
Mathematics Opportunities

DMS Workforce Program in the Mathematical Sciences

The Division of Mathematical Sciences (DMS) of the National Science Foundation (NSF) welcomes proposals for the Workforce Program in the Mathematical Sciences. The long-range goal of the program is increasing the number of well-prepared U.S. citizens, nationals, and permanent residents who successfully pursue careers in the mathematical sciences and in other NSF-supported disciplines. Of primary interest are activities centered on education that broaden participation in the mathematical sciences through research involvement for trainees at the undergraduate through postdoctoral educational levels. The program is particularly interested in activities that improve recruitment and retention, educational breadth, and professional development.

The submission period for unsolicited proposals is **May 15–June 15, 2010**. For more information and a list of cognizant program directors, see the website http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503233.

—From a DSM announcement

Call for Proposals for 2011 NSF-CBMS Regional Conferences

To stimulate interest and activity in mathematical research, the National Science Foundation (NSF) intends to support up to seven NSF-CBMS Regional Research Conferences in 2011. A panel chosen by the Conference Board of the Mathematical Sciences will make the selections from among the submitted proposals.

Each five-day conference features a distinguished lecturer who delivers ten lectures on a topic of important current research in one sharply focused area of the

mathematical sciences. The lecturer subsequently prepares an expository monograph based on these lectures which is normally published as a part of a regional conference series. Depending on the conference topic, the monograph will be published by the American Mathematical Society, by the Society for Industrial and Applied Mathematics, or jointly by the American Statistical Association and the Institute of Mathematical Statistics.

Support is provided for about thirty participants at each conference, and both established researchers and interested newcomers, including postdoctoral fellows and graduate students, are invited to attend. The proposal due date is **April 23, 2010**. For further information on submitting a proposal, consult the CBMS website, http://www.cbmsweb.org/NSF/2011_call.htm, or contact: Conference Board of the Mathematical Sciences, 1529 Eighteenth Street, NW, Washington, DC 20036; telephone: 202-293-1170; fax: 202-293-3412; email: tkolbe@maa.org or rosier@georgetown.edu.

—From a CBMS announcement

NSF-CBMS Regional Conferences, 2010

With funding from the National Science Foundation (NSF), the Conference Board of the Mathematical Sciences (CBMS) will hold six NSF-CBMS Regional Research Conferences during the summer of 2010. These conferences are intended to stimulate interest and activity in mathematical research. Each five-day conference features a distinguished lecturer who delivers ten lectures on a topic of important current research in one sharply focused area of the mathematical sciences. The lecturer subsequently prepares an expository monograph based on these lectures. Support for about thirty participants will be provided for each conference. Both established researchers and interested newcomers, including postdoctoral fellows and graduate students, are invited to attend.

Information about an individual conference may be obtained by contacting the conference organizer. The conferences to be held in 2010 are as follows.

May 17–21, 2010: The Mathematics of Diffusions. Wei-Ming Ni, lecturer. Tulane University. Organizer: Xuefeng Wang, 504-862-3451, xdw@math.tulane.edu; conference website: math.tulane.edu/~xdw/cbms/cbms.html.

May 17–21, 2010: Nonlinear Water Waves with Applications to Wave-Current Interactions and Tsunamis. Adrian Constantin, lecturer. University of Texas, Pan American. Organizers: Lokenath Debnath, 956-381-3459, debnath1@utpa.edu; and Andras Balogh, 956-381-2119, abalogh@utpa.edu; conference website: www.math.utpa.edu/cbms2010.html.

May 25–29, 2010: Quiver Varieties and Crystal Bases of Quantum Affine Algebras. Hiraku Nakajima, lecturer. North Carolina State University. Organizer: Naihuan Jing, 919-513-3584, jing@unity.ncsu.edu; conference website: <http://www4.ncsu.edu/~jing/conf/CBMS/cbms10.html>.

July 12–16, 2010: The Mutually Beneficial Relationship of Matrices and Graphs. Richard Brualdi, lecturer. Iowa State University. Organizers: Leslie Hogben, 515-451-1505, lhogben@iastate.edu; and Bryan L. Shader, 307-766-6826, bshader@uwyo.edu; conference website: <http://orion.math.iastate.edu/lhogben/CBMS/>.

August 9–13, 2010: Recent Advances in the Numerical Approximation of Stochastic Partial Differential Equations. Peter E. Kloeden, lecturer. Illinois Institute of Technology. Organizers: Jinqiao Duan, 312-567-5335, duan@iit.edu; Igor Cialenco, 312-567-3131, igor@math.iit.edu; and Fred J. Hickernell, 312-567-8983, fred@math.iit.edu; conference website: <http://mypages.iit.edu/~duan/SPDE2010.html>.

August 16–20, 2010: Bayesian Nonparametric Statistical Methods: Theory and Applications. Peter Müller, lecturer. University of California Santa Cruz. Organizers: Abel Rodriguez, 831-459-5278, abel@ams.ucsc.edu; and Athanasios Kottas, 831-459-5536, thanos@ams.ucsc.edu; conference website: www.ams.ucsc.edu/CBMS-NPBayes.

—From a CBMS announcement

NSF Integrative Graduate Education and Research Training

The Integrative Graduate Education and Research Training (IGERT) program was initiated by the National Science Foundation (NSF) to meet the challenges of educating Ph.D. scientists and engineers with the interdisciplinary backgrounds and the technical, professional, and personal skills needed for the career demands of the future. The program is intended to catalyze a cultural change in graduate education for students, faculty, and universities by establishing innovative models for graduate education in a fertile environment for collaborative research

that transcends traditional disciplinary boundaries. It is also intended to facilitate greater diversity in student participation and to contribute to the development of a diverse, globally aware science and engineering workforce. Supported projects must be based on a multidisciplinary research theme and administered by a diverse group of investigators from U.S. Ph.D.-granting institutions with appropriate research and teaching interests and expertise.

The preliminary proposal deadline for the 2010 IGERT competition is **March 29, 2010**. The deadline for full proposals is **September 30, 2010**; full proposals may be sent by invitation only. Further information may be found at the website http://www.nsf.gov/pubs/2010/nsf10523/nsf10523.htm?WT.mc_id=USNSF_25.

—From an NSF announcement

Project NExT: New Experiences in Teaching

Project NExT (New Experiences in Teaching) is a professional development program for new and recent Ph.D.'s in the mathematical sciences (including pure and applied mathematics, statistics, operations research, and mathematics education). It addresses all aspects of an academic career: improving the teaching and learning of mathematics, engaging in research and scholarship, and participating in professional activities. It also provides the participants with a network of peers and mentors as they assume these responsibilities. In 2010 about seventy faculty members from colleges and universities throughout the country will be selected to participate in a workshop preceding Mathfest, the Mathematical Association of America (MAA) summer meeting; in activities during the summer MAA meetings and the Joint Mathematics Meetings in January; and in an electronic discussion network. Faculty for whom the 2010–2011 academic year will be the first or second year of full-time teaching (post-Ph.D.) at the college or university level are invited to apply to become Project NExT Fellows.

Applications for the 2010–2011 fellowship year will be due on **April 16, 2010**. For more information, see the Project NExT website, <http://archives.math.utk.edu/projnext/>, or contact Aparna Higgins, director, at Aparna.Higgins@notes.dayton.edu. Project NExT is a program of the MAA. Major funding is provided by the ExxonMobil Foundation and the Dolciani-Halloran Foundation, with additional funding from the Educational Advancement Foundation, the American Mathematical Society, the American Statistical Association, the National Council of Teachers of Mathematics, the American Institute of Mathematics, the Association for Symbolic Logic, the Association of Mathematics Teacher Educators, Texas Instruments, the W. H. Freeman Publishing Company, John Wiley & Sons, MAA Sections, and the Mathematical Association of America.

—From a Project NExT announcement