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# Mathematics Opportunities

## 2000 NSF-CBMS Regional Conferences

With funding from the National Science Foundation (NSF), the Conference Board of the Mathematical Sciences (CBMS) will hold four NSF-CBMS Regional Research Conferences during the summer of 2000. These conferences are intended to stimulate interest and activity in mathematical research.

Each five-day conference features a distinguished lecturer who will deliver ten lectures on a topic of importance in current research. Support for about thirty participants will be provided for each conference. Established researchers and interested newcomers, including postdoctoral fellows and graduate students, are invited to attend.

The title of each conference follows, along with the name of the principal speaker, the date and location of the conference, and the names of the organizers, as well as contact information. More information about the conferences can also be found at the Web site [http://www.maa.org/cbms/nsf/2000\\_conf.htm](http://www.maa.org/cbms/nsf/2000_conf.htm) or by contacting the Conference Board of the Mathematical Sciences, 1529 18th St. NW, Washington, DC 20036-1385; telephone 202-293-1170; fax 202-293-3412; e-mail: [kolbe@math.georgetown.edu](mailto:kolbe@math.georgetown.edu) or [rosier@math.georgetown.edu](mailto:rosier@math.georgetown.edu).

*Interactions of Harmonic Analysis, Statistical Estimation, and Data Compression*, David L. Donoho, May 22–26, University of Missouri, St. Louis. Organizer: Grant V. Welland. Telephone: 314-516-6356; e-mail: [welland@math.ums1.edu](mailto:welland@math.ums1.edu); World Wide Web: <http://www.math.ums1.edu/CBMS/>.

*Superconvergence in Finite Element Methods*, Lars Wahlbin, May 22–26, Texas Tech University. Organizers:

Zhimin Zhang, Lawrence Schovanec. Telephone: 313-577-2486 (for scientific program), 806-742-2566 (for local arrangements); e-mail: [zhang@math.ttu.edu](mailto:zhang@math.ttu.edu) or [schov@math.ttu.edu](mailto:schov@math.ttu.edu); World Wide Web: <http://www.math.ttu.edu/CBMS2000/>.

*Lectures on the Geometrical Study of Differential Equations*, Niky Kamran, June 20–25, Howard University. Organizers: Joshua A. Leslie, Thierry Robart. Telephone: 202-806-6830; e-mail: [leslie@scs.howard.edu](mailto:leslie@scs.howard.edu) or [trobart@howard.edu](mailto:trobart@howard.edu); World Wide Web: <http://homepage.mac.com/trobart/howard/CBMS/>.

*The Existence and Nonexistence of Periodic Orbits in Smooth Dynamical Systems*, Krystyna M. Kuperberg, July 10–14, Mercer University. Organizer: Curtis D. Herink. Telephone: 912-301-4172; e-mail: [herink\\_cd@mercer.edu](mailto:herink_cd@mercer.edu); World Wide Web: <http://www.mercer.edu/math/>.

—From a CBMS announcement

## Request for Proposals for 2001 NSF-CBMS Regional Conferences

The National Science Foundation (NSF), with the sponsorship of the Conference Board of the Mathematical Sciences (CBMS), intends to support up to five NSF-CBMS Regional Research Conferences in 2001.

Each five-day conference features a distinguished lecturer who will deliver ten lectures on a topic of important current research in one sharply focused area of the mathematical sciences. The lecturer will subsequently prepare an

expository monograph based on these lectures, which, depending on the topic, will be published either by the AMS, by the Society for Industrial and Applied Mathematics (SIAM), or jointly by the American Statistical Association and the Institute of Mathematical Statistics. Support will be provided for about thirty participants at each conference, including postdoctoral researchers and graduate students.

Colleges and universities with at least some research competence in the field of the proposal are eligible to apply. Because a major goal of these conferences is to attract new researchers into the field of the conference and to stimulate new research activity, institutions that are interested in upgrading or improving their research efforts are especially encouraged to apply.

Proposals should reach the NSF by **April 18, 2000**. For further information on the NSF-CBMS Regional Conferences and guidelines for preparing proposals, contact: Conference Board of the Mathematical Sciences, 1529 18th Street, NW, Washington, DC 20036; telephone: 202-293-1170; fax: 202-293-3412; World Wide Web: [http://www.maa.org/cbms/nsf/2001\\_call.htm](http://www.maa.org/cbms/nsf/2001_call.htm); e-mail: [kolbe@math.georgetown.edu](mailto:kolbe@math.georgetown.edu) or [rosier@math.georgetown.edu](mailto:rosier@math.georgetown.edu).

—From a CBMS announcement

## News from the Isaac Newton Institute

The Isaac Newton Institute for Mathematical Sciences, Cambridge, England, will hold several workshops as part of two larger programs during the spring of 2000. Following are the titles of the programs, the dates and subjects of the individual workshops, and the World Wide Web address for complete information where available.

### *Ergodic Theory, Geometric Rigidity, and Number Theory*

March 27–31: Rigidity in Dynamics and Geometry; <http://www.newton.cam.ac.uk/programs/ernw02.html>.

