Mathematics Opportunities

American Mathematical Society Centennial Fellowships

Invitation for Applications for Awards
for 2011–2012
Deadline December 1, 2010

Description: The AMS Centennial Research Fellowship Program makes awards annually to outstanding mathematicians to help further their careers in research. The number of fellowships to be awarded is small and depends on the amount of money contributed to the program. The Society supplements contributions as needed. One fellowship will be awarded for the 2011–2012 academic year. A list of previous fellowship winners can be found at `http://www.ams.org/profession/prizes-awards/ams-awards/centennial-fellow`.

Eligibility: The eligibility rules are as follows. The primary selection criterion for the Centennial Fellowship is the excellence of the candidate's research. Preference will be given to candidates who have not had extensive fellowship support in the past. Recipients may not hold the Centennial Fellowship concurrently with another research fellowship such as a Sloan or NSF Postdoctoral Fellowship. Under normal circumstances, the fellowship cannot be deferred. A recipient of the fellowship shall have held his or her doctoral degree for at least three years and not more than twelve years at the inception of the award (that is, received between September 1, 1999, and September 1, 2008). Applications will be accepted from those currently holding a tenured, tenure-track, postdoctoral, or comparable (at the discretion of the selection committee) position at an institution in North America. Applications should include a cogent plan indicating how the fellowship will be used. The plan should include travel to at least one other institution and should demonstrate that the fellowship will be used for more than reductions of teaching at the candidate's home institution. The selection committee will consider the plan in addition to the quality of the candidate's research and will try to award the fellowship to those for whom the award would make a real difference in the development of their research careers. Work in all areas of mathematics, including interdisciplinary work, is eligible.

Grant amount: The stipend for fellowships awarded for 2010-2011 is expected to be US$79,000, with an additional expense allowance of about US$7,900. Acceptance of the fellowship cannot be postponed.

Deadline: The deadline for receipt of applications is **December 1, 2010**. Awards will be announced in February 2011 or earlier if possible.

Application information: Find Centennial information and the application form via the Internet at `http://www.ams.org/ams-fellowships/`. For paper copies of the form, write to the Membership and Programs Department, American Mathematical Society, 201 Charles Street, Providence, RI 02904-2294; `prof-serv@ams.org`; 401-455-4105.

—AMS announcement

Call for Papers for ICIAM 2011

The Seventh International Congress on Industrial and Applied Mathematics (ICIAM) will be held July 18–22, 2011, in Vancouver, British Columbia, Canada. ICIAM 2011 will highlight the most recent advances in the discipline and demonstrate their applicability to science, engineering, and industry. In addition to the traditional, strong focus on applied mathematics, the congress will emphasize industrial applications and computational science. An integrated program will highlight the many outstanding contributions of applied mathematics. ICIAM 2011 will also be an opportunity to demonstrate to young researchers and graduate students the vast potential of mathematics. The congress is being planned by the Canadian Applied and Industrial Mathematics Society (CAIMS), the Mathematics of Information Technology and Complex Systems (MITACS), and the Society for Industrial and Applied Mathematics (SIAM).

Proposals for minisymposia and for papers are sought. The deadline for submitting minisymposia proposals is **October 4, 2010**. The deadline for abstracts for contributed papers is **December 15, 2010**. The cochairs of the scientific program committee are Ivar Ekeland, University of British Columbia, and Jerrold Marsden, California Institute of Technology. For more details, see the website `http://www.iciam2011.com/`.

—From an ICIAM announcement

Call for Nominations for CRM-Fields-PIMS Prize

The Centre de Recherches Mathématiques (CRM), the Fields Institute, and the Pacific Institute for the Mathematical Sciences (PIMS) invite nominations for the joint CRM-Fields-PIMS prize, awarded in recognition of exceptional research achievement in the mathematical sciences. The prize recipient will be chosen on the basis of outstanding contributions to the advancement of the mathematical sciences, with excellence in research as the main selection criterion. The candidate's research should have been conducted primarily in Canada or in affiliation with a Canadian university. A monetary prize will be awarded, and the recipient will be asked to present a lecture at the CRM, the Fields Institute, and PIMS.

