Highlights of 2010

2010 was a year of both successes and challenges. The Joint Mathematics Meetings and AMS Einstein Public Lecture drew record numbers of attendees. Graduate Student Travel Grants were awarded to a record number of applicants. The Society initiated new programs for mathematicians at all levels, in addition to the many valuable programs that already exist and continue to grow. The AMS sponsored and co-sponsored sectional and international meetings, conferences, and lectures; participated in meetings and events of other organizations; co-hosted special events; and managed several employment services. Thousands of research papers from the archive of AMS journals were released; thousands more reviews—and dissertations—were added to the MathSciNet database; and the Book Program issued new textbooks for undergraduate and graduate students, research monographs and works across many fields of mathematics.

In appreciation of the loyalty of our members in difficult times, the governance of the Society froze the individual dues rates for 2011; the 2011 rates are the same as the 2010 rates. The AMS took this step to assist its members in continuing their membership, which in turn helps support every aspect of the Society’s work. Below are some of the many programs and activities of 2010 that enhanced professional experiences and addressed challenges of the mathematical community, supported in part by membership dues.

At the end of this newsletter is an announcement about a new and much-needed program for early career mathematicians: AMS-Simons Travel Grants. — Donald McClure, Executive Director

From the Meetings and Professional Services Division

Providing Employment Services

For those involved in a job search, the AMS offers four ways to post and view job ads. Employment Information in the Mathematical Sciences (EIMS) is the place to view a broad array of academic, industrial and government job ads in the mathematical sciences. MathJobs.org allows job candidates to apply for jobs electronically, and have confidential reference letters submitted. Registered employers can then read, rate, and sort applications through a secure access system. Notices of the AMS is published eleven times per year and is a place to publish ads that need to appear in print form. And lastly, job interviews are conducted each January at the Joint Mathematics Meetings through the Employment Center. The Employment Center allows applicants and employers to set up interviews in advance of the meeting and provides a safe, central meeting place during the JMM. While EIMS and the Employment Center share a website, the services are not otherwise connected and therefore, each service has its own registered users, job postings and prices.

Serving Graduate Student Members

Nomine members (those graduate students nominated for a free membership by their institution) are eligible for a free paper subscription to the Notices of the AMS and Bulletin of the AMS. To avoid the waste of printing copies that may not be received, the AMS requires that each Nominee member verify their address with the AMS and choose a paper subscription.
It’s easy! Just log in (or create a login identity) at www.ams.org/ams-web-account and quickly update your member information. Or call the AMS Member and Customer Services Department at 800-321-4267. Notices of the AMS keeps you up to date on funding opportunities, community news, interesting articles and job ads.

Read more | Learn about additional benefits of membership at www.ams.org/membership/individual/mem-nominees.

Connecting Mathematics Programs and Applicants

The AMS MathPrograms.org site allows programs in the mathematical sciences such as REUs, fellowships and small grants to collect applications and read, rate and respond to them. The site also allows confidential submission of reference letters for the registered programs. Several programs are already utilizing this resource and, in time, the AMS hopes the site will not only provide a cost-effective way to handle applications, but will draw in prospective applicants who will find a variety of programs there. A one-year account for multiple programs is US$500 and a small account for one program is US$250. The service is free for applicants.

Read more | To register for an account or view programs, visit www.mathprograms.org.

Fostering Mathematics Research Communities

The Mathematics Research Communities summer conferences Birational Geometry and Moduli Spaces, Model Theory of Fields, and Commutative Algebra, funded by the National Science Foundation, brought together young mathematicians to become research cohorts.

“At this conference we met in small groups to work on research projects. This was an excellent experience, particularly for a young researcher like myself trying to establish a professional network.”

Read more | See highlights of the 2010 MRCs and link to information about MRC 2011 and 2012 at www.ams.org/programs/research-communities/mrc-10.

Sponsoring Special Lectures

The annual AMS Einstein Public Lecture in Mathematics, always given at an AMS sectional meeting, continues to draw excellent speakers and large crowds. Joining the ranks of past prestigious speakers, Terence Tao drew over 900 people to hear his talk, The Cosmic Distance Ladder, at University of California, Los Angeles. (Lecture photos by Reed Hutchinson.)

Students at MathPath 2010 session on Spherical Geometry. Photo courtesy of MathPath.

Students attending a guest lecture at the Honors Summer Math Camp at Texas State University. Photo courtesy of Texas Mathworks.

“i had always seen mathematics as something that either you knew or you didn’t. Now I know that patience is the key to discovering beautiful things. I also learned that taking on new challenges and welcoming opportunities is the key to new discoveries” - 10th grade student at the 2010 HSMP

“The best part was meeting other girls my age (from all over the country) with an interest in math and science.” – All Girls/All Math student

Read more | www.ams.org/programs/edu-support/epsilon/emp-epsilon.
Recognizing Model Programs for Undergraduate and Graduate Students

The AMS values the work of leaders in mathematics departments of colleges and universities across the U.S. who encourage and enlighten mathematics students. The 2010 Award for an Exemplary Program or Achievement in a Mathematics Department was given to North Carolina State University (NCSU) for its REU program, strong commitment to outreach, and program to increase student participation in their professional development.

The Department of Computational and Applied Mathematics (CAAM) at Rice University and the Summer Program in Quantitative Sciences at the Harvard School of Public Health were recognized in 2010 for their Mathematics Programs That Make a Difference (whose aim is to bring more persons from underrepresented minority backgrounds into the pipeline leading to advanced degrees in mathematics and professional success).

Read more. See descriptions of the 2010 programs at www.ams.org/profession/prizes-awards/prizes and www.ams.org/profession/prizes-awards/ams-supported/make-a-diff-award.

Promoting Awareness of Mathematics

The AMS Public Awareness Office (PAO) helps to publicize mathematics to AMS members, the broader mathematics community and the general public through special activities and long-term programs. In 2010 PAO officers Mike Breen and Annette Emerson hosted a booth at the first USA Science and Engineering Festival in Washington, DC with mathematician-sculptor George Hart; ran national and regional Who Wants to Be a Mathematician games; issued Mathematical Moments and Women Doing Mathematics posters; helped launch the AMS on Facebook, Twitter and YouTube; posted albums on Mathematical Imagery; represented the AMS at the annual meetings of the American Association for the Advancement of Science (AAAS) and the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS); and served as editors of the monthly Math in the Media and Feature Column.

Read more. Browse www.ams.org to follow public awareness programs.

From the Publications Division

Digitizing Mathematics Research Articles

The AMS made over 34,000 articles freely available from over 100 years of high-quality mathematical research in Journal of the AMS, Mathematics of Computation, Proceedings of the AMS, Transactions of the AMS, and Bulletin of the AMS. The massive digitization project was made possible through the generosity of an anonymous donor.

Read more. