
Mathematics Opportunities

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 18, 2002**. Applications must be submitted via FastLane on the World Wide Web. Go to <http://www.fastlane.nsf.gov/> and click on "Postdoctoral Fellowships". Information can be found there for the Mathematical Sciences Postdoctoral Research Fellowships, as well as for other NSF fellowship opportunities. For more information, telephone the DMS at 703-306-1870 or e-mail: msprf@nsf.gov.

—From an NSF announcement

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. FRG proposals should provide a plan for making significant progress in scientifically focused areas of recognized or emerging importance to the mathematical sciences and should explain how the success of the proposed research project depends in a crucial way upon a group effort.

The DMS has announced deadline dates for the fiscal year 2003 competition for FRG grants. The deadline for receipt of the required letters of intent to submit FRG proposals is **August 20, 2002**. The deadline date for full proposals is **September 20, 2002**.

The FRG solicitation may be found on the Web at <http://www.nsf.gov/pubs/2002/nsf02129/nsf02129.htm>.

—From an NSF announcement

DMS/NIGMS Program in Mathematical Biology

The Division of Mathematical Sciences (DMS) of the National Science Foundation and the National Institute of General Medical Sciences (NIGMS) at the National Institutes of Health sponsor the Joint DMS/NIGMS Initiative to Support Research in the Area of Mathematical Biology. The initiative focuses on mathematics and statistics related to mathematical biology research.

The DMS and the NIGMS recognize the need for additional research at the boundary between the mathematical sciences and the life sciences. This competition is designed to encourage new collaborations at this interface, as well as to support existing ones.

Awards made through this competition are dependent upon responsiveness of the proposals to the announcement, the quality of the proposed research, and the availability of funds. The DMS and the NIGMS anticipate making 20–25 awards totaling about \$6 million in each of fiscal years 2003–05. The projected range is from \$100,000 to \$400,000 per award per year (total costs), with durations of 4–5 years.

The program announcement is on the Web page <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf02125>. The deadline for proposals is **August 11, 2002**.

—NSF announcement

News from MSRI

The Mathematical Sciences Research Institute (MSRI) has announced its programs for fall and spring 2003–04. Following are dates, titles, brief descriptions, and names of organizers of the programs.

August 18–December 19, 2003: Discrete and Computational Geometry. This program deals with the structure and complexity of discrete geometric objects, as well as with the design of efficient computer algorithms for their manipulation. Organizers: Jesus A. De Loera, Herbert Edelsbrunner, Jacob E. Goodman, Janos Pach, Micha Sharir, Emo Welzl, and Günter M. Ziegler.

August 28, 2003–May 14, 2004: Differential Geometry. This program will cover five main topics: complex geometry, calibrated geometries, and special holonomy; geometric analysis; symplectic geometry and gauge theory; geometry and physics; and Riemannian and metric geometry. Organizers: Robert Bryant, Frances Kirwan, Peter Petersen, Richard Schoen, Isadore Singer, and Gang Tian.

January 2–May 14, 2004: Topological Aspects of Real Algebraic Geometry. New topics in this area include amoebas; new connections, such as that with symplectic geometry; and new challenges, such as those posed by real polynomial systems. Organizers: Selman Akbulut, Grigory Mikhalkin, Victoria Powers, Boris Shapiro, Frank Sottile, and Oleg Viro.

Applications for memberships in these programs will be accepted starting **July 1, 2002**, via the online application form at <http://zeta.msri.org/forms/memberapp2/>. For more information on programs see MSRI's website, <http://www.msri.org/>.

In addition to these programs, MSRI has three award programs that offer support for work in mathematics at MSRI. Research Professorships provide partial salary support for at least three months and are intended for mathematicians with Ph.D.'s awarded in 1997 or earlier. Deadline for applications is **September 27, 2002**. Postdoctoral Fellowships provide support for five or ten months and are intended for mathematicians with Ph.D.'s awarded in 1998 or later. Deadline for applications is **November 15, 2002**. General Memberships provide partial support toward living and travel expenses. It is generally expected that general members will obtain partial or full support from other sources. Deadline for applications is **November 15, 2002**.

Further information on these programs and application forms are available at <http://www.msri.org/> or from MSRI, 1000 Centennial Drive, Berkeley, CA 94720-5070.

—From an MSRI announcement