Mathematics Opportunities

NSF Mathematics and Geosciences Program

The National Science Foundation (NSF) has announced a new program solicitation, Opportunities for Research Collaborations between the Mathematical Sciences and the Geosciences (CMG). The focus of the solicitation is on research that centers on problems dealing with multiscale phenomena. The full solicitation can be found at the following site: `http://www.nsf.gov/cgi-bin/getpub?nsf02022`.

—From an NSF announcement

NSF Program on Exploratory Research on Engineering the Service Sector

The National Science Foundation (NSF) has announced a focused solicitation for Exploratory Research on Engineering the Service Sector (ESS). The goal of this effort is to stimulate the development of a community of academic researchers in engineering and allied branches of the mathematical and social sciences and a corresponding body of research findings that address the service sector. Specifically, this effort will support research on application of the computational problem-solving techniques that define engineering to improving the quality, productivity, safety, reliability, and competitiveness of service operations.

Proposals are sought that explore novel lines of basic research that promise to extend the range of focused empirical, analytical, and computational techniques for design, planning, and control of service products, operations, and processes and/or advance policy insights with relevance to implementable solutions in service enterprises. Grants of up to $100,000 ($150,000 for investigator teams) are expected to be awarded, with durations of eighteen months.

Cognizant program officers in the Division of Mathematical Sciences are Deborah Lockhart, Tom Fogwell, and Marianthi Markatou. Their contact information, as well as the complete announcement, may be found at `http://www.nsf.gov/cgi-bin/getpub?nsf02029`. The deadline for proposals is **March 5, 2002**.

—From an NSF announcement

Women's International Science Collaboration Program

The American Association for the Advancement of Science (AAAS) Directorate for International Programs, with support from the National Science Foundation (NSF), will sponsor the Women's International Science Collaboration (WISC) Program for 2001–2003. This program aims to increase the participation of women in international scientific research by helping to establish new research partnerships with colleagues in central and eastern Europe, in the newly independent states of the former Soviet Union, in the Near East, the Middle East, the Pacific, Africa, the Americas, and Asia.

Small grants ($4,000–$5,000) will provide travel and living support for a U.S. scientist and, when appropriate, a coprincipal investigator to visit a partner country to develop a research program. Funds can also be used to support a second visit to the partner country or for a foreign partner to travel to the United States. Men and women scientists who have their Ph.D.s or equivalent research experience are eligible to apply. Applicants who have received their doctoral degrees within the past six years will receive special consideration, as will scientists applying to work with colleagues in less frequently represented countries and regions. Approximately forty

awards will be made. The deadline for applications is **July 15, 2002**.

For further application information and region-specific guidelines, see http://www.aaas.org/international/wiscnew.shtml, or contact WISC Travel Grant, American Association for the Advancement of Science, Directorate for International Programs, 1200 New York Avenue, NW, Washington, DC 20005.

—From an AAAS announcement

National Academies Internship Program

The Christine Mirzayan Internship Program of the National Academies is designed to engage graduate students in the analysis and creation of science and technology policy and to familiarize them with the interactions of science, technology, and government. As a result, students develop essential skills different from those attained in academia and make the transition from being a graduate student to being a professional.

During the program, interns work on studies and activities at the National Academies. Each intern is assigned to a senior staff member who acts as his or her mentor. The mentor provides guidance and ensures that the intern's time is focused on substantive work and activities.

Applications for the internships are invited from graduate students through postdoctoral candidates in any physical, biological, or social science field or any field of engineering, medicine/health, or veterinary medicine as well as business and law students. For information on applying, visit the website http://www4.nationalacademies.org/pd/nrc-ip.nsf. The deadline is **March 1, 2002,** for the program that runs June 3 through August 9, 2002 (10 weeks).

The e-mail address is internship@nas.edu, the fax number is 202-334-1667, and the telephone number is 202-334-2455. The postal address is: National Academies Internship Program, 2101 Constitution Avenue, NW, Suite FO-2050, Washington, DC 20418.

—From a National Academies announcement

News from the IMA

The 2001–02 program at the Institute for Mathematics and its Applications (IMA) is "Mathematics in the Geosciences". The dates, topics, and brief descriptions of the workshops follow.

April 22–26, 2002: Inverse Problems and Quantification of Uncertainty. Organizers: William Symes, Philip Stark, and John Scales. A tutorial on Inverse Problems and Data Assimilation will precede the workshop on April 19, 2002.

April 29–May 3, 2002: Data Assimilation in the Oceanic and Atmospheric Sciences. Organizers: Robert N. Miller, Olivier Talagrand, and Paola Malnotte-Rizzoli.

