Department: 1

Teaching Assistantship (4)

2400-2800

\$340

6

Teaching

SOUTH DAKOTA

Northern State College

ABERDEEN, SOUTH DAKOTA 57401 Elton Fors, Chairman Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 597
Baccalaureate Degrees by Department: 28

Teaching Assistantship (1)

2000

9

\$228

6

Teaching

South Dakota School of Mines & Technology

RAPID CITY, SOUTH DAKOTA 57701 Dean C. Benson, Head Department of Mathematics

Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 196
Baccalaureate Degrees by Department: 9
Master's Degrees by Department: 4

Teaching Assistantship (6) Research Assistantship (1)

2600-2600 2600-2600 \$5 sem/hr. \$5 sem/hr.

9

9

4-5

Teaching

Research

South Dakota State University

BROOKINGS, SOUTH DAKOTA 57006 J.E. Richards, Acting Head Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 740
Baccalaureate Degrees by Department: 39

Teaching Assistantship (4)

2400-2800

\$5/cr.

-

Teaching

UNIVERSITY OF SOUTH CAROLINA

The Department of Mathematics has available for the 1970-71 academic year approximately forty assistant-ships, from \$2,800 to \$3,600, requiring five or six hours per week of classroom teaching or an equivalent amount of service in the department, including assistance with some graduate courses. A limited number of larger stipends, requiring additional work, may be given to capable and highly motivated students whose financial needs prevent their progressing with the usual work-study ratio. Tuition for graduate assistants is \$30 per semester.

The programs offered lead to the Master of Arts in Teaching Mathematics, Master of Mathematics, Master of Arts, Master of Science and Doctor of Philosophy degrees. The student's program of study is arranged after individual consultation; the master's program, in particular, is adaptable to a variety of objectives. Doctoral research direction is available in algebra, analysis, topology, logic and foundations. Careful attention will be given to initial advicement and to starting each student in a program commensurate with his training and competence.

Completed applications should be in the graduate school office by March 1. All inquiries are welcome and should be sent to:

J. H. WAHAB, HEAD, DEPARTMENT OF MATHEMATICS
UNIVERSITY OF SOUTH CAROLINA, COLUMBIA, SOUTH CAROLINA 29208

TYPE of financial assistance (with	STIPE Amount	ND 9 or	TUITION if not included	SERVI	CE REQUIRED
number anticipated in 1970-1971)		12 mo.	in stipend	Hrs/Week	Туре
University of South Dal	cota				
VERMILLION, SOUTH DAKOTA 5 William E. Ekman, Chairman	7069		Baccalau	F DEGREES AW. reate Degrees by reate Degrees by	Institution: 733
Department of Mathematics Applications must be filed by Apri	1 1, 1970			Degrees by Dep	
Teaching Assistantship (8-10)	1800-2400	9	1/3 in-state tuition	4-5	Teaching
	т	ENN	ESSEE		
Austin Peay State Univ	ersity				
CLARKSVILLE, TENNESSEE 370- William G. Stokes, Chairman Department of Mathematics Applications must be filed by Apri			Baccalau Baccalau	F DEGREES AW. reate Degrees by reate Degrees by Degrees by Dep	y Institution: 500 y Department: 18
Ceaching Assistantship (4)	1500	9	\$255	3	Teaching
East Tennessee State U	niversit	y			
OHNSON CITY, TENNESSEE 376 Lester C. Hartsell, Chairman Department of Mathematics Applications must be filed by Apri			Baccalau Baccalau	F DEGREES AWA reate Degrees by reate Degrees by Degrees by Dep	y Institution: 1087 y Department: 32
Teaching Assistantship (7)	1800-2025	9	Yes	6	Teaching
Memphis State Univers	sity				
MEMPHIS, TENNESSEE 38111 H.S. Kaltenborn, Chairman Department of Mathematics Applications must be filed by Mar	ab 15 1070		Baccalaurea Baccalaurea	F DEGREES AWA te Degrees by In te Degrees by Degrees by Depart:	stitution: 1580 epartment: 41
applications must be med by mar	ch 13, 1510		Master 5 20	Proof of Debara	
Teaching Assistantship (20)	2200	9	None	6	Teaching
Middle Tennessee Sta	te Unive	rsity			
MURFREESBORO, TENNESSEE: Harold S. Spraker, Chairman Department of Mathematics	37130		Baccala	F DEGREES AW ureate Degrees b ureate Degrees b	y Institution: 1122
Applications must be filed by Mar Late applications will be accepted			Master's	s Degrees by De	partment: 7
Teaching Assistantship (8)	2160	9		6	Teaching
Tennessee Technologi	cal Univ	ersity			
COOKEVILLE, TENNESSEE 385 Ralph C. Boles, Chairman	01			F DEGREES AW reate Degrees b	
Department of Mathematics Applications must be filed by Fe	bruary 15,	1970	Baccalau	reate Degrees b Degrees by Deg	y Department: 21
Teaching Assistantship (12)	2250-245	0 9	None	6	Teaching

STIPEND Amount 9 or TUITION
if not included

SERVICE REQUIRED

of financial assistance (with number anticipated in 1970-1971)

(dollars) 1

12 mo.

in stipend

Hrs/Week

'vne

University of Tennessee

KNOXVILLE, TENNESSEE 37916
Alston S. Householder, Interim Head
Department of Mathematics
Applications must be filed by February 20, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 2732
Baccalaureate Degrees by Department: 43
Master's Degrees by Department: 15

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Geometry and Topology, 3; Analysis and Functional Analysis, 6; Probability and Statistics, 3; Computer Science and Numerical Analysis, 2; Applied Mathematics, 1. TOTAL: 17

Fellowship (18)	2400-3400	9 &	\$15/qtr.		
• • •		12			
Teaching Fellowship (7)	3400-4400	9	\$15/qtr.	3-4	Teaching
Teaching Assistantship (50)	2800-3000	9	\$15/qtr.	6	Teaching
Research Assistantship (2)	1000	9	\$15/qtr.		Research
Scholarship (4)	1600-2500	9 &	\$15/qtr.		
• • •		12	- -		

Vanderbilt University

NASHVILLE, TENNESSEE 37203 Erik Hemmingsen, Chairman Department of Mathematics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 622

Baccalaureate Degrees by Department: 36

Master's Degrees by Department: 10

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 1; Analysis and Functional Analysis, 1; Computer Science and Numerical Analysis, 1. TOTAL: 6

Fellowship (10)	2000-2800		Waived	3-6	Teaching
Teaching Assistantship (10)	2400	9	Waived	3-6	Teaching
Research Assistantship (4)	2400	9	Waived	3-6	Teaching
Scholarship (5)	2400	9	Waived	N	one
M.A.T. (3)	2400	9	Waived	N	one

TEXAS

East Texas State University

COMMERCE, TEXAS 75428
Dale R. Bedgood, Head
Department of Mathematics
Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 2216
Baccalaureate Degrees by Department: 53
Master's Degrees by Department: 15

Teaching Fellowship (4)	3200	9	\$79	6	Teaching
Teaching Assistantship (12)	2700	9	\$79	6	Teaching

Midwestern University

WICHITA FALLS, TEXAS 76308

Louie C. Huffman, Chairman

Department of Mathematics

Applications must be filed by April 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 393
Baccalaureate Degrees by Department: 18

Teaching Assistantship (4)

2700-2700

9 \$50 per. sem.

6

Teaching

TYPE of financial assistance (with

STIPEND Amount 9 or TUITION

if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars) 12 mo. in stipend

Hrs/Week

North Texas State University

DENTON, TEXAS 76203 John T. Mohat, Chairman Department of Mathematics Applications must be filed by February 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 2357 Baccalaureate Degrees by Department: 72 Master's Degrees by Department: 10

2400 * Fellowship (8) \$150 6 - 9Teaching 9 Teaching Assistantship (22) 2680-3740

Rice University

HOUSTON, TEXAS 77001 Salomon Bochner, Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 399 Baccalaureate Degrees by Department: 24 Master's Degrees by Department: 3

PH. D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 5; Analysis and Functional Analysis, 10. TOTAL: 15

Fellowship (30)	1800-2400	9*	6-8	Teaching & Research
Research Assistantship (5) Scholarship (3)	. 1800-2400 2000 tuition	9*	6-8	Research

^{*} Correspondingly higher for 12 months.

Sam Houston State University

HUNTSVILLE, TEXAS 77340 Glen E. Mattingly, Director Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: **7**88 Baccalaureate Degrees by Department: 19 6 Master's Degrees by Department:

Fellowship (9)	2700-3150	9	\$84 per. sem.	15	Class Assistants
Teaching Fellowship (7)	2700-3150	9	\$84 per. scm.	6 hrs. Contact	Teaching
Junior College Internship (3)	3150-3150	9	\$84 per. sem.	6 hrs.	Teaching

Southern Methodist University

DALLAS, TEXAS 75222 David W. Starr, Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1039 Baccalaureate Degrees by Department: 34 Master's Degrees by Department: 11

Fellowship (1) 1800(9) 2400(12) Teaching Assistantship (7) 2200(9) 3300(9) Teaching Scholarship (1) \$1400

^{*} Additional dependency allowances-\$500.00 each.

TYPE

STIPEND

9 or

if not included

TUITION

SERVICE REQUIRED

Type

number anticipated in 1970-1971)

of financial assistance (with

Amount 12 mo. (dollars)

in stipend

Hrs/Week

Southern Methodist University

DALLAS, TEXAS 75220 Ronald L. Gue, Director Computer Science Center

Applications must be filed by January 1, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1039 Baccalaureate Degrees by Department: 20 Master's Degrees by Department: 85

Fellowship (3) 2000 -12 Full \$700 None 2600 (yr) 300 -12 Full \$700 10 hrs./wk. Research Assistantship (25) 350 (mo) Scholarship (3) \$700

Southern Methodist University

DALLAS, TEXAS 75222 Paul D. Minton, Chairman Department of Statistics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 7. TOTAL: 7

Fellowship (12)	2400 - 2800**	12	Yes	None	
Research Assistantship (4)	1800-1800	9	Yes	20	Research
Scholarship (4) · Research Associate (10)	5000-6000	12	Yes No	None Unspecified	Research

^{**} Dependents allotments of \$500 each for 12 months in addition.

Stephen F. Austin State University

NACOGDOCHES, TEXAS 75961 W.I. Layton, Head Department of Mathematics Applications must be filed by March 1, 1970. Applicants will be considered after that date if vacancies exist.

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department:

Teaching Assistantship (24) 1500-3000 \$100 3-6

Texas A & I University

KINGSVILLE, TEXAS 78363 Virgil C. Kowalik, Chairman Department of Mathematics Applications must be filed by April 15, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 939 Baccalaureate Degrees by Department: 28 Master's Degrees by Department: 8

Teaching Assistantship (12) 2700-3000 6 sem. hrs. Teaching TYPE STIPEND

of financial assistance (with Amount 9 or number anticipated in 1970-1971) (dollars) 12 mo.

TUITION if not included in stipend

SERVICE REQUIRED
Hrs/Week Ty

Texas A & M University

COLLEGE STATION, TEXAS 77843 H.A. Luther, Chairman Department of Mathematics Applications must be filed by July 15, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1668
Baccalaureate Degrees by Department: 36
Master's Degrees by Department: 9

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; Analysis and Functional Analysis, 2; Computer Science and Numerical Analysis, 1. TOTAL: 5

Fellowship (2)	2700-3150	9*	Yes			
Teaching Assistantship (25)	2700-3150	9*	Yes **	6	Teaching	
Research Assistantship (5)	2700-3150	9*	Yes		5	
NSF or NASA Traineeship (3)	2400-3800	12				

^{*}Additional support for summer.

Texas A & M University

COLLEGE STATION, TEXAS 77843 H.O. Hartley, Director Institute of Statistics NUMBER OF DEGREES AWARDED IN 1969 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 22. TOTAL: 22

Fellowship (16)	3600-4800	12	Yes	10-20	
Teaching Assistantship (11)	3600-4800	12	Yes	10-20	
Research Assistantship (10)	3600-4800	12	Yes	10-20	

TEXAS A & M UNIVERSITY

The Mathematics Faculty invites interested persons to inquire about its graduate program leading to the M. S. or Ph. D. degrees.

Fields: Algebra, Analysis, Functional Analysis, Numerical Analysis, Topology Financial Assistance: Fellowships and Assistantships granted by the Department carry stipends ranging from \$2700 to \$3150 for nine months, non-resident tuition waived. Apply before July 15, 1970.

Some NSF, NASA, and NDEA grants are available through the University on a competitive basis. Apply before March 15, 1970.

