
Mathematics Opportunities

2002 NSF-CBMS Regional Conferences

With funding from the National Science Foundation (NSF), the Conference Board of the Mathematical Sciences (CBMS) will hold seven NSF-CBMS Regional Research Conferences during the summer of 2002. 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 website http://www.maa.org/cbms/nsf/2002_conf.htm or by contacting the Conference Board of the Mathematical Sciences, 1529 18th Street, NW, Washington, DC 20036-1385, telephone: 202-293-1170, fax: 202-293-3412, e-mail: kolbe@math.georgetown.edu or rosier@math.georgetown.edu.

Nonhomogeneous Harmonic Analysis, Weights, and Applications to Problems in Complex Analysis and Operator Theory, Alexander Volberg, May 13–17, University of North Carolina. Organizers: Joseph Cima and Alec Matheson. Telephone: 919-962-1050, e-mail: cima@email.unc.edu, World Wide Web: <http://www.math.unc.edu/>.

Solving Polynomial Equations, Bernd Sturmfels, May 20–24, Texas A&M University. Organizers: Paulo Lima-Filho, J. Maurice Rojas, and Henry Schenck. Telephone: 979-845-5298, e-mail: cbms@math.tamu.edu, World Wide Web: <http://www.math.tamu.edu/conferences/cbms/>.

Structure and Decomposition of Graphs, Robin Thomas, May 20–24, East Tennessee State University. Organizers: Debra Knisley and Anant Godbole. Telephone: 423-439-

6979, e-mail: knisleyd@etsu.edu, World Wide Web: <http://www.etsu.edu/math/cbms/>.

Mathematical Methods in Nonlinear Wave Propagation, J. Kenneth Shaw, May 20–24, North Carolina A&T State University. Organizers: Dominic P. Clemence and Guoqing Tang. Telephone: 336-334-7822, e-mail: clemence@ncat.edu, World Wide Web: <http://www.ncat.edu/~math/>.

Geometric Graph Theory, Janos Pach, May 28–June 1, University of North Texas. Organizer: Farhad Shahrokhi. Telephone: 940-565-2805, e-mail: farhad@cs.unt.edu, World Wide Web: <http://www.cs.unt.edu/~farhad/CBMSNSF/cbms.html>.

Numerical Methods in Forward and Inverse Electromagnetic Scattering, Peter Monk, June 3–7, Colorado School of Mines. Organizers: Paul Martin and Graeme Fairweather. Telephone: 303-273-3895, e-mail: pamartin@mines.edu, World Wide Web: <http://www.mines.edu/academic/mac/nsfcbms/>.

The Dynamical Behavior of the Newtonian N-Body Problem, Donald Saari, June 9–15, Eastern Illinois University. Organizers: Patrick Coulton, Peter Andrews, Gregory Galperin, and Hillel Gauchman. Telephone: 217-581-6276, e-mail: cfprc@eiu.edu, World Wide Web: <http://www.eiu.edu/~math/news/cbmsconf.html>.

—From a CBMS announcement

Request for Proposals for 2003 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 2003.

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, depending on the topic, is 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 is 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 8, 2002**. 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 20036-1385; telephone: 202-293-1170; fax: 202-293-3412; World Wide Web: http://www.maa.org/cbms/nsf/2003_ca11.htm; e-mail: kolbe@math.georgetown.edu or rosier@math.georgetown.edu.

—From a CBMS announcement

Career Awards for Research Addressing Biological Questions

In recognition of the vital role mathematical and physical scientists will play in furthering biomedical research, the Burroughs Wellcome Fund has developed the Career Awards at the Scientific Interface program. These awards are intended to foster the early career development of researchers with backgrounds in the physical, mathematical, and computational sciences whose work addresses biological questions and who are dedicated to pursuing a career in academic research.

Applicants are expected to draw from their training in a scientific field other than biology to propose innovative approaches to answer important questions in the biological sciences. Examples of approaches include, but are not limited to, physical measurement of biological phenomena, computer simulation of complex processes in physiological systems, mathematical modeling of self-organizing behavior, building probabilistic tools for medical diagnosis, developing novel imaging tools or biosensors, applying nanotechnology to manipulate cellular systems, predicting cellular responses to topological clues and mechanical forces, and developing a new conceptual understanding of the complexity of living organisms. Proposals that include experimental validation of theoretical models are particularly encouraged.

The awards provide \$500,000 over five years to support up to two years of advanced postdoctoral training and the first three years of a faculty appointment. During both

the postdoctoral and the faculty periods, awards must be taken at degree-granting institutions in the United States or Canada.

Candidates must hold a Ph.D. degree in the fields of mathematics, physics, chemistry (physical, theoretical, or computational), computer science, statistics, or engineering. Exceptions will be made only if the applicant can demonstrate significant expertise in one of these areas, evidenced by publications or advanced course work. Candidates must have completed at least six months but not more than forty-eight months of postdoctoral training at the time of application. Candidates must not hold or have accepted a faculty appointment as a tenure-track assistant professor at the time of application.

Candidates who are not citizens of the United States or Canada must provide documentation of their visa status at the time of application. Permanent residents must provide a copy of their Alien Registration card (green card) for the United States or their Landed Immigrant Status form for Canada.

The application deadline is **May 1, 2002**. For more information and complete application materials, visit the website http://www.bwfund.org/interfaces_in_science_career_awards.htm.