April 3–7: Workshop on Ergodic Theory and  $Z^d$  Actions (to be held at the Mathematics Institute at Warwick University); <http://www.newton.cam.ac.uk/programs/ernw03.html>.

July 3–7: Conference on Ergodic Theory, Riemannian Geometry, and Number Theory.

### *Strongly Correlated Electron Systems*

April 10–20: NATO ASI/EC Summer School: New Theoretical Approaches to Strongly Correlated Systems; <http://www.newton.cam.ac.uk/programs/scew03.html>.

June 26–30: Strongly Interacting Electron Systems—Novel Materials and Novel Physics.

In addition, the following future programs have been confirmed:

*Surface Water Waves*, August 13–31, 2001. Organizers: S. E. Belcher, T. J. Bridges, S. G. Saggiadi.

*New Contexts for Stable Homotopy Theory*, September–December 2002. Organizers: J. P. C. Greenlees, H. R. Miller, F. Morel, V. P. Snaitch.

For details and a list of current and future programs, see the Institute's Web site at <http://www.newton.cam.ac.uk/programs/>.

The next call for proposals will be issued in March 2000, with a deadline of June 30, 2000. See the Web site <http://www.newton.cam.ac.uk/callprop.html> for details.

—From a Newton Institute announcement

## Project NExT: New Experiences in Teaching

Project NExT (New Experiences in Teaching) is a program for new or recent Ph.D.'s in the mathematical sciences that addresses a broad range of issues focusing on the teaching and learning of undergraduate mathematics. Faculty who are just beginning or just completing their first year of full-time teaching at the college/university level are invited to apply to become Project NExT fellows.

The first event for the 2000–01 fellows will be a workshop, held July 31–August 2, 2000, just prior to the MathFest, the summer meeting of the Mathematical Association of America (MAA) in Los Angeles, California (August 3–5, 2000). At this workshop and at Project NExT sessions during the MathFest, fellows will explore and discuss issues of special relevance to beginning faculty, including new approaches to teaching calculus, precalculus, and more advanced courses; alternative methods of teaching and assessing student learning; involving undergraduates in mathematical research; using technology in the classroom; perspectives from pedagogical research; writing grant proposals; and balancing teaching and research.

Following the workshop, Project NExT fellows will attend the summer MAA MathFest, participate in all the opportunities of that meeting, and choose among special short courses designed for the fellows. During the following year the fellows will participate in an electronic network that links them with one another and with distinguished teachers of mathematics, in special events at the Joint Mathematics Meetings in New Orleans, Louisiana (January 10–13, 2001), and in a second workshop in 2001 and the MAA MathFest immediately afterward (probably in Madison, Wisconsin, August 2–4, 2001).

Approximately sixty Project NExT fellows will be selected for the 2000–01 year. Funding for room and board at the workshop in Los Angeles and for the short courses at the summer MathFest will be provided for participants. Institutions at which the fellows are employed are expected to provide financial assistance for all other expenses associated with the meetings, and the level of institutional support is a consideration in the application process. Limited funds are available to assist those institutions that are unable to afford full support.

The application deadline is **April 14, 2000**. For more information, see the article "Project NExT" in the February 2000 issue of the *Notices*, p. 217. Information and application forms can be found on the Project NExT home page

(<http://archives.math.utk.edu/projnext/>), or contact one of the following: T. Christine Stevens, Director, Project NEXT, Department of Mathematics and Mathematical Computer Science, Saint Louis University, 221 North Grand Blvd., St. Louis, MO 63103; telephone: 314-977-2436; e-mail: [stevensc@slu.edu](mailto:stevensc@slu.edu); Joseph Gallian, Codirector, Department of Mathematics and Statistics, University of Minnesota, Duluth, MN 55812; telephone: 218-726-7576; e-mail: [jgallian@d.umn.edu](mailto:jgallian@d.umn.edu); or Aparna Higgins, Codirector, Department of Mathematics, University of Dayton, Dayton, OH 45469; telephone: 937-229-2103; e-mail: [higgins@saber.udayton.edu](mailto:higgins@saber.udayton.edu). Project NEXT is sponsored by the MAA, with partial support from the ExxonMobil Foundation.

—*Project NEXT announcement*

## Nominations Sought for National Medal of Science

The National Medal of Science was established by the 86th Congress in 1959 as a presidential award to be given to individuals “deserving of special recognition by reason of their outstanding contributions to knowledge in the physical, biological, mathematical, or engineering sciences.” In 1980 Congress expanded this recognition to include the social and behavioral sciences. A selection committee of 12 scientists and engineers is appointed by the president to evaluate nominees for this award. The selection process is handled by the National Science Foundation.

For information on making nominations, consult the Web site <http://www.nsf.gov/nsb/awards/nms/start.htm>, or contact: Susan Fannoney, Program Manager, National Medal of Science Committee, National Science Foundation, 4201 Wilson Boulevard, Rm 1225, Arlington, VA 22230; e-mail: [nms@nsf.gov](mailto:nms@nsf.gov); telephone: 703-306-1096; fax: 703-306-0181. The next deadline for nominations is **May 31, 2000**.

—*From an NSF announcement*