The deadline for nominations is **November 1, 2010**. Nominations should be submitted by at least two sponsors of recognized stature and must include the following: three supporting letters, curriculum vitae, list of publications, and up to four preprints. Nominations will remain active for two years. At most one prize will be awarded during any academic year. Submit nominations to `crm-fields-pims-prize@fields.utoronto.ca`. Only electronic submissions will be accepted.

The prize was established in 1994 as the CRM-Fields Prize. Renamed in 2005, all subsequent prizes have been awarded jointly by all three institutes. The selection committee is appointed by the three institutes and will select the prizewinner.

—From a CRM-Fields-PIMS announcement

NSF International Research Fellow Awards

The objective of the International Research Fellowship Program (IRFP) of the National Science Foundation (NSF) is to introduce scientists and engineers in the early stages of their careers to research opportunities abroad. The program provides support for postdoctoral and junior investigators to do research in basic science and engineering for nine to twenty-four months in any country in the world. The goal of the program is to establish productive, long-term relationships between U.S. and foreign science and engineering communities. Applicants must be U.S. citizens or permanent residents who have earned their doctoral degrees within two years before the date of application or who expect to receive their degrees by the date of the award.

The target date for full proposals is **September 14, 2010**. For further information contact the program officer, Susan Parris, 703-292-7225, `sparris@nsf.gov`; or visit the website `http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5179&org=NSF`.

—From an NSF announcement

AWM Travel Grants for Women

The National Science Foundation (NSF) and the Association for Women in Mathematics (AWM) sponsor travel grant programs for women mathematicians.

AWM Travel Grants enable women to attend research conferences in their fields, thereby providing scholars valuable opportunities to advance their research activities and their visibility in the research community. A Mathematics Travel Grant provides full or partial support for travel and subsistence for a meeting or conference in the grantee's field of specialization. The Mathematics Education Research Travel Grants provide full or partial support for travel and subsistence in math/math education research for mathematicians attending a math education research conference or math education researchers attending a math conference.

AWM Mentoring Travel Grants are designed to help junior women develop long-term working and mentoring relationships with senior mathematicians. A Mentoring Travel Grant funds travel, subsistence, and other expenses for an untenured woman mathematician to travel to an institute or a department to do research with a specified individual for one month.

The final deadline for the Travel Grants program for 2010 is **October 1, 2010**. The deadlines for 2011 are **February 1, 2011**; **May 1, 2011**; and **October 1, 2011**. For the Mentoring Travel Grants program the deadline is **February 1, 2011**. For further information and details on applying, see the AWM website `http://www.awm-math.org/travelgrants.html#standard`, telephone: 703-934-0163, or e-mail: `awm@awm-math.org`; or contact Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

—From an AWM announcement

Call for Nominations for Clay Research Fellows

The Clay Mathematics Institute (CMI) solicits nominations for its competition for the 2011 Clay Research Fellowships. Fellows are appointed for a period of two to five years. They may conduct their research at whatever institution or combination of institutions best suits their research. In addition to a generous salary, the fellow receives support for travel, collaboration, and other research expenses.

The selection criteria are the quality of the candidate's research and promise to make contributions of the highest level. At the time of their selection, most recent appointees were graduating Ph.D. students. However, mathematicians within three years of the Ph.D. are sometimes appointed. Selection decisions are made by CMI's Scientific Advisory Board: Jim Carlson, Simon Donaldson, Gregory Margulis, Richard Melrose, Yum-Tong Siu, and Sir Andrew Wiles.

To nominate a candidate, please send the following items by **October 29, 2010**: (1) letter of nomination,

(2) names and contact information for two other references, (3) curriculum vitae for the nominee, and (4) publication list for the nominee.

Nominations should be sent to the attention of Alagi Patel, Clay Mathematics Institute, One Bow Street, Cambridge, MA 02138. Electronic submissions are also accepted at `nominations@claymath.org`.

Information about the Clay Research Fellows is available on the CMI website at `http://www.claymath.org/research_fellows`. Additional information may be obtained by calling Alagi Patel at 617-995-2602 or emailing her at `patel@claymath.org`.