June 10–14, 2002: Point Process Modeling and Seismological Applications of Statistics. Organizers: Frederick Schoenberg, David R. Brillinger, and Bruce A. Bolt.

For further information and registration forms for these workshops, consult http://ima.umn.edu/geoscience/.

In addition to the geosciences theme, the IMA will also sponsor a three-day Minisymposium on Evolutionary Consequences of Invasions by Exotic Species on **April 12–13, 2002.**

The IMA summer program on Special Functions in the Digital Age will be held from **July 22–August 2, 2002.** Organizers are George Andrews, Richard Askey, Carl de Boor, Arieh Iserles, Daniel W. Lozier, Frank W. J. Olver, Peter Olver, and Peter Paule.

From **August 5–14, 2002**, the IMA will host FoCM'02, organized by the Society for Foundations of Computational Mathematics. There will be three-day workshops and plenary lectures (eighteen of each). For further information, see the conference home page at http://www.damtp.cam.ac.uk/user/na/FoCM/FoCM02/ or e-mail: focm@ima.umn.edu.

Upcoming annual thematic programs at the IMA are Optimization in 2002–03, Probability and Statistics in Complex Systems: Genomics, Networks, and Financial Engineering in 2003–04, and Mathematics of Materials and Macromolecules: Multiple Scales, Disorder, and Singularities in 2004–05.

Details of these and all planned IMA programs may be found at http://www.ima.umn.edu/programs/annual/annual.html, or contact the Institute for Mathematics and its Applications, University of Minnesota, 400 Lind Hall, 207 Church Street, Minneapolis, MN 55455; telephone 612-624-6066; e-mail to Fred Dulles, Associate Program Director, at dulles@ima.umn.edu.

—From an IMA announcement

2002 Summer Program for Women in Mathematics

The George Washington University has announced the 2002 Summer Program for Women in Mathematics (SPWM 2002) to be held June 29–August 3, 2002, in Washington, DC. SPWM 2002 is an intensive five-week program for mathematically talented undergraduate women who are completing their junior years and may be contemplating graduate study in the mathematical sciences. The goals of this program are to communicate an enthusiasm for mathematics, to develop research skills, to cultivate mathematical self-confidence and independence, and to promote success in graduate school.

Sixteen women will be selected. Each will receive a travel allowance, campus room and board, and a stipend of $1,500. The application deadline is **March 1, 2002**. For further information, see the university's website, http://www.gwu.edu/~math/spwm.html, or contact the codirectors, Murli M. Gupta (mmg@gwu.edu) or E. Arthur Robinson Jr. (robinson@gwu.edu), Department of

Mathematics, George Washington University, Washington, DC 20052; telephone 202-994-4857; fax 202-994-6760.

—George Washington University announcement

Maria Mitchell Women in Science Award

The Maria Mitchell Association offers an annual award to recognize an individual, program, or organization that encourages the advancement of girls and women in studies and careers in science and technology. Maria Mitchell (1818–1889) was the first woman astronomer and first woman astronomy professor in the United States.

The award may be given in the natural and physical sciences, mathematics, engineering, computer science, or technology. The winner will be chosen by a national jury of distinguished educators and scientists and will receive a cash award of $10,000.

Funding for the award has been provided by an anonymous donor. Guidelines and nomination forms are available from the association's website at `http://www.mmo.org/`, or contact the Maria Mitchell Women in Science Award Committee at the Maria Mitchell Association, 2 Vestal Street, Nantucket, MA 02554; telephone 508-228-9198. Deadline for nominations is **April 30, 2002**.

—From a Maria Mitchell Association announcement

ICM Travel Grants

The organizers of the 2002 International Congress of Mathematicians (ICM2002), to be held in Beijing August 20–28, 2002, have announced a new program of travel grants. The grants are intended for mathematicians from Eastern Europe, senior mathematicians from developing countries in Latin America and Africa, and senior mathematicians from developing countries in Asia. The grants are sponsored by the International Mathematical Union and the Chinese Mathematical Society.

Those who have already applied for grants for local costs of attending ICM2002 may also apply for the travel grants. The deadline is **March 10, 2002**. For further information, send e-mail to `icm@bnu.edu.cn/`, or visit the website `http://www.icm2002.org.cn`. Or write to: Shanzhen Lu or Yingbo Zhang, Department of Mathematics, Beijing Normal University, 100875 Beijing, People's Republic of China; fax 86-10-622082802.

—From an ICM announcement

MATHEMATICS OPPORTUNITIES