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# Mathematics Opportunities

## NSF Focused Research Groups

The Focused Research Groups (FRG) activity of the Division of Mathematical Sciences (DMS) of the National Science Foundation (NSF) supports small groups of researchers in the mathematical sciences.

The DMS has announced deadline dates for the fiscal year 2005 competition for FRG grants. The deadline for receipt of the required letters of intent to submit FRG proposals is **August 19, 2005**. The deadline date for full proposals is **September 16, 2005**. The FRG solicitation may be found on the Web at [http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=5671&org=DMS](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5671&org=DMS).

—From an NSF announcement

## NSF Mathematical Sciences Postdoctoral Research Fellowships

The Mathematical Sciences Postdoctoral Research Fellowship program of the Division of Mathematical Sciences (DMS) of the National Science Foundation (NSF) awards fellowships each year for research in pure mathematics, applied mathematics and operations research, and statistics. The deadline for this year's applications is **October 19, 2005**. Applications must be submitted via FastLane on the World Wide Web. For more information see the website [http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=5301&org=DMS](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5301&org=DMS).

—From an NSF announcement

## AMS Scholarships for Math in Moscow

The Independent University of Moscow has created a program called Math in Moscow, which offers foreign students (undergraduate or graduate students specializing in

mathematics and/or computer science) the chance to spend a semester in Moscow studying mathematics. The AMS provides a small number of scholarships to students to attend the program.

Math in Moscow provides students with a fifteen-week program similar to the Research Experiences for Undergraduates programs that are held each summer across the United States. Math in Moscow draws on the Russian tradition of teaching mathematics, which emphasizes creative approaches to problem solving. The focus is on developing in-depth understanding of carefully selected material rather than broad surveys of large quantities of material. Discovering mathematics under the guidance of an experienced teacher is the central principle of Math in Moscow. Most of the program's teachers are internationally recognized research mathematicians, and all of them have considerable teaching experience in English, typically in the United States or Canada. All instruction is in English.

With funding from the National Science Foundation, the AMS awards five US\$5,000 scholarships each semester to U.S. students to attend the Math in Moscow program. To be eligible for the scholarships, students must submit applications to *both* the Math in Moscow program and to the AMS. An applicant should be an undergraduate mathematics or computer science major enrolled at a U.S. institution. **April 15** is the deadline for scholarship applications for the fall semester immediately following that date; **September 30** is the deadline for the spring semester.

Information and application forms for Math in Moscow are available on the Web at <http://www.mccme.ru/mathinmoscow> or by writing to: Math in Moscow, P.O. Box 524, Wynnewood, PA 19096; fax +7095-291-65-01; email: [mim@mccme.ru](mailto:mim@mccme.ru). Information and application forms for the AMS scholarships are available on the Web at <http://www.ams.org/outreach/mimoscow.html> or by writing to: Math in Moscow Program, Membership and Programs Department, American Mathematical Society, 201 Charles Street, Providence RI 02904-2294; email: [student-serv@ams.org](mailto:student-serv@ams.org).

—Allyn Jackson

## Call for Submissions for Sunyer i Balaguer Prize

Ferran Sunyer i Balaguer (1912–67) was a self-taught Catalan mathematician who, despite a serious physical disability, was very active in research in classical analysis, an area in which he acquired international recognition. Each year, in honor of the memory of Ferran Sunyer i Balaguer, the Institut d'Estudis Catalans awards an international research prize bearing his name.

The prize is awarded for a mathematical monograph of an expository nature presenting the latest developments in an active area of research in mathematics in which the author has made important contributions. The monograph should be written in English and should be at least 150 pages long.

The prize, amounting to EUR 10,000 (about US\$13,000), is provided by the Ferran Sunyer i Balaguer Foundation. The winning monograph will be published in Birkhäuser Verlag's series Progress in Mathematics, subject to the usual regulations concerning copyright and author's rights. Submissions should be sent before **December 2, 2005**, to: Fundació Ferran Sunyer i Balaguer, Carrer del Carme, 47, E-08001 Barcelona, Spain. For further information, visit the website <http://www.crm.es/FSBPrize/fsb2005prize.htm>.

—From an Institut d'Estudis Catalans announcement

## Nominations Sought for 2005 IBC Young Researcher Award

Nominations are sought for the 2005 Information-Based Complexity Young Researcher Award. This annual award is for significant contributions to information-based complexity by a young researcher. The prize will consist of US\$1,000 and a plaque and will be awarded at a suitable location.

Any researcher who has not reached his or her thirty-fifth birthday by September 30 of the year of the award is eligible.

The members of the Award Committee (Josef Dick, University of New South Wales; Frances Kuo, University of New South Wales; Christiane Lemieux, University of Calgary; Peter Mathe, Weierstrass Institute for Applied Analysis and Stochastics; Joseph F. Traub, Columbia University; and Henryk Wozniakowski, Columbia University and University of Warsaw) would appreciate nominations. However, a person does not have to be nominated to win the award.

The deadline for nominations for the award is **September 30, 2005**. Nominations should be sent to Joseph Traub. The award can be for work done in a single year or a number of years. The work can be published in any journal, number of journals, or monographs.

—Joseph Traub, Columbia University

## Crossword Puzzle

*To the Nth Degree* (page 761)

### Answers

1	P	I	P		C	D	S		M	I	T		I	S	R			
13	I	N	E	R	T	I	A		I	N	R	A	D	I	I			
17	Q	U	A	D	R	A	T	I	C	F	I	E	L	D	S			
19	U	R	N	S		M	A	O	R	I		R	E	E	K			
22	E	E	O		N	O	N	C	O	M	S		S	S	S			
					26	N	I	N				27	U	H	S			
29	C	U	B	I	C	D	E	C	I	M	E	T	E	R	S			
38	O	R	A	T	E		S	O	C		F	E	T	O	R			
41	Q	U	A	R	T	I	C	S	U	R	F	A	C	E	S			
					44	O	A	R				45	O	E	D			
46	E	G	O		N	O	W	A	T	E	R		N	I	M			
56	S	A	B	U		N	A	B	O	B		C	A	N	I			
60	Q	U	I	N	T	I	C	E	Q	U	A	T	I	O	N			
63	U	N	T	H	I	N	K		U	C	D	A	V	I	S			
65	E	T	S		66	A	G	O		67	E	K	E		68	E	L	K