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# Mathematics Opportunities

## Deadlines and Target Dates at the DMS

The Division of Mathematical Sciences (DMS) of the National Science Foundation (NSF) has a number of programs in support of mathematical sciences research and education. Listed below are some of the programs and their deadlines or target dates for the year 2004. Some dates are tentative; please refer to the program announcement or contact the program director for more information.

**First week of January 2004 (target date):** Mathematical Biology part of Applied Mathematics (includes all proposals for Research in Undergraduate Institutions [RUI])

**January 15, 2004 (target date):** Mid-Career Methodological Opportunities

**Late January 2004 (deadline; see solicitation):** Major Research Instrumentation (MRI) Program; Scientific Computing Research Environments for the Mathematical Sciences (SCREMS)

**February 1, 2004 (target date):** Research Planning Grants and Career Advancement Awards for Minority Scientists and Engineers

**Early April 2004 (target date; see solicitation):** CBMS Regional Research Conferences in the Mathematical Sciences

**June 30, 2004 (deadline):** Joint DMS/NIGMS Initiative to Support Research Grants in the Area of Mathematical Biology

**July 2004 (deadline; see solicitation):** Faculty Early Career Development (CAREER) Program

**August 15, 2004 (target date):** Mid-Career Methodological Opportunities

**August 20, 2004 (deadline):** Letters of intent for Focused Research Groups (FRG) in the Mathematical Sciences

**September 15, 2004 (deadline):** Research Experiences for Undergraduates (REU) sites

**September 16, 2004 (deadline):** Enhancing the Mathematical Sciences Workforce in the 21st Century (includes Vertical Integration of Research and Education in the Mathematical Sciences [VIGRE])

**September 17, 2004 (deadline):** Proposals for Focused Research Groups (FRG) in the Mathematical Sciences

**October 15, 2004 (deadline):** Mathematical Sciences Postdoctoral Research Fellowships

**November 13, 2004 (deadline):** University-Industry Cooperative Research Programs in the Mathematical Sciences

**November 22, 2004 (deadline):** Interdisciplinary Grants in the Mathematical Sciences (IGMS)

Proposals for conferences, workshops, and special years that are submitted to the Statistics and Probability program or to the Topology and Foundations program can be sent at any time. However, proposals for these activities that are submitted to all other DMS programs (Analysis, Algebra and Number Theory, Applied Mathematics, Computational Mathematics, and Geometric Analysis) must be submitted according to the target dates for those programs. Proposals for supplements for Research Experiences for Undergraduates may be submitted at any time.

For further information consult the DMS website at [http://www.nsf.gov/mps/divisions/dms/news/c\\_deadlines.htm](http://www.nsf.gov/mps/divisions/dms/news/c_deadlines.htm). The mailing address is Division of Mathematical Sciences, National Science Foundation, Room 1025, 4201 Wilson Boulevard, Arlington, VA 22230. The telephone number is 703-292-5111.

—From a DMS announcement

## ONR Young Investigator Program

The Office of Naval Research (ONR) sponsors a Young Investigator Program to support academic scientists and engineers who have recently received Ph.D. or equivalent degrees and who show exceptional promise for doing creative research.

Awards of up to \$100,000 per year for three years are made, and additional funds may be provided based on need. The program is open to United States citizens, nationals (native residents of a U.S. possession), and permanent residents who hold tenure-track or permanent faculty positions at U.S. universities and who received their graduate degrees on or after November 1, 1998.

Proposals in mathematical, computer, and information sciences should be sent to: Office of Naval Research (FY04 YIP under BAA 04-002), Attn: Director, Mathematical, Computer, and Information Sciences Division, ONR Code 311, Room 607, 800 North Quincy Street, Arlington, VA 22217-5660. Proposals must be received by 4:00 p.m. Eastern Standard Time on **January 8, 2004**. For further information and instructions for proposal preparation, see the ONR website, [http://www.onr.navy.mil/sci\\_tech/industrial/yip.htm](http://www.onr.navy.mil/sci_tech/industrial/yip.htm), or call 703-696-4314.

—From an ONR announcement

## Collaborations in Mathematical Geosciences

The National Science Foundation supports a program called Collaborations in Mathematical Geosciences (CMG). The purposes of the CMG activity are: (A) to enable collaborative research at the intersection of mathematical sciences and geosciences, and (B) to encourage cross-disciplinary education through summer graduate training activities. Research topics under (A) should fall within one of three broad themes: (1) mathematical and statistical modeling of large, complex geosystems; (2) representing uncertainty in geosystems; or (3) analyzing large geoscience data sets.

Research projects supported under this activity should be essentially collaborative in nature. Research groups should include at least one mathematical scientist and at least one geoscientist. Projects under category (A) should be of three to four years in duration. It is not the intent of this activity to provide general support for infrastructure. Projects under category (B) are not restricted to topics (1)–(3). The award duration for category (B) will be two years.

The CMG program announcement is available on the Web at <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf04508>. The proposal deadline is **January 14, 2004**.