—Burroughs Wellcome Fund announcement

Project NExT

Project NExT (New Experiences in Teaching) is a program for new or recent Ph.D.'s in the mathematical sciences who are interested in improving the teaching and learning of undergraduate mathematics. It addresses the full range of faculty responsibilities in teaching, research, and service, and it provides professional support for new faculty as they undertake these activities. Faculty for whom the 2002–03 academic year will be the first or second year of full-time employment with significant teaching responsibilities at the college/university level are invited to apply to become Project NExT Fellows.

The first event for the 2002–03 Project NExT Fellows will be a workshop, July 29–31, 2002, just prior to the summer MAA meeting (the Mathfest) in Burlington, Vermont, August 1–3, 2002. At this workshop and at Project NExT sessions during the Mathfest, Fellows will explore and discuss issues that are of special relevance to beginning faculty. The Fellows will also have an opportunity to meet with Fellows who began the program in previous years.

Following the workshop, Project NExT Fellows will attend the Mathfest, participating in all the opportunities of that meeting, and will choose among special short courses organized by Project NExT. During the following year, Project NExT Fellows will participate in an electronic network that links Fellows with one another and with distinguished teachers of mathematics. Fellows will also attend special events at the Joint Mathematics Meetings in Baltimore, Maryland, January 15–18, 2003; the MAA Mathfest in Boulder, Colorado, July 30–August 2, 2003; and a workshop preceding the Mathfest.

There is no fee for participation in Project NExT itself, and Fellows will be provided with room and board at the Project NExT workshop in Burlington. Fellows also do not have to pay for the special short courses at the summer Mathfest that are organized by Project NExT. Institutions employing the Project NExT Fellows are expected to provide all other expenses associated with the meetings, and assurances of institutional support are of critical importance in the application process.

Application forms are available on the Project NExT Web page (<http://archives.math.utk.edu/projnext/>). The application deadline is **April 12, 2002**. For more information, contact one of the following:

T. Christine Stevens, director of Project NExT, Department of Mathematics and Mathematical Computer Science, Ritter Hall 104, Saint Louis University, 220 N. Grand Blvd., St. Louis, MO 63103; telephone: 314-977-2436; e-mail: stevensc@slu.edu.

Joseph Gallian, co-director, Department of Mathematics and Statistics, University of Minnesota, Duluth, MN 55812; telephone: 218-726-7576; e-mail: jgallian@d.umn.edu.

Aparna Higgins, co-director, Department of Mathematics, University of Dayton, Dayton, OH 45469; telephone: 937-229-2103; e-mail: higgins@saber.udayton.edu.

Project NExT is a program of the Mathematical Association of America. Major funding is provided by the Exxon-Mobil Foundation, with additional funding from the American Mathematical Society, the Dolciani-Halloran Foundation, and the Educational Advancement Foundation.

—From a Project NExT announcement

AMS Scholarships for “Math in Moscow”

The Independent University of Moscow has created a program called “Math in Moscow,” which offers foreign students (undergraduate or graduate students specializing in mathematics and/or computer science) the chance to spend a semester in Moscow studying mathematics.

Math in Moscow provides students with a fifteen-week program similar to the Research Experiences for Undergraduates programs that are held each summer across the United States. Math in Moscow draws on the Russian tradition of teaching mathematics, which emphasizes creative approaches to problem solving rather than memorizing theorems. The focus is on developing in-depth understanding of carefully selected material rather than broad surveys of large quantities of material. Discovering mathematics under the guidance of an experienced teacher is the central principle of Math in Moscow. Most of the program’s teachers are internationally recognized research mathematicians, and all of them have considerable teaching experience in English, typically in the United States or Canada. (All instruction is in English.)

Each semester, five \$5,000 scholarships will be granted to U.S. students to attend the Math in Moscow program.

Funding is provided by the National Science Foundation, and the scholarships are administered by the AMS. To be eligible for the scholarships, students must submit applications to *both* the Math in Moscow program and the AMS. An applicant should be an undergraduate mathematics or computer science major enrolled at a U.S. institution. **May 15** is the deadline for applications to enroll in Math in Moscow for the following fall semester; **October 15** is the deadline for the spring semester. The same deadlines apply for the AMS scholarships.

Information and application forms for Math in Moscow are available on the Web at <http://www.mccme.ru/mathinmoscow/>, or by writing to: Math in Moscow, P.O. Box 524, Wynnewood, PA 19096; fax +7095-291-65-01; e-mail: mim@mccme.ru. Information and application forms for the AMS scholarship are available on the Web at <http://www.ams.org/careers-edu/mimoscow.html>, or by writing to: Math in Moscow Program, Professional Services Department, American Mathematical Society, 201 Charles Street, Providence RI 02904; e-mail: prof-serv@ams.org.

—Allyn Jackson

AP Calculus Readers Sought

The Educational Testing Service and the College Board invite interested college faculty to apply to be readers for the Advanced Placement Calculus Exam. The AP Calculus exams (AB and BC) were taken by approximately 185,000 high school students last year. The six free-response problems on the exam are graded during seven days in June by more than 600 high school and college mathematics teachers at Colorado State University in Ft. Collins, Colorado. This is an excellent opportunity for teachers, especially those just starting their professional careers, to enhance their knowledge of the AP Calculus Program and of teaching and to meet with other faculty from around the country. To learn more about this opportunity or to apply for a position as a reader, see the website <http://apcentral.collegeboard.com/> and follow the links to “Colleges & Universities” and then “Faculty Involvement”, or send e-mail to apreader@ets.org. Questions about the reading may be sent to Larry Riddle, Chief Faculty Consultant for the AP Calculus Program, at LRiddle@agnesscott.edu.

—Larry Riddle, Agnes Scott College