Current and alumni Clay Research Fellows are Mohammed Abouzaid, Spyridon Alexakis, Timothy Austin, Artur Avila, Roman Bezrukavnikov, Manjul Bhargava, Daniel Biss, Alexei Borodin, Maria Chudnovsky, Dennis Gaitsgory, Soren Galatius, Daniel Gottesman, Ben Green, Sergei Gukov, Adrian Ioana, Bo'az Klartag, Elon Lindenstrauss, Ciprian Manolescu, Davesh Maulik, Maryam Mirzakhani, Sophie Morel, Mircea Mustata, Sam Payne, Igor Rodnianski, Sucharit Sarkar, David Speyer, Terence Tao, Andras Vasy, Akshay Venkatesh, Teruyoshi Yoshida, and Xinyi Yuan.

—Clay Mathematics Institute announcement

Graduate Student Travel Grants to 2011 JMM

The AMS, with funding from a private gift, is accepting applications for partial travel support for graduate students attending the Joint Mathematics Meetings in New Orleans, LA, January 6–9, 2011. The awards, not to exceed US$500, must be matched by travel funds from the student's institution. Applications will be accepted ONLY from doctoral students in mathematics who are in their last year of study; i.e., applicants must not have received their doctoral degrees before the travel takes place but must expect to receive them no later than August of the upcoming year. No student shall receive a grant more than once.

It is expected that awards will be made late in November 2010. Funding is provided on a reimbursement basis. The deadline for submitting applications is **October 28, 2010**. Awards or decline notifications will be made by email in late November 2010. Information may be found at `http://www.ams.org/travel-grants/`. This travel grant program is being administered by the AMS Membership and Programs Department. You can reach the department at `student-JMM@ams.org` or at 800-321-4267, ext. 4060, or 401-455-4060.

—AMS announcement

PIMS Postdoctoral Fellowships

The Pacific Institute for the Mathematical Sciences (PIMS) invites nominations of outstanding young researchers in the mathematical sciences for postdoctoral fellowships for the year 2011–2012. Candidates must be nominated by one or more scientists affiliated with PIMS or by a department or departments affiliated with PIMS. The fellowships are intended to supplement support provided by the sponsor and are tenable at any of its Canadian member universities: Simon Fraser University, University of Alberta, University of British Columbia, University of Calgary, University of Victoria, University of Regina, and University of Saskatchewan, as well as at the University of Lethbridge (a PIMS affiliate).

For the 2011–2012 competition, held in January of 2011, the amount of the award will be CA$20,000 (approximately US$19,500), and the sponsor(s) is (are) required to provide additional funds to finance a minimum total stipend of CA$40,000 (approximately US$39,000).

Rankings of the candidates are made by the PIMS PDF Review Panel based on the qualifications of the candidate, potential for participation in PIMS programs, and potential involvement with PIMS partners. PIMS Postdoctoral Fellows will be expected to participate in all PIMS activities related to the fellow's area of expertise and will be encouraged to spend time at more than one site. To ensure that PIMS Postdoctoral Fellows are able to participate fully in institute activities, they may not teach more than two single-term courses per year.

Nominees must have a Ph.D. or equivalent (or expect to receive a Ph.D. by December 31, 2011) and must be within three years of the Ph.D. at the time of the nomination (i.e., the candidate must have received her or his Ph.D. on or after January 1, 2008). The fellowship may be taken up at any time between September 1, 2011, and January 1, 2012. The fellowship is for one year and is renewable for at most one additional year.

The PIMS PDF nomination/application process takes place entirely online, utilizing the MathJobs service provided by the American Mathematical Society (AMS). Having selected their nominees, sponsors direct them to apply online at `mathjobs.org/jobs/PIMS`. Nominees are required to upload two letters of reference, a curriculum vitae, and a statement of research interests. Sponsors must also upload their own reference letters (these are in addition to the two reference letters mentioned just above) and statements of anticipated support. They will receive instructions as to how to proceed from their nominees via email from MathJobs. Detailed instructions regarding all aspects of the MathJobs application procedure may be found in the online MathJobs user guides. Please note that application is **by nomination only**; unsolicited applications will not be considered.

Complete applications must be uploaded to MathJobs by **December 15, 2010**. For further information, visit the website `http://www.pims.math.ca/scientific/postdoctoral`.

—PIMS announcement

News from the Fields Institute

The Fields Institute has recently implemented a new program, Research Immersion Fellowships, which provides financial support to individuals with high potential to reenter an active research career after an interruption for family responsibilities by participating in a thematic program. There are no restrictions on the nationality or country of employment of candidates for an Immersion Fellowship. For more information, see `www.fields.utoronto.ca/proposals/research_immersion.html`.

The thematic program for the fall of 2010 is *Asymptotic Geometric Analysis*. Three workshops will be held: *Asymptotic Geometric Analysis and Convexity*, September 13–17; *Concentration Phenomenon, Transformation Groups, and Ramsey Theory*, October 12–16; and *Geometric Probability and Optimal Transportation*, November 1–5.

Avi Wigderson (Institute for Advanced Study) will deliver the Distinguished Lecture Series during the week of September 13, and Shiri Artstein-Avidan (Tel-Aviv University) will deliver the Coxeter Lecture Series during the month of September.

More (and up-to-date) information can be found at `www.fields.utoronto.ca/programs/scientific/10-11/asymptotic/`.

Future thematic programs include the following:
Winter/Spring 2011: Dynamics and Transport in Disordered Systems
Summer 2011: Constraint Satisfaction Problem
Fall 2011: Discrete Geometry and Applications
Winter/Spring 2012: Galois Representations
Fall 2012: Forcing and Its Applications

A conference on Homotopy Theory and Derived Algebraic Geometry is scheduled for August 30–September 3, 2010.

One of the objectives of the Fields Institute is to increase the diversity of participants in all of its mathematical activities. Organizers of Fields-supported events are required to keep this goal in mind when selecting participants.

See `www.fields.utoronto.ca/programs/scientific/` for more information on these programs and on all other activities at the institute.

—Fields Institute announcement

AIM Workshops

The American Institute of Mathematics (AIM) seeks proposals for workshops and SQuaREs. Workshops are held in all areas of the mathematical sciences. Funding is provided for full support (travel, hotel, meals) of twenty-eight participants for a 5-day workshop in Palo Alto, California.

Proposals for workshops (to run sometime between June 2011 and October 2012) and SQuaREs may be submitted online at `www.aimath.org` by **November 1**, and decisions will be made by December 15. The AIM workshop format is designed to encourage new collaborations to make plans or progress toward a research goal: there are two talks each morning of the workshop and structured group activities each afternoon, including research in small groups.

SQuaREs are for collaborative efforts by four to six researchers for multiple-week-long visits to AIM. SQuaREs groups are encouraged to make ambitious research plans to attack a long-term goal.

AIM reserves seven spots at each workshop for participants selected from a pool of applicants who apply online to attend an AIM workshop. The deadline is usually four months before the workshop. Interested researchers are invited to browse our list of upcoming workshops at `www.aimath.org` and apply for funding to attend a workshop of interest.

—AIM announcement

News from BIRS

The Banff International Research Station for Mathematical Innovation and Discovery (BIRS) is now accepting proposals for its 2012 program. The station provides an environment for creative interaction and the exchange of ideas, knowledge, and methods within the mathematical, statistical, and computing sciences, and with related disciplines and industrial sectors.

Full information, guidelines, and online forms are available at the new BIRS website: `http://www.birs.ca/`.

BIRS is hosting a 49-week scientific program in 2012. Each week, the station will be running either a full workshop (42 people for 5 days) or two half-workshops (each with 21 people for 5 days). As usual, BIRS provides full accommodation, board, and research facilities at no cost to the invited participants, in a setting conducive to research and collaboration.

The deadline for 5-day Workshop and Summer School proposals is **September 27, 2010**.

In addition BIRS will operate its Research in Teams and Focused Research Groups programs, which allow smaller groups of researchers to get together for several weeks of uninterrupted work at the station. **September 27, 2010**, is also the preferred date to apply for these programs. However, proposals for projects involving Research in Teams or Focused Research Groups can be submitted at any time—subject to availability—and they must be received at least 4 months before their requested start date.

Proposal submissions should be made using the online submission form. Please use: `https://www.birs.ca/proposals`.

—BIRS Announcement