Application: Address all inquiries to

Head, Department of Mathematics Texas A & M University College Station, Texas 77843

^{**} Non-resident tuition waived.

TYPE STIPEND TUITION
of financial assistance (with Amount 9 or if not included SERVICE REQUIRED number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week Ty

Texas Christian University

FORT WORTH, TEXAS 76129 Landon A. Colquitt, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1026
Baccalaureate Degrees by Department: 25
Master's Degrees by Department: 12

Type

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory,3; Geometry and Topology, 9; Analysis and Functional Analysis, 6. TOTAL: 18

Fellowship (5)	2400-3600	12	None	8	Research
Teaching Fellowship (5)	2400-3600	12	None	4	Teaching
Teaching Assistantship (5)	2125-2750	12	None	6	Teaching
Scholarship (2)	None	12	None	8	Grading
Computer Traineeship (3)	3000-3200	9		20	Computer Center
Computer Traineeship (3)	3000-3200	9	None	20	Computer Center

Texas Southern University

HOUSTON, TEXAS 77004 Llayron L. Clarkson, Head Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 4
Baccalaureate Degrees by Department: 14
Master's Degrees by Department: 1

Fellowship (2) 2400-2400 9 \$50 15 Aide

Texas Technological University

LUBBOCK, TEXAS 79409
Patrick L. Odell, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 3219

Baccalaureate Degrees by Department: 85

Master's Degrees by Department: 9

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Probability and Statistics, 2; Computer Science and Numerical Analysis, 1; Applied Mathematics, 2. TOTAL: 6

Fellowship (10) Teaching Assistantship (70)	2600-2600 2400-2800	9 . 9	out of state	6	Research Teaching
Scholarship (12)	600	9	tuition waived		Research

Texas Technological University

LUBBOCK, TEXAS 79409 G.S. Innis, Director Department of Computer Science Applications must be filed by June 1970

PH.D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 2; Probability and Statistics, 4; Computer Science and Numerical Analysis, 1; Applied Mathematics, 1. TOTAL: 8

Research Assistantship (20)	2400	9	Yes	16	Research
• • •	3200	12			

9 or

TUITION

of financial assistance (with number anticipated in 1970-1971)

Amount (dollars) 12 mo. if not included in stipend

Hrs/Week

SERVICE REQUIRED Type

University of Houston

HOUSTON, TEXAS 77004 James N. Younglove, Chairman Department of Mathematics Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 3380 Baccalaureate Degrees by Department: 156 Master's Degrees by Department: 13

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 4; Analysis and Functional Analysis, 1. TOTAL: 6

Fellowship (15)	2000-3600	9		
Teaching Assistantship (45)	2000-3600	9	6	Teaching
Research Assistantship (2)	2500	9		_

University of Houston

HOUSTON, TEXAS 77004 Elliot I. Organick, Chairman Department of Computer Science NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 3380

Teaching Fellowship (15)	250	9	Yes	12-15	Teaching
Research Assistantship (6)	250-350	9-12	No	20	Research

University of Texas

AUSTIN, TEXAS 78712 Leonard Gillman, Chairman Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 4628 Baccalaureate Degrees by Department: Master's Degrees by Department:

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 9; Geometry and Topology, 9; Analysis and Functional Analysis, 49; Probability and Statistics, 2; Computer Science and Numerical Analysis, 3; Applied Mathematics, 4; Others, 2. TOTAL: 78

Fellowship (20)	1950-3900	9&12	Yes	
Teaching Assistantship (94)	2700-3200	9		10-30
Research Assistantship (3)	5520-6780	12	Yes	30-40

University of Texas at Arlington

ARLINGTON, TEXAS 76010 Basil M. Wall, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 138 Master's Degrees by Department: 15

Fellowship (4)	2700-2700	9	\$50/sem.		
Teaching Assistantship (20)	2700-2700	9	50/sem.	6	Teaching

UTAH

Brigham Young University

PROVO, UTAH 84601 H.Gill Hilton, Chairman Department of Statistics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: Master's Degrees by Department:

Fellowship (1)	1800-2100	9			None
m 1.2. A 2.4. (1.4. (o)					110110
reaching Assistantship (8)	2200-2450	9	\$375 sem.	20	Teaching
Teaching Assistantship (8)	2200-2450	9	\$375 sem.	20	Teaching

TYPE of financial assistance (with	STIPENI Amount 9	or	TUITION if not included	SERVIC	E REQUIRED
number anticipated in 1970-1971)		mo.	in stipend	Hrs/Week	Туре
University of Utah					
SALT LAKE CITY, UTAH 84112 C. Edmund Burgess, Chairman Department of Mathematics Applications must be filed by Mar			Baccalaur Baccalaur	DEGREES AWAI eate Degrees by eate Degrees by Degrees by Depa	Institution: 2158 Department: 64
PH. D. Degrees awarded during l Geometry and Topology , 4; Analy TOTAL: 17	ast three year sis and Functi	s by fiel onal An	ld of specializatio alysis, 7; Comput	n: Algebra and N er Science and N	umber Theory, 3; umerical Analysis,3.
Fellowship (6) Teaching Fellowship (6) Teaching Assistantship (50)	2400-2800* 3000-4000** 3600-4000	12 12 9		2-4	Teaching Research, and Study
*Plus dependent's allowance ** \$1000-1200 additional stipend	usually availab	ole for s	ummer teaching.		
Utah State University					
LOGAN, UTAH 84321 Lawrence O. Cannon, Chairm Department of Mathematics Applications must be filed by Man			Baccalau Baccalau	F DEGREES AWA reate Degrees by reate Degrees by Degrees by Depa	Institution: 1366 Department: 12
Teaching Assistantship (20) Research Assistantship (1)	2400-3800 2200-2400	9	\$426 \$426	5-10 5	Teaching Research
	7	ER	MONT		
University of Vermont					
BURLINGTON, VERMONT 05401 N. James Schoonmaker, Chair Department of Mathematics Applications must be filed by Mar			Baccalau Baccalau	F DEGREES AWA reate Degrees by reate Degrees by Degrees by Depa	Institution: 950 Department: 70
Fellowship (5) Teaching Assistantship (13) *	1000 2400	9		None 6	Teaching
* Three of these are in our compu	iter center.				
	v	'IRG	INIA		
College of William and	Mary				
WILLIAMSBURG, VIRGINIA 2318 Thomas L. Reynolds, Head Department of Mathematics Applications must be filed by Man			Baccalau Baccalau	F DEGREES AWA reate Degrees by reate Degrees by Degrees by Depa	Institution: 732 Department: 35
Fellowship (2) Teaching Assistantship (6) Scholarship (1)	500-3000 2400 500-3000	9 9 9	Not Paid Paid Not Paid	6	Tutoring, etc.
Madison College					
HARRISONBURG, VIRGINIA 2280 William M. Sanders, Head Department of Mathematics Applications must be filed by Apr	•		Baccalau Baccalau	F DEGREES AWA reate Degrees by reate Degrees by Degrees by Depa	Institution: 540 Department: 28
Teaching Assistantship (8)	3000	9	\$600	3-6	Teaching

TYPE

STIPEND

TUITION

of financial assistance (with number anticipated in 1970-1971) Amount 9 or (dollars) 12 mo. if not included in stipend

SERVICE REQUIRED Hrs/Week

Radford College

RADFORD, VIRGINIA 24141 Valiant W. Mah, Chairman Department of Mathematics & Statistics NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 766 Baccalaureate Degrees by Department:

Master's Degrees by Department:

45

Fellowship (1)	334-1000	9	\$120/qtr.	None
Non-teaching Assistantship (1)	300-900	9	\$120/qtr.	10 hrs./wk. for 10 wks./qtr.
NDEA	300-600	9	\$120/qtr.	None

University of Virginia

CHARLOTTESVILLE, VIRGINIA 22903 Marvin Rosenblum, Chairman Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 11 Baccalaureate Degrees by Department: Master's Degrees by Department: 6

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Geometry and Topology, 6; Analysis and Functional Analysis, 11. TOTAL: 21

Fellowship (3)	1500-3000	9		
Teaching Assistantship (25)	1500-3200	9	6	Teaching
Research Assistantship (6)	1500-3000	9		Research
Scholarship (30)	500-3000			

University of Virginia

CHARLOTTSVILLE, VIRGINIA 22901 Robert II. Owens, Chairman

Department of Applied Mathematics & Computer Science Applications must be filed by February 1, 1970

NUMBER OF DEGREES AWARDED IN 1970 Baccalaureate Degrees by Institution: 632 Master's Degrees by Department: 5

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 1; Applied Mathematics, 2. TOTAL: 3

Fellowship (9)	2200-3000	9			
Teaching Assistantship (10)	1500-2000	9	\$300	1 sectio	on-4 hours
Research Assistantship (12)	950-3000	9	\$300-\$900	10	Research

Note: Award is normally a combination teaching-research assistantship paying \$950 + \$1900 = \$2850.

Virginia Commonwealth University,Health Sciences Center

RICHMOND, VIRGINIA 23219 S.J. Kilpatrick, Jr., Chairman Department of Biometry Applications must be filed by April 1, 1970

Fellowship (2)	2400-3500 [.]	12	No		
Teaching Assistantship (2)	2400-3500	12	Yes	variable	Teaching
Research Assistantship (3)	2400-4000	12	Yes	variable	Research

9 or Amount

TUITION

if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

12 mo.

in stipend

Hrs/Week

Virginia Polytechnic Institute

BLACKSBURG, VIRGINIA 24061 Leon Rutland, Jr., Chairman Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1766 Baccalaureate Degrees by Department: Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 1; Analysis and Functional Analysis, 2. TOTAL: 6

Fellowship (6)	2400-2800	12	Included			
Teaching Assistantship (35)	2970-3375	9	\$495	6	Teaching	

Virginia Polytechnic Institute

BLACKSBURG, VIRGINIA 24061 G.W. Gorsline, Head Department of Computer Science Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1766 Baccalaureate Degrees by Department:

Work (Faculty or	0- 1.0000	either	Yes	0-40	Teaching and
Civil Service) (0-10)					Computer
					Consulting

Virginia Polytechnic Institute

BLACKSBURG, VIRGINIA 24061 Boyd Harshbarger, Head Department of Statistics

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 10 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Probability and Statistics, 29. TOTAL: 29

Fellowship (22)	2400-3100	12	Yes	None
Teaching Assistantship (6)	3015-3378	9	No	12
Research Assistantship (2)	4020-4500	11		20

WASHINGTON

Central Washington State College

ELLENSBURG, WASHINGTON 98926 Robert Y. Dean, Chairman Department of Mathematics Applications must be filed by March 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1293 Baccalaureate Degrees by Department: 55 Master's Degrees by Department: 1

Teaching Assistantship (5)	175-275	9	\$88-\$157	10-20	Teaching	
			ner atr		0	

Eastern Washington State College

CHENEY, WASHINGTON 99004 Robert G. Thompson, Chairman Department of Mathematics Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 36 Master's Degrees by Department

				grees of Espainment.	U
Teaching Fellowship (10)	2500	9	\$88/qtr.	5 crs.	

TYPE TUITION of financial assistance (with Amount 9 or if not included

SERVICE REQUIRED number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week Type

Gonzaga University

NUMBER OF DEGREES AWARDED IN 1969 SPOKANE, WASHINGTON 99202 300 Zane C. Motteler, Chairman Baccalaureate Degrees by Institution: Department of Mathematics Baccalaureate Degrees by Department: 15 Master's Degrees by Department: Applications must be filed by April 1, 1970 2

Fellowship (1) Research Yes q 6 Teaching Assistantship (1) 1800 Yes Teaching

University of Washington

SEATTLE, WASHINGTON 98105 NUMBER OF DEGREES AWARDED IN 1969 Ross A. Beaumont, Chairman Baccalaureate Degrees by Institution: Baccalaureate Degrees by Department: 121 Department of Mathematics Applications must be filed by March 1, 1970 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 16; Geometry and Topology, 5; Logic, 5; Analysis and Functional Analysis, 15; Probability and Statistics, 5. TOTAL: 46

34

45

3

Fellowship (22) 2400-3800 12 3240-3825 9 \$399 6 Teaching Teaching Assistantship (80) Research Assistantship (20) 3015 9 \$399 Research

University of Washington

SEATTLE, WASHINGTON 98105 Edward B. Perrin, Program Director Department of Biomathematics Group

PH. D. Degrees awarded during last three years by field of specialization: Biostatistics, 2. TOTAL: 2

Scholarship (2) \$360/mo. 9 or \$133/qtr. 12 NIGMS Traineeship (12-14) \$200/mo. 12 plus dependent allowance; supplementation permitted.

Washington State University

PULLMAN, WASHINGTON 99163 NUMBER OF DEGREES AWARDED IN 1969 T.G. Ostrom, Chairman Baccalaureate Degrees by Institution: Department of Mathematics Baccalaureate Degrees by Department: Applications must be filed by March 1, 1970 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology, 8; Analysis and Functional Analysis, 5; Probability and Statistics, 1; Applied Mathematics, 1. TOTAL: 20

Fellowship (7)	2400-2800	12			
Teaching Assistantship (34	3289.50-	9	\$198.50 per	20	Teaching
	3447		semester		
Research Assistantship (4)	3762-3762	12	\$198.50 per	20	Research
			semester		

STIPEND
Amount 9 or (dollars) 12 mo.

TUITION if not included in stipend

SERVICE REQUIRED

Hrs/Week_____

Type

Washington State University

PULLMAN, WASHINGTON 99163 Ottis W. Rechard, Chairman Department of Computer Science

The Ph.D. in CPT.S was approved in the Fall of 1966. We expect that the first students will receive their Ph.D.'s in the Fall of 1969.

Fellowship (7) Teaching Assistantship (12) Research Assistantship (20)

6 20

Western Washington State College

BELLINGHAM, WASHINGTON 98225 Joseph Hashisaki, Chairman Department of Mathematics Applications must be filed by February 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1218
Baccalaureate Degrees by Department: 43
Master's Degrees by Department: 25

Teaching Assistantship (10)	2700	9	payable	5	Teaching	_
Other (10)	2000	9 or 12	included		_	
Academic Year Institute (15)	3000	9 or 12	included			

WEST VIRGINIA

West Virginia University

MORGANTOWN, WEST VIRGINIA 26506 J.C. Eaves, Chairman Department of Mathematics Applications must be filed by April 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1857

Baccalaureate Degrees by Department: 18

Master's Degrees by Department: 11

Fellowship (4)	2000-3000	9		
Teaching Assistantship (25)	2000-3000	9	10±	6 ± 1
Other (10)	500-600	9	6±1	

These are Honors Fellows -- undergraduate.

WISCONSIN

Marquette University

MILWAUKEE, WISCONSIN 53233 C.B. Hanneken, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1504

Baccalaureate Degrees by Department: 61

Master's Degrees by Department: 15

Teaching Assistantship (11) Research Assistantship (1)	2200-2600* 1900-2300*	9	6	Teaching Teaching and/or
NSF Traineeship (1)	2400-2800*	12	6	Research Teaching and Research

^{*}Stipends presently under review. May be increased.

TYPE of financial assistance (with

STIPEND Amount 9 or TUITION if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars)

12 mo.

in stipend Hrs/Week

Tuno

University of Wisconsin

MADISON, WISCONSIN 53706 John A. Nohel, Chairman Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 4676
Baccalaureate Degrees by Department: 91
Master's Degrees by Department: 42

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 23; Geometry and Topology, 25: Logic, 7; Analysis and Functional Analysis, 29; Probability, 3; Applied Mathematics, 4; Mathematics and Mathematics Education, 1; Mathematics and Historical Science, 1; TOTAL: 93

Fellowship (40) Teaching Assistantship (165)	2000-3400 3555-3690*	12	\$263	no duties 6-8	Instruct & attend
Research Assistantship (15)	3333 3030	9	\$263	1/2 time	Lecturers
MRC Fellowships (10)	2400-2900	12	4-00	no duties	

^{*}These represent current rates. Rates for 1970-1971 have yet to be voted by the Board of Regents.

University of Wisconsin

MADISON, WISCONSIN 53706
Seymour Parter, Chairman
Department of Computer Sciences
Applications must be filed by January 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 4676
Baccalaureate Degrees by Department: 21
Master's Degrees by Department: 43

PH.D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 13. TOTAL: 13

		_			
Fellowship (10)	2700	9			
Teaching Assistantship (43)	2700-3700	9	15-20	Teaching	
Research Assistantship (25)	2826	9	20	Research	
NSF Trainee (5)	2400	9			

University of Wisconsin

MADISON, WISCONSIN 53706
J. Barkley Rosser, Director
Mathematics Research Center, U.S. Army
Applications must be filed by January 15, 1970

MRC Fellowships (12)	2400-2800*	12
R.E. Langer Fellowship (3)	2900-3300*	12

^{*}Plus \$500 allowance for each dependent.

TYPE of financial assistance (with	STIP1	END 9 or	TUITION if not included	SERVIC	E REQUIRED
number anticipated in 1970-1971)	(dollars)	12 mo.	in stipend	Hrs/Week	Туре
University of Wisconsin	-Milwa	ukee			
MILWAUKEE, WISCONSIN 53217 Edmund H. Feller, Chairman Department of Mathematics Applications must be filed by Febr	uary 15, 1	970	Baccalau Baccalau	DEGREES AWAI reate Degrees by reate Degrees by Degrees by Depa	Institution: 1427 Department: 52
PH.D. Degrees awarded during la Geometry and Topology, 1; Analys	sis and Fun	ctional An		: 8	
Fellowship (22)	1800-330			9	Research
Teaching Fellowship (5)	750-184	5 9		3	Teaching
Mar 11 - A 11 (50)	0555 000		A= 0.0	6	Research
Teaching Assistantship (50)	3555-369		\$526	6	Teaching Research
Research Assistantship (1) Scholarship (6)	2826	9 9	\$526 \$526	9 9	nesearch
4-Yr. Prize Fellow (3)	3200-350	-	φυ40	9	
1 11. 11120 10110 w (5)	0400-000	0 12		J	

Wisconsin State University

EAU CLAIRE, WISCONSIN	•		NUMBER OF DEGREES	S AWARDED IN 1969	
Lawrence Wahlstrom, Chairman			Baccalaureate Degrees by Institution: 869		
Department of Mathematics Applications must be filed by March 1, 1970			Baccalaureate Degrees by Department: 50 Master's Degrees by Department: 1		
Scholarship (2)	380	9	\$450/yr.	None	
Assistantship (2)	2500	9	(same) out 20 of`state tuition is waived	Non-teaching, Research	

Wisconsin State University

LACROSSE, WISCONSIN 54601 Arnold I. Temte, Chairman Department of Mathematics Applications must be filed by March 1, 1970			NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 730 Baccalaureate Degrees by Department: 22 Master's Degrees by Department: 11			
Teaching Fellowship (1)	2500	9	\$200/sem.	20		

Wisconsin State University

RIVER FALLS, WISCONSIN 54022 Lillian Gough, Chairman Department of Mathematics			NUMBER OF DEGREES AWARDED Baccalaureate Degrees by Institu Baccalaureate Degrees by Depar Master's Degrees by Department	tion: 592 tment: 58
Teaching Assistantship (10)	2000-2500	9	5 T	eaching

TYPE

STIPEND

TUITION

of financial assistance (with number anticipated in 1970-1971)

Amount 9 or (dollars) 12 mo.

if not included in stipend

Hrs/Week

SERVICE REQUIRED ek Type

WYOMING

University of Wyoming

LARAMIE, WYOMING 82070 W. Norman Smith, Head Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1072

Baccalaureate Degrees by Department: 35
Master's Degrees by Department: 12

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 2; TOTAL: 2

Fellowship (5)	2400 plus	12	Included		
Teaching Assistantship (25)	2898-3861	9	Included	6-8 cr. hrs.	Teaching
Research Assistantship (3)	2898	9	Included	18	Research
Supply Instructor (3)	5184	9	\$18 per hr. above 3 hrs.	10	Teaching

CANADA

Carleton University

OTTAWA 1, ONTARIO, CANADA
D.W. Sida, Chairman
Department of Mathematics
Applications must be filed by February 15, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1348
Baccalaureate Degrees by Department: 74
Master's Degrees by Department: 6

PH.D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 1. TOTAL: 1

Fellowship (2)	2600-3600	12	\$440		
Teaching Fellowship (3)	2400	9	\$440	6	Teaching
Teaching Assistantship (10)	2250-3250	9	\$440	6	Teaching
Scholarship (9)	1300-3600	12	\$440		

Dalhousie University

HALIFAX, N.S., CANADA A.J. Tingley, Chairman Department of Mathematics NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 600

Baccalaureate Degrees by Department: 30

Master's Degrees by Department: 8

PH.D. Degrees awarded during last three years by field of specialization: Geometry and Topology,1. TOTAL: 1

Teaching Assistantship (15)	2000-4000	12	\$558	3-6	Paper Grading or Teaching
Scholarship (3)	3000-5500	12	\$558		

Lakehead University

PORT ARTHUR, ONTARIO, CANADA Clement F. Kent, Chairman Department of Mathematics Applications must be filed by September 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 165
Baccalaureate Degrees by Department: 17
Master's Degrees by Department: 1

Fellowship (3) 3500-4500 12 \$500 0-3 Teaching Fellowship (4) 3000-3500 9 \$500 3	
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TYPE STIPEND TUITION
of financial assistance (with Amount 9 or if not included SERVICE REQUIRED number anticipated in 1970-1971) (dollars) 12 mo. in stipend Hrs/Week T

McGill University

MONTREAL, QUEBEC, CANADA E. Rosenthall, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1050
Baccalaureate Degrees by Department: 53
Master's Degrees by Department: 24

PH. D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 12; Geometry and Topology, 3; Analysis and Functional Analysis, 1; Probability and Statistics, 3; Applied Mathematics, 1. TOTAL: 20

Fellowship (5)	2000-3500	9	\$640	None	
Post-Doctoral Fellowship (5)	6000-7200	12			
Teaching Assistantship (25)	2550-4700	8	\$640	3 or 6	
Research Assistantship(40)	2000-3000	12		6	
Demonstrators (60)	425-1500	8	\$640	3 or 6	

McMaster University

HAMILTON, ONTARIO, CANADA T. Husain, Chairman Department of Mathematics Applications must be filed by September 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1177
Baccalaureate Degrees by Department: 39
Master's Degrees by Department: 2

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 6; Analysis and Functional Analysis, 2; Graph Theory, 2. TOTAL: 10

Teaching Fellowship (60)	3800-4000	12	\$403 1st year \$103 2nd &	8-10	Teaching	
			subsequent			
			years		•	

Memorial University of Newfoundland

ST. JOHN'S, NEWFOUNDLAND, CANADA W.J. Blundon, Head Department of Mathematics Applications must be filed by June 30, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 800

Baccalaureate Degrees by Department: 50

Master's Degrees by Department: 2

Fellowship (6) 2500-3600 12 \$500 3 Various

Queen's University at Kingston

KINGSTON, ONTARIO, CANADA A.J. Coleman, Head Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 983

Baccalaureate Degrees by Department: 37

Master's Degrees by Department: 13

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 5; Geometry and Topology, 1. TOTAL: 6

300-3800	12	\$500	10
300-3800	12	\$500	10
			• • • • • • • • • • • • • • • • • • • •

STIPEND

Amount.

TUITION if not included in stipend

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars) 12 mo.

9 or

Hrs/Week

Type

Simon Fraser University

BURNABY 2, B.C., CANADA A.H. Lachlan, Acting Head Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 572 Baccalaureate Degrees by Department: 15 Master's Degrees by Department: 2

PH.D. Degrees awarded during last three years by field of specialization: Logic, 1. TOTAL: 1

Teaching Assistantship (20)	2300-2700	8*	\$150/sem.**	15	Teaching, Grading
Scholarship (5)	3600	12	\$150/sem.		Grading

^{*}Many extendable to 12 months with \$1000 research assistantship.

Université de Montréal

MONTRÉAL 161, QUÉBEC, CANADA Jean Maranda, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 2324 Baccalaureate Degrees by Department: 115 Master's Degrees by Department: 22

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 3; Geometry and Topology, 1; Logic, 1; Analysis and Functional Analysis, 5; Probability and Statistics, 2. TOTAL: 12

			· · · · · · · · · · · · · · · · · · ·
Fellowship (7)			
Teaching Fellowship (10)	8000-9000	12	10 hr./wk.
Teaching Assistantship (5)	900-2500	9	2 hr./wk.
Scholarship (88)	2500-3500	9	

Université de Montréal

MONTRÉAL 101, QUÉBEC, CANADA Pierre Robert, Chairman Department of Computer Science Applications must be filed by different dates according to grants specifications.

NUMBER OF DEGREES AWARDED IN 1969 2324 Baccalaureate Degrees by Institution: Master's Degrees by Department:

Fellowship (1)	5000-8000	12	\$550	
Teaching Fellowship (2)	5000-6500	9	\$550	
Teaching Assistantship (100)	900-1100	9	\$550	
Research Assistantship (6)	4000-8000	12	\$550-	
Scholarship (40)	875-1375	9	\$550	
Total				

^{**} Fees reduce to \$20 per semester during the second year of studies.

TYPE of financial assistance (with STIPEND 9 or

TUITION if not included

SERVICE REQUIRED

number anticipated in 1970-1971)

(dollars) 12 mo.

Amount

in stipend

Hrs/Week

University of Alberta

EDMONTON, ALBERTA, CANADA W. Al-Salam, Acting Chairman Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969 2982 Baccalaureate Degrees by Institution:

Baccalaureate Degrees by Department: 11 Master's Degrees by Department: 8

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 4; Geometry and Topology, 1; Analysis and Functional Analysis, 3; Applied Mathematics, 1. TOTAL: 9

Post -Doctoral Fellow					
U. of A. (10)	6000*	12			
Other (10)	6000-7200*	12			
Teaching Supplement	2500**			3-4	Teaching
Graduate Teaching	1800-3600	8	Nil	3-4 or	Teaching
Assistantship (G. T.A.) (40)***				6-9	Problem
• • • • • • • • • • • • • • • • • • • •					Supervision
Graduate Research	2400-3000	12	\$500		Research
Assistantship (10)****					

^{*} Tax free

University of Alberta

EDMONTON, ALBERTA, CANADA D.B. Scott, Chairman Department of Computing Science Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Department: Master's Degrees by Department:

12

26

Teaching

Teaching Assistantship (30) 3000 8 Research Assistantship (30) 3000 12 \$500 Scholarship (10) 3000-3600 12 \$500

THE UNIVERSITY OF ALBERTA

Graduate Study in Mathematics to the M.Sc. or Ph.D. degree

FIELDS:

Algebra, Approximation Theory, Classical Analysis, Control Theory, Combinatorics and Graph Theory, Differential Equations, Functional Analysis, Mathematical Statistics, Number Theory, Relativity, Topology.

TEACHING ASSISTANTSHIPS: \$1800 to \$3600 for 8 months. Fees are waived. In addition students may receive an additional \$1000 while continuing

their work on campus during the summer months.

ASSISTANTSHIPS: Support of \$3000 for 12 months. In addition RESEARCH students may receive \$800 to \$1000 as part time teaching assistants.

APPLY:

Prof. J. R. McGregor, Chairman Department of Mathematics The University of Alberta Edmonton, Alberta, Canada

^{**} Taxable

^{***} Students are usually eligible for summer assistantships of \$1000.

^{****} Graduate Research assistants may receive supplementary teaching up to the equivalent of 1/3 of a G.T.A.

TYPE

STIPEND Amount

TUITION

SERVICE REQUIRED

of financial assistance (with number anticipated in 1970-1971)

(dollars)

9 or 12 mo. if not included in stipend

Hrs/Week

Type

University of British Columbia

VANCOUVER8, B.C., CANADA R.D. James, Chairman Department of Mathematics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 3121 Baccalaureate Degrees by Department: 200 Master's Degrees by Department: 11

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 9; Geometry and Topology, 2; Analysis and Functional Analysis, 8; Probability and Statistics, 1; Computer Science and Numerical Analysis, 1; Applied Mathematics, 2. TOTAL: 23

Teaching Assistantship (85)	1500-3000	8	\$355	4-12*	Teaching, Grading
Scholarship (35)	2000-3600	12	\$355		

^{* 0-3} of these are formal lectures hours.

University of British Columbia

VANCOUVER 8, B.C., CANADA J.E.L. Peck, Head Department of Computer Science Applications must be filed by July 1, 1970 NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: Master's Degrees by Department:

Teaching Assistantship (8)	2550	9	\$355	6	Teaching
Research Assistantship (4)	3000	12	\$355	12	Research

University of Calgary

CALGARY 44, ALBERTA, CANADA Hanafi K. Farahat, Head Department of Mathematics, Statistics and Computing Science Applications must be filed by March 31, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 1110 Baccalaureate Degrees by Department: Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 1; Computer Science and Numerical Analysis, 1. TOTAL: 2

Teaching Assistantship (40)	2400-3600	8*	Included	6-12	Tutorials and Grading
Research Assistantship (5) Scholarship (2)	2000-2400** 3600	8* 12	Included Included		Research
Service Assistantships (10)	2400-3600	8*	Included	6-12	Programming and other services
Post Doctoral (6)	6000-8000**	.12		-	Research

^{*}Additional research grants of \$1000 are available for students working on their programme during the four summer months.

University of Guelph

GUELPH, ONTARIO, CANADA T.D. Newton, Chairman Department of Mathematics and Statistics Applications must be filed by April 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 929 Baccalaureate Degrees by Department: 10 Master's Degrees by Department:

Teaching Assistantship (12)	3300	12	\$400	12-15	Lab. Instruction
Research Assistantship (2)	3300	12	\$400	12-15	Research
1 (,					Assistance

^{**} Tax free.

TYPE of financial assistance (with number anticipated in 1970-1971)

STIPEND Amount 9 or (dollars) 12 mo. TUITION if not included in stipend

SERVICE REQUIRED
Hrs/Week Type

University of Manitoba

WINNIPEG 19, MANITOBA, CANADA N.S. Mendelsohn, Head Department of Mathematics and Astronomy NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2661
Baccalaureate Degrees by Department: 101
Master's Degrees by Department: 4

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1. TOTAL: 1

Fellowship (8)	2000-3000	8	\$425/yr.			
	3000-4000	12				
Teaching Fellowship (20)	3000	8	\$425/yr.	4	Teaching	
Teaching Assistantship (10)	2000	8	\$425/yr.	4	Teaching	
Summer Research Grant (20)	1000	3				

University of Manitoba

WINNIPEG 19, MANITOBA, CANADA B.K. Kale, Acting Head Department of Statistics Applications must be filed by March 1, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 2661
Baccalaureate Degrees by Department: 9
Master's Degrees by Department: 7

 Teaching Assistantship (8)
 1600-2400
 9
 \$400-\$450
 2-6

 Research Assistantship (8)
 1600-2400
 9
 \$400-\$450
 2-6

THE UNIVERSITY OF CALGARY

Graduate Study in Pure & Applied Mathematics, Statistics & Computing Science

This rapidly expanding University is situated within easy access to beautiful climbing and ski areas in the Rocky Mountains. The library already has over 275,000 volumes and subscribes to over 6,500 periodicals including 250 mathematical periodicals with back runs.

The department offers programmes leading to the M.A., M.Sc., and Ph.D. degrees. There are presently over 50 faculty members in the department with active research interests in algebra, analysis, functional analysis, combinatorics, logic, set theory, differential geometry, number theory, numerical analysis, continuum mechanics, relativity, multivariate analysis, probability, stochastic processes, artificial intelligence, automata theory, algorithmic languages, machine logic.

Teaching, service and research assistantships are available in the department and each applicant for graduate study will be considered for these. The average stipend is \$3,000 for the 8 month session. Fees are waived. In addition, students working on their programme during the summer months may receive an additional \$1,000.

For further information and details write to:

Professor E. C. Milner
Director of Graduate Studies
Department of Mathematics, Statistics & Computing Science
The University of Calgary
Calgary 44, Alberta, Canada

TYPE

STIPEND Amount 9 or

TUITION if not included

of financial assistance (with number anticipated in 1970-1971)

(dollars) 12 mo. in stipend

SERVICE REQUIRED Hrs/Week

University of New Brunswick

FREDERICTON, NEW BRUNSWICK, CANADA L.P. Edwards, Head

Department of Mathematics

Applications must be filed by December 31, 1969

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution:

Baccalaureate Degrees by Department: 25 Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1. TOTAL: 1

Fellowship (6)	2000	9	\$400		
Teaching Assistantship (2)	3500	9	\$400	5	Teaching
Tutorial Instr. (10)	1000	9	\$400	2	Teaching

University of New Brunswick

FREDERICTON, NEW BRUNSWICK, CANADA

W. Dana Wasson, Head Department of Computer Science

Applications must be filed by March 17, 1970

Fellowship (3)	2000-3000	9	\$400	
Teaching Assistantship (12)	1000-2000	. 9	\$400	4-8
Research Assistantship (4)	2000	9	\$400	

University of Ottawa

OTTAWA, ONTARIO, CANADA

V. Linis, Chairman

Department of Mathematics

Applications must be filed by April 1, 1970

NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 900

Baccalaureate Degrees by Department: 5

Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Logic, 1; Analysis and Functional Analysis, 1; Computer Science and Numerical Analysis, 1. TOTAL: 3

Teaching Assistantship (5)	2000-3000	9	\$450	4	Teaching
Research Assistantship (1)	3000	9		6	Research
Demonstrat.(8)	1200-2000	8	\$450	4	Teaching

University of Saskatchewan

SASKATOON, SASKATCHEWAN, CANADA Carman E. Miller, Head

Department of Mathematics

Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969 Baccalaureate Degrees by Institution: 2013 Baccalaureate Degrees by Department: 6 Master's Degrees by Department: 6

PH.D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 1; Probability and Statistics, 1. TOTAL: 2

Teaching Fellowship (9)	2500-3500	12	\$425	3-5	Teaching
Teaching Assistantship (2)	4500	12	\$425	6	Teaching
Research Assistantship (6)	2000-3000	12	\$425		

STIPEND

9 or

TUITION

number anticipated in 1970-1971)

(dollars) 12 mo.

Amount

if not included in stipend

SERVICE REQUIRED

Hrs/Week

vne

University of Saskatchewan, Regina

REGINA, CANADA
C.L. Kaller, Chairman
Department of Mathematics
Applications must be filed by March 15, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 529
Baccalaureate Degrees by Department: 50
Master's Degrees by Department: 4

Teaching Fellowship (4)	3600-3600	12	\$425	5	Teaching
Teaching Assistantship (6)	3000-3000	12	\$425	10	Grading, etc.
Scholarship (bursary) (2)	3600-3600	12	\$425		
Other (10) *	2000-3600	12	\$425		

^{*}These are from N.R.C. funds made available to staff members who then support graduate students as their own research assistants.

University of Toronto

TORONTO 181, CANADA G.F.D. Duff, Chairman Department of Mathematics Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 3741
Baccalaureate Degrees by Department: 25
Master's Degrees by Department: 23

PH.D. Degrees awarded during last three years by field of specialization: Algebra and Number Theory, 1; Geometry and Topology, 6; Logic, 1; Analysis and Functional Analysis, 7; Probability and Statistics, 10; Applied Mathematics, 3. TOTAL: 28

Fellowship (55)	2000-5000	12	\$475		
Teaching Assistantship (30)	2000-2750	8	\$475	4	Demonstrating
Scholarship (6)	2000-4000	8	\$475		

University of Toronto

TORONTO 181, ONTARIO, CANADA Thomas E. Hull, Chairman Department of Computer Science Applications must be filed by March 15, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 3741
Baccalaureate Degrees by Department: 20
Master's Degrees by Department: 5

PH. D. Degrees awarded during last three years by field of specialization: Computer Science and Numerical Analysis, 6. TOTAL: 6

Fellowship	3000	12	\$475		
Teaching Fellowship	3800-5100	12	\$395	4	Teaching
Teaching Assistantship	3600-3600				Tutoring
Research Assistantship	3600-3600	12	\$396	4	Demonstrating

University of Victoria

VICTORIA, B.C., CANADA S.A. Jennings, Chairman Department of Mathematics Applications must be filed by February 21, 1970 NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 450
Baccalaureate Degrees by Department: 410

Teaching Fellowship	1400-2400	8	\$450	4
reaching renowship	1100 2100	U	Ψ100	•
Posserch Assistantship	2400*	Q	\$450	
nesearch assistantship	2400	O	Φ= 00	
Research Assistantship	2400*	8	\$450 \$450	•

^{*}In addition, there is \$1000 available for the summer months.

TYPE

STIPEND

TUITION

of financial assistance (with number anticipated in 1970-1971)

Amount 9 or (dollars) 12 mo.

if not included in tipend

SERVICE REQUIRED
Hrs/Week Ty

uno

University of Waterloo

WATERLOO, ONTARIO, CANADA W.F. Forbes, Acting Dean Faculty of Mathematics Applications must be filed by April 15, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1167

Baccalaureate Degrees by Department: 152

Master's Degrees by Department: 46

PH. D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 2; Analysis and Functional Analysis, 1; Probability and Statistics, 3; Computer Science and Numerical Analysis, 3; Applied Mathematics, 2. TOTAL: 11

Teaching Fellowship (192)	1000-2000	8	\$466	5	Teaching
Research Assistantship (92)	1000-3000	8/12	\$466	5 /10	
Scholarship (50)	3600	12	\$466	10	

University of Western Ontario

LONDON, ONTARIO, CANADA D. Borwein, Head Department of Mathematics

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution: 1898
Baccalaureate Degrees by Department: 36
Master's Degrees by Department: 4

PH.D. Degrees awarded during last three years by field of specialization: Analysis and Functional Analysis, 4; Probability and Statistics, 1; Computer Science and Numerical Analysis, 2. TOTAL: 7

Fellowship (11)	2200-3000	8	\$137/term			
Teaching Assistantship (10)	500	8	\$137/term	1	Tutor	
Research Assistantship (5)	3000	12	\$137/term	1-6	Research	
Scholarship (9)	1500-3600	8-12	\$137/term			

UNIVERSITY OF VICTORIA

Victoria, B. C., Canada Department of Mathematics

Mathematics Department Head:

The University is seeking an established senior colleague to head a growing thirty member department. The department offers an undergraduate major and honours programme, and has begun a graduate programme in the areas of Pure Mathematics, Applied Mathematics, Statistics, and Computing Science.

Applicants should have suitable experience in university teaching, mathematical research, and administration.

Applications will be received until January 9, 1970.

Duties to commence July 1, 1970.

Applications including curriculum vitae or requests for further information should be sent to:

Dr. L. A. Hinrichs
Chairman, Head Selection Committee
Department of Mathematics
University of Victoria
P. O. Box 1700
Victoria, B. C., Canada

TYPE of financial assistance (with number anticipated in 1970-1971)

STIPEND Amount 9 or (dollars) 12 mo. TUITION if not included in stipend

 $\begin{array}{ccc} {\tt SERVICE~REQUIRED} \\ {\tt Hrs/Week} & {\tt Type} \end{array}$

University of Western Ontario

LONDON 72, ONTARIO, CANADA J.H. Blackwell, Chairman Department of Applied Mathematics Applications must be filed by January 1, 1970

NUMBER OF DEGREES AWARDED IN 1969
Baccalaureate Degrees by Institution:
Master's Degrees by Department:

PH.D. Degrees awarded during last three years by field of specialization: Applied Mathematics, 1. TOTAL: 1

Teaching Fellowship (1)	3000	9	12	Tutoring &
Teaching Assistantship (2)	2000-3000	9	8-12	Marking Tutoring & Marking
Research Assistantship	500-3000	12		Research
Scholarship NRC (6)	3000-3600	12		
Scholarship OGF (5)	2250	12		

University of Windsor

WINDSOR 11, ONTARIO, CANADA Rev. D.T. Faught, Head Department of Mathematics Applications must be filed by April 1, 1970 NUMBER OF DEGREES AWARDED IN 1969

Baccalaureate Degrees by Institution: 1250
Baccalaureate Degrees by Department: 55
Master's Degrees by Department: 8

PH.D. Degrees awarded during last three years by field of specialization: Geometry and Topology, 2; Applied Mathematics, 2. TOTAL: 4

Teaching Fellowship (20) 2500-4000 9 \$470 6-7 Presiding at Tutorials

THE UNIVERSITY OF WATERLOO FACULTY OF MATHEMATICS

Graduate Studies leading to Degrees of M. Math.; M. Phil.; Ph. D. DEPARTMENTS: Applied Mathematics, Pure Mathematics, Combinatorics and Optimization, Applied Analysis and Computer Science, Statistics.

TEACHING FELLOWSHIPS AND RESEARCH ASSISTANTSHIPS:

Combined values: \$2000-\$3000 for 8 months and up to \$1500 for the summer term.

APPLY TO:

Associate Dean of Graduate Studies Faculty of Mathematics The University of Waterloo Waterloo, Ontario, Canada

TAX STATUS OF GRANTS

Under Section 117 of the Internal Revenue Service Code assistantships, fellowships and grants meeting certain conditions are excludable from gross income and therefore not subject to the Federal Income Tax. The Internal Revenue Service has given the following interpretation of Section 117.

"Section 117(a) of the Internal Revenue Code of 1954 permits an individual to exclude from his gross income amounts received as a scholarship or fellowship grant. Whether the amounts received are in fact a scholarship or fellowship grant, i.e., are paid for the primary purpose of furthering the recipient's education and training, is a conclusion reached by the Internal Revenue Service on the basis of the facts in a particular case.

"Section 117(b) (1) of the Code provides that in the case of individuals who are candidates for a degree the exclusion from gross income shall not apply to that portion of any amount received as payment for teaching, research, or other services in the nature of part-time employment required as a condition to receiving the scholarship or fellowship grant. However, if teaching, research, or other equivalent services are required of all candidates for a particular degree as a condition to receiving the degree, such teaching, research or other services shall not be regarded as part-time employment.

"In situations where research is required of all degree candidates, but only those students who engage in teaching receive stipends, the Service would conclude that the stipend was not excludable under Section 117(a) of the Code, but was paid for services rendered in the nature of part-time employment.

"If research and teaching services are required of all degree candidates and such research and services are performed for the primary purpose of furthering the students' education and training, the Service would conclude that stipends paid for the research and teaching services, required of all degree candidates, are excludable from the recipients' gross income under Section 117(a) of the Code. However, amounts paid to a degree candidate for teaching services not strictly required as a condition to receiving the degree for which the recipient is a candidate, at the time he performs the service, represents compensation for services rendered which is includable in the recipient's gross income."

To help expedite the processing of returns, two forms are given below showing the types of information which should be provided by the graduate school for the Internal Revenue Service to help determine the validity of the claimed tax exclusion.

Application for total exclusion of stipend from gross income:

TO WHOM IT MAY CONCERN:

During the calendar Assistant in the Department of _	(Name	of Student) at the	served as a Research
University from	to		He was paid a stipend of
\$ for his services.	The funds were derived	from (Description	on of grant or contract)
At the same time, he was a can	lidate for the degree of _		. The research which
he performed under this arrang	ement met, in part, the	equirements for thi	s degree.
Equivalent research	is required of all	students working	for this same degree at the
University,	regardless of whether	or not they are comp	ensated for their services.

Application for partial exclusion from Federal Income Tax:

TO WHOM IT MAY CONCERN:

During the calendar year 19	(Nam	e of Student)	served as a
(position) in the Department of		at the	University
from to	. He was paid	a stipend of \$	The funds were
derived from	At the same	time, he was a candidat	e for the degree
of During this period the c	candidate spent a	pproximately (a)	_per cent of his
working time (assigned duties) , which	ch is not required	for the degree, and (b)	per
cent of his time on degree requirements.	The research or s	study which he perform	ed under (b) met
in part the requirements for his degree. Eq	uivalent research	is required of all stude	ents working for
this same degree at theUr	niversity, regardl	ess of whether or not th	ney are compen-
sated for their services.			

SELECTED LIST OF STIPENDS

I. Graduate Fellowships and Loan Sources

Ames Laboratory. Graduate assistantships in applied mathematics and computer science. Direct inquiries to Dr. Clair G. Maple, Chief, Mathematics and Computer Science Division, Ames Laboratory of the U.S. Atomic Energy Commission, Iowa State University, Ames, Iowa 50010.

Boris A. Bakhmeteff Research Fellowship in Mechanics of Fluids. A Boris A. Bakhmeteff Research Fellowship will be available for the 1970-71 academic year in an amount up to \$3,600. It is intended to be a specific contribution for a definite research project of an original and creative nature in the general field of mechanics of fluids. The recipient shall be a graduate student who is a candidate for the master's or doctor's degree. He shall have no commitment that will interfere with the research work and study on a full-time basis. It is expected that the stipend will be applied principally toward fees, tuition, and subsistence. The study and research may be undertaken at an institution of the Fellow's choice. In the judgment of the Committee, the adequacy of the facilities of the institution will have substantial weight in the selection of the Fellow. Application forms should be filed by February 15, 1970, with Dean William Allan, School of Engineering, The City College of The City University of New York, New York 10031.

Center for Naval Analyses, 1970 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 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. Write to Mr. Terry D. Harris, Center for Naval Analyses, 1401 Wilson Boulevard, Arlington, Virginia 22209.

<u>Danforth Graduate Fellowships</u>. Citizenship unrestricted. Open to men and women under 30 years of age who are seniors or recent graduates of accredited colleges in the United States, with no previous graduate study, and who intend to teach at the college level. Tenable at any accredited U. S. university. Must be nominated by liaison officer of college or university. See the liaison officer on campus or, for general information, write to Dr. John H. Chandler, Director, Graduate Fellowship Program, The Danforth Foundation, 222 South Central Avenue, St. Louis, Missouri 63105.

General Electric Foundation. Provides research and study grants to selected departments of selected graduate institutions on a programmed, rotational basis, to be used by the department in a number of ways, including fellowships and teaching assistantships. Write to J. Moreau Brown, Crotonville, P. O. Box 791, Ossining, New York.

Daniel and Florence Guggenheim Fellowships. For U.S. or Canadian residents interested in jet propulsion, space flight, and flight structures. Graduate fellowships at specified institutions. Write to Daniel and Florence Guggenheim Foundation, 120 Broadway, New York, New York 10005.

Hughes Aircraft Company Doctoral, Engineer and Masters Fellowship Programs. Academic training leading to these degrees and correlated experience developed through professional work assignments. Over 100 new awards each year in various fields of engineering, mathematics, and physics. Value of awards, including salary associated with work assignments, ranges from approximately \$7,500 to \$12,000 annually. Write to Scientific Education Office, Hughes Aircraft Company, P. O. Box 90515, Los Angeles, California 90009.

Johns Hopkins University. (1) Financial support for students taking the Ph.D. in mathematical statistics is available in the form of NSF and USPHS traineeships, NDEA fellowships, and research assistantships. Inquiries should be addressed to Chairman, Department of Statistics, The Johns Hopkins University, Baltimore, Maryland 21218. (2) USPHS traineeships are available to students seeking the Sc.M., Sc.D., or Ph.D., in biostatistics. Applicants for the biostatistics programs 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. \$500 each. Approximately 14 awards are available to women under 30 years of age who may or may not be fraternity members. A bachelor's degree is necessary 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. U. S. or Canadian citizenship required. First year graduate students receive preference. Candidate must receive no more than \$1,000 of additional financial aid. Not renewable. Application forms are available from Dr. Miriam Locke, Chairman of Fellowships, Kappa Kappa Gamma Fraternity, Box 1484, University, Alabama 35486. Applications must be completed by March 1.

<u>Kent Fellowships.</u> Purpose is to encourage and support persons who are preparing for teaching or administration in colleges and universities. Open to men and women to age 40. A minimum of one year of previous graduate study is required at the time of application. Fields unrestricted. A maximum of 50 awards are made. Information is available by writing to Director, Kent Program, The Danforth Foundation, 222 South Central Avenue, St. Louis, Missouri 63105.

Mathematics Research Center. For support of mathematical research of interest to the U.S. Army. Predoctoral fellowships for U.S. citizens for graduate study in any of the Departments of Mathematics, Computer Sciences, Statistics, or School of Business and College of Engineering, at the University of Wisconsin. For information write to J. Barkley Rosser, Director, Mathematics Research Center, United States Army, University of Wisconsin, Madison, Wisconsin 53706.

National Defense Student Loan Program. Fields unrestricted. Student must be carrying at least one half the normal full-time academic workload as determined by the institution where he is or will be enrolled. Funds are administered by participating institutions and applications should be made through the Director of Admissions or officer in charge of student financial aid. Other inquiries may be addressed to Division of Student Financial Aid, Office of Education, Department of Health, Education, and Welfare, Washington, D. C. 20202.

National Science Foundation Graduate Fellowships. Application may be made by college seniors and graduate students working in a degree program. All applicants must be citizens of the United States. Annual stipends are \$2,400 for the first-year level; \$2,600 for the intermediate level; and \$2,800 for the terminal-year level. Dependency allowances and allowances for tuition, fees, and limited travel will also be provided. Further information and application materials may be obtained from the Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington D. C. 20418. Applications are due in early December.

National Science Foundation Graduate Traineeships. For 9- or 12-month study programs leading to the master's or doctoral degree. Summer traineeships will also be available for graduate teaching assistants to enable them to continue their studies during the summer on a full-time basis. Trainees must be U. S. citizens or nationals. Trainees are selected by the institution at which graduate study is to be undertaken, and application must be made to the university. Further information and a list of participating institutions may be obtained from the Graduate Traineeship Program, Division of Graduate Education in Science, National Science Foundation, Washington, D. C. 20550.

North Atlantic Treaty Organization Fellowships. The Science Committee awards each year a number of Graduate Apprenticeships in Operational Research. The purpose of this scheme is to enable young scientists to receive practical training in operational research at one of a number of NATO or national centers. The normal assignment is for two years, subject to satisfactory completion of the first year. Applicants need not have previous experience in operational research, but they should have a scientific background with a sound basic training in mathematics. Each apprentice receives from NATO an allotment of \$4,000 per year plus travel expenses, together with the removal expenses for his personal belongings. An allowance of \$200 is also paid for each dependent accompanying the apprentice. Awards are also made to operational research scientists who wish to make a short "study visit" to a foreign country within the NATO Alliance, in order to learn about new techniques or procedures in operational research. Application forms for both of these awards can be obtained from the Scientific Affairs Division (Operational Research), NATO, Brussels, 39, Belgium.

Oak Ridge Graduate Fellowship Program. Opportunity for graduate students working toward doctoral degrees in scientific fields, including mathematics, to use AEC installations at Oak Ridge, Savannah River Laboratory, and Puerto Rico Nuclear Center for thesis research. U. S. citizenship is required. About 25 fellowships are awarded annually. Inquiries may be addressed to University Participation Office, Oak Ridge Associated Universities, Post Office Box 17, Oak Ridge, Tennessee 37830.

Population Council Fellowships in Demography. Citizenship unrestricted. Fields associated with

demography, statistics, economics, and sociology. Approximately 40 fellowships are awarded. Forms available from Fellowship Secretary, Population Council, 245 Park Avenue, New York, New York 10017.

<u>RCA Fellowships</u>. Grants are for graduate study in biomedical engineering, computer/information science, computer science, electrical engineering, electronics, and physics. (RCA-NBC Fellowships are available in journalism and telecommunications.) Candidates are selected by appropriate officials in designated universities. Although appointments are for one year, RCA Fellows are eligible for reappointment. For further information write to the RCA Educational Aid Committee, David Sarnoff Research Center, Princeton, New Jersey 08540.

Shell Companies Foundation, Incorporated, Shell Merit Residencies. 12-month residencies at Cornell and Stanford Universities; primarily for high school teachers of science and mathematics who have been Shell Merit Fellows. For information write to Coordinator, Shell Merit Programs, Room 19, Stone Hall, Cornell University, Ithaca, New York 14850, or to Dr. Paul DeHart Hurd, Coordinator, Shell Merit Programs, School of Education, Stanford University, Stanford, California.

Shell Merit Fellowships of Shell Companies Foundation, Inc. For U.S. citizens who are high school teachers of science and mathematics. Tenable at Cornell University during a 6-week summer period. Write to Coordinator, Shell Merit Programs, Room 19, Stone Hall, Cornell University, Ithaca, New York 14850.

Shell Merit Graduate Scholarships at Cornell University. For graduates of a college or university as National Merit or National Achievement Scholars or finalists who wish to enter or advance their preparation for pre-college science or mathematics teaching. For information write to Coordinator, Shell Merit Programs, Room 19, Stone Hall, Cornell University, Ithaca, New York 14850.

Sigma Delta Epsilon Grant-in-Aid. This award, to be given annually by Sigma Delta Epsilon, Graduate Women's Scientific Fraternity, is available to any woman who holds a degree from a recognized institution of higher learning and has demonstrated outstanding ability and promise in research in one of the mathematical, physical, or biological sciences. The period of the grant shall not exceed one calendar year. The stipend may be applied either directly to the research project or to course work, provided the latter is relevant to the research program. Appointments will be made irrespective of race, nationality, creed, or marital status. Preference will be shown to applicants 35 years of age or older but this limitation is not absolute. Application forms may be obtained from Dr. Kathleen R. Stitt, Doster Hall, University of Alabama, University, Alabama 35486. Applications should be submitted before February 1, 1970.

Smithsonian Institution Research Assistantships. For graduate and undergraduate students to work under the guidance of a Smithsonian staff member. Grants are made for a twelve-week period, during the summer. Deadline for receipt of applications is February 1, 1970. Further information and application forms may be obtained from the Division of Graduate Studies, Office of Academic Programs, Room 236, Pension Building, Smithsonian Institution, Washington, D. C. 20560.

Smithsonian Institution Visiting Research Associateships. For candidates for the Ph.D. or equivalent degree whose departments or universities approve their working at the Smithsonian. Deadline for applications is January 2, 1970. Further information and application forms may be obtained from the Division of Graduate Studies, Office of Academic Programs, Room 236, Pension Building, Smithsonian Institution, Washington, D. C. 20560.

United States Department of Health, Education and Welfare, National Defense Graduate Fellowship Program. Limited to specified universities. Applicant must have completed a bachelor's degree, intend to enroll in a full-time doctorate program, and signify an interest in a college teaching career. Fellowships are usually 3-year awards. Application is made directly to the university at which the student intends to study. For general information write to the Graduate Academic Programs Branch, Division of Graduate Programs, Bureau of Higher Education, Office of Education, United States Department of Health, Education and Welfare, Washington, D. C. 20202.

United States Department of Health, Education, and Welfare; National Institutes of Health. Supports predoctoral, postdoctoral, and special fellows. Research in biostatistics, especially as related to health and disease. Applicant must have earned an appropriate degree and show that his goal is a research career in the health related sciences. U. S. citizenship or lawful admittance to the U. S. for permanent residence is required. Announcements available from Fellowships Section, Career Development Review Branch, Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014.

United States Steel Corporation Fellowships. A bachelor's degree and U. S. citizenship are required. Applicant must usually be a candidate for a doctor's degree, but master's degree candidates may also be eligible. Thirty-three two-year awards are made through 33 participating colleges and universities for study in the natural and physical sciences, engineering, business administration, humanities, and social sciences. General information may be obtained from the United States Steel Corporation, Fellowship Program, Room 1805, 71 Broadway, New York, New York 10006.

<u>United States Steel Foundation Fellowships.</u> A bachelor's degree and U. S. citizenship are required. Applicant must usually be a candidate for a doctor's degree, but master's degree candidates may also be eligible. Forty-four two-year awards are made through 44 participating colleges and universities for study in the natural and physical sciences, engineering, business administration, humanities, and social sciences. General information may be obtained from the Executive Director, United States Steel Foundation, Inc., 71 Broadway, New York, New York 10006.

Woodrow Wilson National Fellowship Foundation. For U.S. and Canadian first-year graduate students interested in college teaching careers. Nominations from faculty members are due by October 20; no application will be accepted directly from students. For information write to Dr. Hans Rosenhaupt, President, Woodrow Wilson National Fellowship Foundation, Box 642, Princeton, New Jersey 08540.

Zonta International. Amelia Earhart Fellowships. For women holding a bachelor's degree in science and interested in graduate work in aero-space and related sciences. Recipients will be granted \$3,000, and past recipients may apply for renewed grants. Write to Zonta International, 59 East Van Buren Street, Chicago, Illinois 60605.

II. Postdoctoral Awards

AFOSR-NRC Postdoctoral Research Program. Supported by the Air Force Office of Scientific Research and administered by the National Research Council. These awards, open only to citizens of the United States, are tenable at appropriate educational institutions and research laboratories in the United States and abroad, and provide to young investigators of superior ability, who are recent recipients of the doctoral degree, special opportunities for advanced study and fundamental research in various branches of the natural and applied sciences of particular importance to the Air Force. Application materials for the 1970-1971 program are available from the Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418.

Agency for International Development. Research grants for research projects and analytical studies in systems and operations dealing with socio-economic development problems. Research groups are encouraged to investigate problems of their own devising within the above areas. For further information write to Mr. Glenn B. McClelland, Research Coordination Staff, Office of Program and Policy Coordination, Agency for International Development, Department of State, Washington, D. C. 20523.

Agency for International Development, Vietnam. Research grants for research projects and analytical studies in systems and operations dealing with socio-economic development problems in Vietnam. Research groups are encouraged to investigate problems of their own devising within the above areas. For further information, write to Dr. Karl F. Bode, Director, Research, Evaluation and Information Retrieval Staff, Bureau for Vietnam, Agency for International Development, Department of State, Washington, D. C. 20523.

Air Force Office of Aerospace Research. Postdoctoral and Senior Postdoctoral Research Associateships. Awards made in several fields, including mathematics. Tenable at two laboratories in the United States. Applicants should state, in some detail, their field of specialization and should indicate laboratory of interest. Annual stipends for these appointments range from \$12,500 to \$13,000 for the recent recipient of the doctorate with an adjustment made for the senior candidate. More details regarding this program may be obtained from the Office of Scientific Personnel, Associateship Office, National Research Council, 2101 Constitution Avenue, N.W., Washington, D. C. 20418. Deadline for submission of applications is February 6, 1970.

Air Force Office of Scientific Research. Research Contracts and Grants. Research mathematicians are encouraged to submit proposals through their college, university, or industrial laboratory for research in mathematical fields in which they specialize. Proposals should be mailed to the Director of Mathematical Sciences, Air Force Office of Scientific Research, 1400 Wilson Boulevard, Arlington, Virginia 22209.

American Association of University Women Educational Foundation. Fifty research fellowships for American women, unrestricted as to age or field, except the awards are not made in the creative or performing arts, to be used abroad or in the United States. Applicants must hold a doctorate or its equivalent in scholarly achievement or have fulfilled all requirements for the doctorate, except the dissertation, by July 1 preceding the fellowship year. Preference given to dissertation year applicants. Deadline for application is December 1. Write to Fellowships Office, AAUW Educational Foundation, 2401 Virginia Avenue, N.W., Washington, D. C. 20037.

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. Awards made in October, December, February, April, and June. For information write to the American Philosophical Society, 104 South Fifth Street, Philadelphia, Pennsylvania 19106.

Argonne National Laboratory. Limited number of postdoctoral appointments and temporary appointments for faculty members in many fields of applied mathematics and the computer sciences. Write to James L. Weeks, Professional Placement Manager, Argonne National Laboratory, 9700 S. Cass Avenue, Argonne, Illinois 60439.

Atomic Energy Commission Division of Research. Supports research in applied mathematics, numerical analysis, digital computer design, programming research, and related topics at universities and other institutions. Submit proposals to the Division of Research, U. S. Atomic Energy Commission, Washington, D. C. 20545.

Atomic Energy Commission Postdoctoral Fellowships. Applicants must hold a Ph.D. degree and be interested in nuclear science. U.S. citizenship is required. Approximately 30 fellowships are awarded. Write to U.S. Atomic Energy Commission, Division of Nuclear Education and Training, University Relations Branch, Washington, D. C. 20545.

Courant Institute Instructorships in Mathematics are open to young mathematicians with doctor's degrees who show strong promise in research. The teaching duty will consist of one graduate course related to the field of interest of the instructor. Appointments are for two years. The academic salary for nine months will be \$10,500. In addition, the instructor may receive 2/9 of this amount for research in residence during two summer months. Inquiries or requests for application forms should be addressed to the Committee on Instructorships, Courant Institute of Mathematical Sciences, 251 Mercer Street, New York, New York 10012. Applications should be filed no later than January 1,1970.

Courant Institute Postdoctoral Visiting Memberships. The Courant Institute of Mathematical Sciences of New York University offers postdoctoral Visiting Memberships to mathematicians, scientists, and engineers who are interested in its program of training and research in a broad range of pure and applied mathematics. Applications for the academic year 1970-71 must be submitted before January 1, 1970. Inquiries should be addressed to the Visiting Membership Committee of the Courant Institute, 251 Mercer Street, New York, New York 10012.

Educational Testing Service. Two renewable research fellowships in psychometrics at Princeton University. Apply September, to Director, Psychometric Fellowship Program, Educational Testing Service, Princeton, New Jersey 08540.

- G. C. Evans Instructorships at Rice University. For promising young mathematicians with the doctorate, primarily for new Ph.D.'s. Appointments are for two years at a salary of at least \$10,000 for the regular academic year. Teaching duties will amount to six hours per week in one semester and three hours per week in the other, or the equivalent. Inquiries and applications should be addressed to Professor Salomon Bochner, Chairman, Department of Mathematics, Rice University, Houston, Texas 77001.
- J. Willard Gibbs Instructorships in Mathematics. Offered by Yale University to promising young mathematicians with the doctorate, primarily recent Ph.D.'s. Appointments are for two years at a salary of \$10,300 for the regular academic year. In the past, summer support for two months has been obtained from a grant from the Air Force Office of Scientific Research; it is expected that this practice will be continued in the future. Teaching duties will involve six hours per week in one semester and three hours per week in the other, or the equivalent. These will include one semester course at the graduate level in the general area of the instructor's research. Inquiries and applications should be addressed to the Chairman, Department of Mathematics, Yale University, Box 2155, Yale Station, New Haven, Connecticut 06520. Preference will be given to applications received before January 17, 1970.

John Simon Guggenheim Memorial Foundation Fellowships. Applicants should be between 30 and 45 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. 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, to assist studies to be carried on in the United States. Nominations are made by the Committee of Selection. Approximately 350 awards are made, averaging (in 1969) \$8,200. For more information write to President, John Simon Guggenheim Memorial Foundation, 90 Park Avenue, New York, New York 10016.

Václav Hlavatý Research Assistant Professorships in Mathematics. Offered by the Department of Mathematics at Indiana University to young mathematicians with doctorates who show definite promise in research. The appointment is for three years with an academic-year salary of at least \$11,000. 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 Air Force Office of Scientific Research will support summer research for the recipients of the Václav Hlavatý Research Assistant Professorship. This will provide 2/9 of the academic-year salary for the two summer months. There will also be an annual amount of \$400 available for professional expenses, such as travel to meetings, supplies, publication costs, etc. Inquiries or request for application forms should be addressed to Professor George Springer, Chairman, Department of Mathematics, Swain Hall East, Indiana University, Bloomington, Indiana 47401. Preference will be given to applications received before January 31, 1970.

Institute for Advanced Study Membership. 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 1970-1971. 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 Secretary of the School of Mathematics and should be returned (whether or not funds are expected from some other source) by January 15, 1970, or as soon thereafter as possible.

Los Alamos Scientific Laboratory. Offered to U.S. citizens holding 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. Write to Recruiting Department, Los Alamos Scientific Laboratory, University of California, P. O. Box 1663, Los Alamos, New Mexico 87544.

Mathematics Research Center. For support of mathematical research of interest to the U.S. Army. Visiting research member appointments at all levels from postdoctoral up. For information write to J. Barkley Rosser, Director, Mathematics Research Center, United States Army, University of Wisconsin, Madison, Wisconsin 53706.

Michigan State University Postdoctoral Fellowships. As part of a university development program under a grant from the National Science Foundation, the Department of Mathematics at Michigan State University has established five postdoctoral research fellowships. These are to be awarded each year to promising young Ph.D.'s. The teaching duties of a postdoctoral research fellow consist of one course each term which may be an advanced graduate course or seminar. The stipend for 1970-1971 will be \$10,500 for an academic-year appointment. Research fellows are eligible for reappointment as a fellow for a second year or for appointment to a regular staff position. Additional information and application forms may be obtained from the Department of Mathematics, Michigan State University, Wells Hall, East Lansing, Michigan 48823. Completed applications should be filed by February 14, 1970.

C. L. E. Moore Instructorships in Mathematics. Offered by the Department of Mathematics at the Massachusetts Institute of Technology, open to young mathematicians with doctorates who show definite promise in research. The base salary will be \$10,600 and the teaching load is six hours per week in one semester and threehours per week in the other. The salary can be supplemented by summer work on a research grant, sponsored by the Air Force Office of Scientific Research, or by teaching in the summer session. The appointments are annual but renewable for one additional year. Applications should be filed not later than January 5 on forms obtained from the Department, 2-247, Massachusetts Institute of Technology, Cambridge, Massachusetts.

National Aeronautics and Space Administration. Postdoctoral and Senior Postdoctoral Resident Research Associateships. Open to individuals at the postdoctoral level who have the Ph.D., M. D., or Sc. D. degree or its training equivalent, or who have completed the requirements for one of these degrees. Citizenship is unrestricted, but a foreign national must have full command of the English language. Approximately 150 awards are made in numerous fields, including mathematics. Tenable at

Ames Research Center, Moffett Field, California; Electronic Research Center, Cambridge, Massachusetts; Goddard Space Flight Center, Greenbelt, Maryland; Institute for Space Studies, New York City; Jet Propulsion Laboratory, Pasadena, California; Langley Research Center, Hampton, Virginia; Manned Spacecraft Center, Houston, Texas; and Marshall Space Flight Center, Huntsville, Alabama. Forms are available from the Associateship Office, Office of Scientific Personnel, Room JH 606, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Annual stipend begins at \$13,000. Senior stipend variable. Deadlines for receipt of completed applications in 1970 are February 6, May 15, August 15, and October 31, with announcement of awards in April, July, October, and December.

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, National Aeronautics and Space Administration, Washington, D. C. 20546.

National Bureau of Standards. The Office of Scientific Personnel of the National Research Council announces the availability of Postdoctoral Research Associateship appointments for 1970-1971. Awards are made in several fields, including mathematics. Tenable in the Washington, D. C. area and Boulder, Colorado. Applicants should state, in some detail, their field of specialization and should indicate laboratory of interest. Annual stipend for these appointments is \$13,389 for the recent recipient of the doctorate. More details regarding this program may be obtained from the Office of Scientific Personnel, Associateship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Deadline for submission of applications is February 6, 1970.

National Research Council. In association with certain Federal laboratories, the Office of Scientific Personnel of the NRC evaluates applications and makes appointments for associateships at the following laboratories: National Bureau of Standards (Washington, D. C. area and Boulder, Colorado); Naval Undersea Research and Development Center (San Diego, California); Air Force Office of Aerospace Research (two laboratories); National Aeronautics and Space Administration (eight laboratories); Naval Research Laboratory (Washington, D. C.); U. S. Army Munitions Command (Feltman Laboratories, Dover, N. J., and other locations); U. S. Army Natick Laboratories (Natick, Massachusetts); Air Force Office of Scientific Research (at appropriate educational institutions and research laboratories in the U. S. and abroad). Detailed information regarding these programs may be obtained from the Office of Scientific Personnel, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Applicants should state, in some detail, their field of specialization and should indicate laboratory of interest.

National Science Foundation Postdoctoral Fellowships. For U.S. citizens or nationals who have earned or who will have earned a doctoral degree as of the beginning of their fellowships, who wish to enter upon or continue postdoctoral study. Application materials may be obtained from the Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Applications due in early December.

National Science Foundation Research Grants. Proposals accepted at any time. 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 Residencies in Computing and Computer Activities. The NSF will award up to ten one-year faculty residencies at Systems Development Corporation, Santa Monica, California, for training in computing and computer applications. Participants will spend from July 1, 1970, to June 30, 1971, in a program developed by SDC. Proposals for participation should be submitted by the institution of the proposed participant, and preference will be given to those institutions granting 100 or more baccalaureates in science in any three-year period since 1963. Since the objective of the program is to increase the number of institutions with strong academic computing activities, institutions already recognized as being outstanding incomputing are not encouraged to apply. For additional information, write to the Education, Research and Training Section, Office of Computing Activities, National Science Foundation, Washington, D. C. 20550.

National Science Foundation Science Faculty Fellowships. Requirements are a bachelor's degree or its equivalent, three or more academic years' teaching experience at the collegiate level with the rank of instructor or higher, and the intention to continue teaching. Applicants must also be U. S. citizens or nationals. Approximately 200 awards are available. Forms may be obtained by writing to

the Division of Graduate Education in Science, National Science Foundation, Washington, D. C. 20550. Applications due in early October.

National Science Foundation Senior Postdoctoral Fellowships. Candidates must have held a doctoral degree in one of the basic fields of science, mathematics, or engineering for at least five years (or have had equivalent scientific training and experience), and have achieved recognized stature in their profession. Applicants must be U. S. citizens or nationals. Approximately 50 awards are made. Information and application materials will be available in the late summer from the Division of Graduate Education in Science, National Science Foundation, Washington, D. C. 20550. Applications due early in October.

Naval Ordnance Laboratory. The Office of Scientific Personnel of the National Research Council announces the availability of Postdoctoral Research Associateship appointments for 1970-1971. Awards are made in several fields, including mathematics. Tenable in Silver Spring, Maryland. Applicants should state, in some detail, their field of specialization. Annual stipend for these appointments is \$13,389 for the recent recipient of the doctorate. More details regarding this program may be obtained from the Office of Scientific Personnel, Associateship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Deadline for submission of applications is February 6, 1970.

Naval Undersea Research and Development Center. The Office of Scientific Personnel of the National Research Council announces the availability of Postdoctoral Research Associateship appointments for 1970-1971. Awards are made in several fields including mathematics. Tenable in San Diego, California. Applicants should state in some detail their field of specialization. Annual stipend for these appointments is \$13,389 for the recent recipient of the doctorate, More details regarding this program may be obtained from the Office of Scientific Personnel, Associateship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Deadline for submission of applications is February 6, 1970.

Benjamin Peirce Lectureships at Harvard University, now carrying the rank of Assistant Professorships. The appointments are for three years with a starting salary of \$9,000 (for the nine-month academic year) and annual increments of \$500. This salary can be augmented during the summer by teaching at the Summer School or by work on a research contract if funds are available. The teaching committment 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 Department of Mathematics, Harvard University, 2 Divinity Avenue, Cambridge, Massachusetts 02138, and should be filed by February 1, 1970.

Alfred P. Sloan Foundation. Unrestricted grants made to selected young university scientists who are regular faculty members for support of basic research in the physical sciences, including mathematics. 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.

J. D. Tamarkin Instructorships. These instructorships at Brown University are intended to give promising young mathematicians the opportunity to begin their careers in an active and stimulating mathematical environment where ample opportunity exists for association with senior staff members. Teaching load is six hours one semester and three the other. Salary for the academic year is \$10,000 with opportunity for summer support. Applicant should have his doctorate by the time his appointment is to begin. Three letters of recommendation and a letter from applicant expressing interest in an instructorship must be submitted by January 15, 1970. For further information write to Chairman, Department of Mathematics, Brown University, Providence, R. I. 02912.

University of New Mexico. Postdoctoral fellowships which are provided under the terms of a National Science Foundation Departmental Grant for recent recipients of the doctorate or from persons expecting to receive the doctorate in 1970. Awards, which are for the period September 1970 to June 1971, provide a stipend of \$11,000. No formal duties are imposed, but recipients of the awards are expected to engage actively in research and to maintain a close association with faculty members having related mathematical interests. Inquiries should be addressed to the Chairman, Department of Mathematics and Statistics, University of New Mexico, Albuquerque, New Mexico 87106.

U.S. Army Munitions Command. Postdoctoral and Senior Postdoctoral Resident Research Associateships. Awards made in several fields, including mathematics. Tenable at Feltman Laboratories, Dover, New Jersey, and other locations. Applicants should state, in some detail, their field of specialization and should indicate laboratory of interest. Annual stipends for these appointments range from \$12,500 to \$13,000 for the recent recipient of the doctorate with an adjustment made for the senior

candidate. More details regarding this program may be obtained from the Office of Scientific Personnel, Associateship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Deadline for submission of applications is February 6, 1970.

- U. S. Army Natick Laboratories. Postdoctoral and Senior Postdoctoral Visiting Scientists Research Associateships. Awards made in several fields, including mathematics. Tenable in Natick, Massachusetts. Applicants should state, in some detail, their field of specialization and should indicate laboratory of interest. Annual stipends for these appointments begin at \$12,500. Senior stipend variable. More details regarding this program may be obtained from the Associateship Office, JH606, Office of Scientific Personnel, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Deadlines for submission of applications in 1970 are February 6, May 15, August 15, and October 31 with announcement of awards in April, July, October, and December.
- U. S. Army Research Office--Durham. Research grants and contracts for basic research in mathematics, engineering, and physical and environmental sciences. Write to Commanding Officer, U. S. Army Research Office--Durham, Box CM, Duke Station, Durham, North Carolina 27706.

John Wesley Young Research Instructorships. Two instructorships are 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 may be supplemented by a summer research fellowship. The appointments are for two years and are not renewable. Applicants should write to Donald L. Kreider, Chairman, Mathematics Department, Dartmouth College, Hanover, New Hampshire 03755.

III. Study Abroad

Alexander von Humboldt Foundation Fellowships. These fellowships of 6 to 12 months are offered in order to pursue advanced academic research projects at a German university or research institute. Fields of research and citizenship are unrestricted. Amount of stipend: 'forschungsstipendium' DM 1200.-monthly, 'Dozentenstipendium' DM 1600.-monthly; supplementary family allowances, travel expenses. An extension of the original award period is possible. Applicants should furnish proof of independent teaching experience at university level or research work (of at least two years if interested in a 'Forschungsstipendium' and at least five years if interested in a 'Dozentenstipendium'). They should hold a Ph.D., have sufficient knowledge of German, and as a rule, not be older than 38. Applicants for a 'Dozentenstipendium' should have outstanding academic publications to their credit. For further information write to Alexander von Humboldt-Stiftung, 532 Bad Godesberg, Schillerstrasse 12, Germany.

Alliance Française Scholarships. For Americans between 20 and 30 years old with a working knowledge of French to study in France at the graduate level. Fields unrestricted. Write to Chairman of Scholarship Committee, Alliance Française de New York, Inc., 527 Madison Avenue, New York, New York 10022, or Alliance Française, 101 Boulevard Raspail, Paris 6, France.

American Association of University Women Educational Foundation. See Section II.

American Philosophical Society. See Section II.

American-Scandinavian Foundation. Graduate fellowships to be used in Scandinavia. Applicants must be U. S. citizens who have completed their college education and should be under 40 years old. Application deadline is December 1, 1969 (November 1 for Marshall Fellowships for Denmark). Write to The American-Scandinavian Foundation, 127 East 73 Street, New York, New York 10021.

Foreign Area Fellowship Program. This program offers a limited number of research training and internship opportunities in Latin America, Asia, Africa, Western and Eastern Europe, and the Near East, the majority of which are in the social sciences and humanities. A few grants are available for those in the natural and physical sciences. Applicants must be, in most cases, predoctoral students enrolled in American or Canadian universities. Further information may be obtained by writing to Foreign Area Fellowship Program, 110 East 59th Street, New York, New York 10022.

<u>Fulbright-Hays Grants.</u> For graduate study or research in any field in which the project can be profitably undertaken abroad. Applicant must be U. S. citizen and have language proficiency sufficient to carry out the proposed study and to communicate with the people of the host country. Students already enrolled in a U. S. university 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 Information and Reference Services Division, Institute of International Education, 809 United Nations Plaza, New York, New York 10017.

Fulbright-Hays Postdoctoral Awards. United States Government grants available annually in all fields for university lecturing and postdoctoral research abroad. Elligibility 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. Write to Committee on International Exchange of Persons, Senior Fulbright-Hays Program, 2101 Constitution Avenue, N. W., Washington, D. C. 20418.

Institute of International Education. Grants for graduate study abroad; includes U. S. Government grants and fellowships offered by other governments, foundations, universities, organizations and private donors. Applicant must be U. S. citizen, have a Bachelor's degree or its equivalent before the beginning date of the grant, generally be under 35 years of age, and be able to read, write, and speak the language of the host country by time of application. Students already enrolled at U. S. universities must apply through the Fulbright Program Advisor at his university. Unnenrolled students may apply through the Institute of International Education. IIE regional offices are (1) 65 E. South Water Street, Chicago, Illinois 60601; (2) Capitol Life Center, E. 16th Avenue at Grant Street, Denver, Colorado 80203; (3) Suite 1411, Peachtree Center, 230 Peachtree Street, N. W., Atlanta, Georgia 30303; (4) Suite 1-A, World Trade Center, 1520 Texas Avenue, Houston, Texas 77002; (5) 1212 Wilshire Boulevard, Los Angeles, California 90017; (6) 1530 P Street, N. W., Washington, D. C. 20005; (7) 291 Geary Street, San Francisco, California 94102; (8) 809 United Nations Plaza, New York, New York 10017 (Main Office).

International Research and Exchanges Board. IREX administers academic exchange programs between scholars in the United States and the countries of East-Central and Southeast Europe and the Soviet Union. These programs operate under reciprocal agreements with the countries concerned. U.S. citizenship is required for all programs, except short-term grants to citizens of the exchange countries for visits to the United States. Applicants to the exchange programs must have a full-time affiliation with a North American college or university and be faculty members or advanced doctoral candidates who will have completed all requirements for the Ph.D. except the thesis by the time of participation. Applicants will be expected to have mastery of the language of the host country sufficient for the purposes of their research and study. IREX provides domestic and international transportation and an internal travel allowance for the participant; one-half of domestic and international transportation costs for accompanying family members for stays of at least one semester, or full family transportation costs for stays of an academic year; for married graduate students a family allowance determined by the number of dependents; for salaried participants a stipend in lieu of salary less the value of housing and other benefits received from the host country. Stipends are adjusted to take into account such other resources as fellowships and sabbatical salaries. For further information, write to International Research and Exchanges Board, 110 East Fifty-Ninth Street, New York, New York 10022.

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: Room 2303, John Hancock Building, Boston, Massachusetts 02116; (2) East: 845 Third Avenue, New York, New York 10022; (3) South: 814 Atlanta Merchandise Mart, 240 Peachtree Street, N. W., Atlanta, Georgia 30303; (4) Midwest: 33 North Dearborn Street, Chicago, Illinois 60602; (5) Pacific: 5th Floor, Hong Kong Building, 160 Sansome Street, San Francisco, California 94104.

Netherland-America Foundation Graduate Study Grants. Small supplementary grants toward study in the Netherlands. Apply to the Netherland-America Foundation, Inc., 10 Rockefeller Plaza, New York, New York 10020.

North Atlantic Treaty Organization Postdoctoral Fellowships. For study abroad in countries in the NATO Alliance. Open to U.S. citizens who have earned a doctoral degree or who have had research training and experience equivalent to that represented by the doctoral degree in one of numerous scientific fields, including mathematics. Tenure is normally either 9 or 12 months. Write to the Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418.

North Atlantic Treaty Organization Senior Fellowships in Sciences. For U. S. citizens or nationals to study new scientific techniques and developments at nonprofit research and educational institutions in other NATO nations, or countries cooperating with NATO, for tenures of one to three months. Senior staff members may be nominated by any U. S. educational institution that offers a postbaccalaureate degree in one of the sciences, or any nonprofit scientific research institution. Approximately 20 awards are made. Evaluations are made periodically. For application materials, write Division of Graduate Education in Science, National Science Foundation, Washington, D. C. 20550.

Organization of American States Fellowship. Applicants must be citizens or permanent residents of member states of the OAS. Graduate study must be done in member state other than the country of the applicant. Fields are individually limited by member countries. Forms are available from the Technical Secretariat of the OAS Fellowship Program, Division of Fellowships, Department of Technical Cooperation, Pan American Union, Washington, D. C. 20006.

Rotary Foundation Graduate Fellowships and Undergraduate Scholarships. One academic year of study abroad 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 140 countries in which there are Rotary Clubs. An applicant for both types of awards must be unmarried. An applicant for a Graduate Fellowship must be between the ages of 20 and 28 inclusive as of July 1971, and have obtained a bachelor's degree or equivalent prior to the beginning of his fellowship year. An applicant for an Undergraduate Scholarship must be between the ages of 18 and 24 inclusive as of July 1971, and 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 15, 1970.

Royal Norwegian Council for Scientific and Industrial Research Postdoctorate Fellowships. Fields: engineering and applied sciences. Candidates should not be more than 35 years of age. Studies can be carried out at the Universities of Oslo and Bergen, the Technical University of Norway, and at different institutes for applied research in Oslo, Bergen, and Trondheim. English may be used at all institutes; German and French at some institutes. Deadline each year is February 1. Write to Royal Norwegian Council for Scientific and Industrial Research, Gaustadelleen 30, Oslo, Norway.

William and Mildred Zelosky Scholarships. Open to American and Polish men at least 21 years of age. American candidates must have at least a master's degree and a knowledge of the Polish language. Polish candidates must have at least their master's degree and preferably their doctorate, plus sufficient knowledge of the English language. Polish citizenship is required for study in the United States; U. S. citizenship is required for study in Poland. Write to Kosciuszko Foundation, 15 East 65th Street, New York, New York 10021.

IV. Fellowships for Citizens of other Countries

Alliance Française Scholarships. Available to French citizens between 20 and 30 years old who have a working knowledge of English, for study in the U.S.A. at the graduate level. Fields unrestricted. Write to Chairman of Scholarship Committee, Alliance Française de New York, 527 Madison Avenue, New York, New York 10022 or Alliance Française, 101 Boulevard Raspail, Paris 6e, France.

American Association of University Women International Fellowships. Approximately 50 awards made to women of other countries for advanced study or research in the United States. No restriction as to age or field of study, except that awards are not made in the creative or performing arts. An applicant must hold a bachelor's degree, be proficient in English, and intend to return to her own country. Forms are to be obtained in the applicant's country from the Fellowships Office, AAUW Educational Foundation, 2401 Virginia Avenue, N. W., Washington, D. C. 20037 or the Cultural Affairs Officer of the U. S. Embassy.

<u>Fulbright-Hays Program.</u> 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. The number of grants for the academic year 1970-1971 will depend on funds available.

John Simon Guggenheim Memorial Foundation Fellowships. See Section II.

Institute of International Education. Open to nationals of most countries. Levels: undergraduate and graduate. Fields unrestricted. Develops and administers exchange programs for a number of organizations and corporations and administers U. S. Government grants under the Fulbright-Hays Act for students under the educational exchange program of the Department of State. Write to the Selection Committee in the candidate's own country; address may be obtained from the United States Embassy or Consulate. IIE overseas regional offices: Post Office Box 5869, Nairobi, Kenya; Apartado 300, Lima, Peru; Reid Hall, 4 Rue de Chevreuse, Paris 6, France; P. O. Box 6907, Tsimshatsui, Hong Kong.

Kappa Kappa Gamma Fraternity Fellowships. For Canadian citizens. See Section I.

National Aeronautics and Space Administration. International University Fellowships in Space Science. Foreign nationals only. Level: graduate and postdoctoral. Candidates must be sponsored by their national or regional space research organization or national research councils; must have the equivalent of an earned Master of Science or Master of Engineering degree and must intend to return to their own countries. Fields: all space sciences. Fellowships in the mathematical sciences tenable at 33 U.S. universities. Applications should be made to the national space research organization, National Research Council, or appropriate organization of the applicant's own country. Further information may be obtained from the Office of Scientific Personnel, National Research Council, 2101 Constitution Avenue, Washington, D. C. 20418.

National Aeronautics and Space Administration. See Section II.

National Science Foundation Senior Foreign Scientist Fellowships. For foreign nationals who have had a doctoral degree in science for at least five years or comparable research or teaching experience over a 10-year period. Must be citizens of a nation which maintains diplomatic relations with the U.S. Approximately 50 awards are made. Applicants must be recommended by a U.S. educational institution participating in the program. Further information and a list of participating institutions may be obtained from Division of Graduate Education in Science, National Science Foundation, Washington, D.C. 20550. Application is made directly to the institution.

North Atlantic Treaty Organization Fellowships. See Section I.

Organization of American States Fellowships. Citizenship in member country of OAS is required. See Section III.

Population Council Fellowships in Demography. See Section I.

Shell Merit Fellowships of Shell Companies Foundation, Inc., and Shell Canada, Ltd. For Canadian citizens. See Section I.

Woodrow Wilson National Fellowship Foundation. For Canadian citizens. See Section I.

William and Mildred Zelosky Scholarships. Open to Polish men. See Section III.

V. Other Sources of Information

S. Norman Feingold Scholarships, Fellowships and Loans. Volumes III and IV, Bellman Publishing Company, Box 172, Cambridge, Massachusetts 02138, 1955, 1962. Listing of financial aid sources, plus an excellent bibliography especially in Volume III, listing other sources of similar information.

<u>Fellowship and Research Opportunities in Mathematical Sciences</u>, 1969-1970. Division of Mathematical Sciences, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Lists fellowships and grants available from various U.S. Government agencies and bureaus.

<u>Fellowships Offered by Foreign Governments, Universities, and Private Donors.</u> Institute of International Education, 809 United Nations Plaza, New York, New York 10017. List of fellowships and scholarships administered by the IIE for U.S. students.

Scholarships, Fellowships and Loans News Service. The Staff, Bellman Publishing Company, Box 172, Cambridge, Massachusetts 02138, published quarterly, \$20 per year. Up-to-date information regarding student financial aid. Annotated bibliography of books and professional journals.

National Defense Graduate Fellowships, Graduate Programs 1969-1970. U. S. Department of Health, Education, and Welfare, Office of Education, Washington, D. C. 20202. Gives pertinent information on how to apply for a fellowship and lists the participating institutions.

Selected List of Major Fellowship Opportunities and Aids to Advanced Education for Foreign Nationals. Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418, 1969. Contains a list of financial aid sources plus a bibliography listing other sources of financial aid information.

Selected List of Major Fellowship Opportunities and Aids to Advanced Education for United States Citizens. Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418, 1969. Contains a list of fellowships available on the undergraduate, graduate, and post-doctoral levels plus a bibliography giving other sources of information on fellowships, scholarships, and loans.

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The presentation in this book is carried out in the spirit of the abstract theory of operators. It is illustrated by various applications to the theory of integral equations. The reader who has some experience in the theory of boundary value problems for differential equations, or an acquaintance with the theory of linear vibrating systems with a finite or infinite number of degrees of freedom, will easily discover how many of the results discussed here find immediate application in each of these fields.

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