
Mathematics Opportunities

News from The Fields Institute

The Fields Institute for Research in Mathematical Sciences at the University of Toronto is holding eight workshops as part of its 1998-99 program, Probability and Its Applications. Information about the first three of the workshops is given below.

Mathematical Physics of Polymers and Percolation, August 24-29, 1998. Organizing Committee: J. Cardy (University of Oxford), F. den Hollander (University of Nijmegen), G. Slade (McMaster University), and S. G. Whittington (University of Toronto).

The following individuals have been invited to speak: M. Aizenman (Princeton University), M. Batchelor (Australian National University), M. Bousquet-Melou (Université Bordeaux I), J. Cardy (Oxford University), J. T. Chayes (Microsoft Research and UCLA), A. J. Guttmann (University of Melbourne), F. den Hollander (University of Nijmegen), E. J. Janse van Rensburg (York University), G. Lawler (Duke University), A. Owczarek (University of Melbourne), A. Pisztor (Carnegie Mellon University), Y. Saint-Aubin (CRM, Université de Montréal), H. Saleur (University of Southern California), G. Slade (McMaster University), T. Spencer (Institute for Advanced Study), and S. G. Whittington (University of Toronto).

Each speaker will give two lectures. There are limited funds available to assist attendance of graduate students and postdocs; please contact s.lade@mcmaster.ca for further information.

Hydrodynamic Limits, October 5-10, 1998. Organizing Committee: S. Feng (McMaster University), A. Lawniczak (University of Guelph), and S. R. S. Varadhan (Courant Institute).

On October 5-6, S. R. S. Varadhan will present a mini-course on Hydrodynamic Limits. The following individu-

als have been invited to speak during October 7-10: B. Boghosian (Boston University), A. De Masi (Università di L'Aquila), T. Funaki (University of Tokyo), J. Lebowitz (Rutgers University), D. Levermore (University of Arizona), J. Quastel (University of Toronto), F. Rezakhanlou (University of California, Berkeley), T. Seppalainen (Iowa State University), H. Spohn (Ludwig Maximilians Universität), and H. T. Yau (Courant Institute). Poster and discussion sessions are planned.

Monte Carlo Methods, October 25-29, 1998. Organizing Committee: N. Madras (York University), R. Neal (University of Toronto), and J. Rosenthal (University of Toronto).

The following individuals have been invited to speak: Bernd Berg (Florida State University), David M. Ceperley (University of Illinois), James Allen Fill (Johns Hopkins University), Daan Frenkel (FOM Institute, The Netherlands), Peter Green (University of Bristol), Karl Jansen (CERN), Anthony D. Kennedy (Florida State University), Xiao-Lo Meng (University of Chicago), Jesper Moller (Aalborg University), Duncan Murdoch (Queen's University), Gareth O. Roberts (Cambridge University), Alistair Sinclair (University of California, Berkeley), Alan D. Sokal (New York University), Stuart G. Whittington (University of Toronto), and David B. Wilson (Institute for Advanced Study).

The focus of the workshop will be on Monte Carlo methods (mostly Markov chain methods) that have been used effectively in statistical physics and/or statistics and that are based on ideas that seem to be widely applicable. The speakers have backgrounds in physics, statistics, and probability, and the program is intended to promote discussion across these disciplines. The emphasis will be on new methods, practical applications, and analysis of methods.

For further information about these workshops, consult the Web site <http://www.math.yorku.ca/Probability/Fields.html> or contact: The Fields Institute for

Research in Mathematical Sciences, 222 College Street, Second Floor, Toronto, Ontario, M5T 3J1, Canada; telephone: 416-348-9710; fax: 416-348-9385; e-mail: probability@fields.utoronto.ca.

—from *Fields Institute Announcement*

1998 NSF-CBMS Regional Conferences

Contingent upon funding from the National Science Foundation (NSF), the Conference Board of the Mathematical Sciences (CBMS) will hold six NSF-CBMS Regional Conferences in the summer of 1998. These conferences are intended to stimulate interest and activity in mathematical research.

Each five-day conference features a distinguished lecturer who speaks on a topic of current research. Support for about thirty participants is provided for each conference. The conference organizers invite both established researchers and interested newcomers, including postdoctoral researchers and graduate students.

The title of each conference appears below, followed by the name of the principal speaker, the date, the location, and the names of the organizers, who can be contacted for more information.

Wavelet Analysis as a Tool for Computational and Harmonic Analysis, Ronald Coifman, May 4–8, 1998, University of Central Florida, Orlando. Contact Lokenath Debnath, telephone: 407-823-2478 or 407-823-2754, e-mail: ldebnath@pegasus.cc.ucf.edu or ijmms@pegasus.cc.ucf.edu.

Blocks of Finite Reductive Groups, Deligne-Lusztig Varieties, and Complex Reflections Groups, Michel Broué, May 25–29, 1998, University of North Texas, Denton. Contact J. Matthew Douglass, telephone: 817-565-2155, e-mail: douglass@unt.edu, World Wide Web: <http://hilbert.math.unt.edu/cbms.html>.

Lectures on Division Algebras, David J. Saltman, June 14–18, 1998, Colorado State University, Fort Collins. Contact Frank DeMeyer, telephone 970-491-6327, e-mail: demeyer@math.colostate.edu, World Wide Web: <http://www.math.colostate.edu/>.

Ergodic Theory, Groups, and Geometry, Robert J. Zimmer, June 22–26, 1998, University of Minnesota. Contact Scot Adams or Dave Witte, telephone: 612-625-5507; e-mail: adams@math.umn.edu, dwitte@math.okstate.edu; World Wide Web: <http://www.math.umn.edu/~adams/CBMS/main.html>.