—From an NSF announcement

## News from AIM

The American Institute of Mathematics (AIM) announces that applications are being accepted to fund ten graduate students enrolled at U.S. institutions to attend a 10-day course, “Recent Perspectives in Random Matrix Theory and Number Theory”, to be held March 29 to April 8, 2004, at the Isaac Newton Institute in Cambridge, England. Information about the school can be obtained at <http://www.newton.cam.ac.uk/programmes/RMA/rmaw02.html>.

An online application form may be filled out at <http://www.aimath.org/newtonschoolapplication.html>.

The deadline for applications is **January 10, 2004**. The funding is being provided by a grant from the National Science Foundation (NSF).

—AIM announcement

## News from the MBI

The Mathematical Biosciences Institute (MBI) at The Ohio State University announces its 2003–2004 scientific program.

**Winter Quarter 2004: Mathematical Modeling and Signal Transduction.** January 5–9, 2004: Tutorial on “Signal Transduction”; January 26–30, 2004: Workshop 3—“Signal Transduction I: The Many Roles of Calcium” (Organizers: James Sneyd and Mike Sanderson); February 16–19, 2004: Tutorial on “Signal Transduction”; March 8–12, 2004: Workshop 4—“Signal Transduction II: Muscles and Motility” (Organizers: James Sneyd and Ed Pate).

**Spring Quarter 2004: Immune Models and Host-Pathogen Dynamics.** May 6–7, 2004: Tutorial on Immunology and Intracellular Processes (speakers include Denise Kirschner and Tom Kepler); May 10–14, 2004: Workshop 5—“Immunology Models: Cell Signaling and Immune Dynamics” (Organizers: Denise Kirschner, Jennifer Linderman, and Sergei Pilyugin); June 17–18, 2004: Tutorial on “Pathogens and Host-Pathogen Interaction” (speakers include Denise Kirschner and others); June 21–25, 2004: Workshop 6—“Modeling Host-Pathogen Interactions” (Organizers: Denise Kirschner and Tom Kepler).

**Summer Program, July 19–August 6, 2004.** This educational program consists of a one-week tutorial and a two-week team project. The participants are graduate students. College instructors and qualified undergraduates will also be considered. The tutorial and projects will focus on cell processes, with emphasis on signal transduction within a cell and among cells.

**2004–2005 Scientific Program: Genomics, Proteomics, Bioinformatics.** The year will begin with one-week tutorials on microarrays and a one-week tutorial on statistical methods in genomics. The following workshops are planned. Autumn quarter 2004: “Analysis of Gene Expression Data: Principles and Applications” and “Regulatory Networks”. Winter quarter 2005: “Computational Proteomics and Mass Spectrometry” and “Emerging Genomic Technologies and Data Integration Problems”. Spring quarter 2005: “Biomarkers in HIV and Cancer Research” and “Evolutional Genomics”.

For more information visit the MBI website at: <http://mbi.osu.edu>. Applications for postdoctoral fellowships, workshop participation, and long-term visits are available on the Web.

—MBI announcement

## News from the SAMSI

The Statistical and Applied Mathematical Sciences Institute (SAMSI) of the National Science Foundation (NSF) aims to forge a synthesis of the statistical sciences and the applied mathematical sciences and disciplinary science.

Its 2004 program is on the topic Multiscale Model Development and Control Design. The major workshops already scheduled are:

**January 17–21, 2004:** Tutorials and Opening Workshop

**February 15–17, 2004:** Workshop on Multiscale Phenomena in Soft Matter Nanomaterials

**April 15–17, 2004:** Workshop on Fluctuations and Continuum Equations in Granular Flow

Additional miniworkshops, to be scheduled, will address specific issues associated with multiscale modeling, homogenization, large-scale simulation, reduced-order system models, and robust control design and implementation.

In 2005 SAMSI will offer programs on Computational Biology of Infectious Diseases (September 2004–May 2005), on Social Sciences (September 2004–May 2005), and on Data Assimilation (January 2005–June 2005). SAMSI is accepting proposals for future research programs. Contact Jim Berger, email: [berger@samsi.info](mailto:berger@samsi.info); Tom Banks, email: [htbanks@eos.ncsu.edu](mailto:htbanks@eos.ncsu.edu); Alan Karr, email: [karr@niss.org](mailto:karr@niss.org); or Steve Marron, email: [marron@email.unc.edu](mailto:marron@email.unc.edu). For more information see the SAMSI website, <http://www.samsi.info>.

—From a SAMSI announcement

## Departments Coordinate Job Offer Deadlines

A group of mathematical sciences departments has adopted an agreement to coordinate deadlines for acceptance of postdoctoral job offers. The purpose is to ensure that applicants do not have to make decisions about job offers before the results of the National Science Foundation (NSF) postdoctoral fellowship competition are announced. The agreement applies only to offers of postdoctoral positions and not tenure-track positions, and only to applicants who are less than two years past the Ph.D.

The departments have agreed not to require these applicants to decide about a job offer before Monday, **February 9, 2004**. The NSF has agreed to notify postdoctoral fellowship recipients no later than Friday, **January 31, 2004**. The list of participating departments, together with additional information, may be found on the Web at <http://www.ams.org/employment/postdoc-offers.html>.

—Allyn Jackson