For information on submitting a proposal to organize an NSF-CBMS Regional Conference, see the announcement about the request for proposals in this section of the *Notices*.

—from *CBMS Announcement*

Request for Proposals for 1999 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 1999.

These five-day conferences feature a distinguished lecturer who delivers ten lectures on a sharply focused topic of current research in the mathematical sciences. The lecturer subsequently prepares a monograph which, depending on the topic, is published by the AMS, or 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 conference participants, 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. Since 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 6, 1998**.

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 202-265-2384; World Wide Web <http://www.maa.org/cbms/cbms.html>. See also the announcement elsewhere on this page about the upcoming NSF-CBMS Regional Conferences, to be held in the summer of 1998.

—from *CBMS Announcement*

ICM-98 Call for Presentations of Mathematical Software

The 1998 International Congress of Mathematicians (ICM-98) will take place in Berlin, Germany, August 18–27, 1998. In addition to the scientific program, a “Section of Special Activities” is planned. One of these activities will be a session on mathematical software, to be held on two afternoons during the congress. The focus of this session will be the presentation of a broad spectrum of mathematical software systems ranging from general purpose to specialized systems, e.g., systems from numerical analysis, computer algebra, optimization, mathematical visualization, or mathematical education. The session is intended to attract a broad audience: ICM attendees, students, teachers, etc., with a special interest in mathematical software.

Submissions for the session on mathematical software are encouraged from all fields of mathematics where soft-

ware systems are used. Systems which are available free of charge (e.g., public domain) are especially invited and will be preferred when the presentations are chosen. Talks in which various commercial packages are compared from an independent viewpoint, pointing out particular strengths and weaknesses of the systems, are also sought.

There will also be in connection with ICM-98 a software exhibition and book fair, which may be more suitable for the demands of vendors of commercial software systems. Please contact the chairman of the local arrangements committee, Rolf H. Moehring (e-mail: moehring@math.tu-berlin.de) for details about the exhibition.

The program committee, a group of internationally renowned mathematicians and experts on mathematical software, will evaluate the entries and select a number of contributions according to quality and thematic balance. The committee will be chaired by Johannes Grabmeier of IBM Germany.

Submissions should be sent, preferably by electronic mail, to: ICM-98—Session on Mathematical Software, c/o W. Neun, Konrad-Zuse-Zentrum (ZIB), Takustr. 7, D-14195 Berlin, Germany; e-mail: neun@zib.de. Submissions must be received by **March 1, 1998**. Notifications of acceptance will be made on April 1, 1998. For further information, consult the ICM-98 Web site, <http://elib.zib.de/ICM98/>.

—from ICM-98 Announcement

Summer Mathematics Program for Women

Bryn Mawr and Spelman Colleges extend a special invitation to women who will be entering graduate programs in mathematics in the fall of 1998 to participate in a post-baccalaureate summer enrichment program. The Enhancing Diversity in Graduate Education (EDGE) Program will consist of a four-week summer session and an accompanying graduate school mentoring and support network component. The summer program consists of two core courses in analysis and algebra/linear algebra. A set of minicourses in vital areas of mathematical research, short-term visitors from academia and industry, guest lectures, graduate student mentors, and problem sessions will round out the summer experiences.

Applicants to the program should be women who are (i) graduating seniors who have applied to graduate programs in the mathematical sciences, (ii) recent recipients of undergraduate degrees who are now entering graduate programs, or (iii) first-year graduate students. *Women from minority groups who fit one of the above categories are especially encouraged to apply.* Final acceptance to the program is contingent upon acceptance to a graduate program in the mathematical sciences.

The 1998 summer session will be conducted on the campus of Bryn Mawr College outside Philadelphia, Pennsylvania, June 15–July 10 and will be co-directed by Rhonda Hughes (Bryn Mawr College) and Sylvia Bozeman (Spelman

College). A stipend of \$1,800 plus room and board will be awarded to participants.

Applications should consist of the following: (i) a statement describing the expected value of this program to the applicant's academic goals; (ii) two letters of recommendation from mathematical sciences faculty familiar with the applicant's work; (iii) a transcript and vita; and (iv) a list of graduate programs to which the applicant has applied, together with a ranked list of her two or three top choices.

The deadline is **March 1, 1998**. Applications should be sent to: EDGE Program, Department of Mathematics, Bryn Mawr College, Bryn Mawr, PA 19010.

Major funding for the program is provided by the National Science Foundation. Visit the program's Web site at <http://www.brynmawr.edu/Acads/Math/>.

Editor's Note: This is a corrected version of the announcement that appeared in the January 1998 issue of the *Notices*.

—EDGE Program Announcement

Grants for Computing Equipment

The Division of Mathematical Sciences (DMS) of the National Science Foundation plans a limited number of grants for the purchase and support of computing equipment through its Scientific Computing Research Environments for the Mathematical Sciences (SCREMS) program.

Some awards may be as high as \$200,000, provided a case is made for substantial impact and cost effectiveness. The DMS expects to provide about \$1,000,000 for this activity in fiscal year 1998, pending availability of funds. In fiscal year 1997, twenty-one awards were made.

The solicitation is available on the World Wide Web at <http://www.nsf.gov/mps/dms/screms.htm>. The announcement appears on the NSF home pages and search engines as publication number NSF 98-31. A text version is also available. The deadline for proposals is **February 20, 1998**. (This is a change from previous years' deadlines.) The mailing address is: Division of Mathematical Sciences, National Science Foundation, 4201 Wilson Boulevard, Room 1025, Arlington, VA 22230; the telephone number is 703-306-1870. For specific questions or information not on the announcement, please send e-mail to screms@nsf.gov.

—from DMS Announcement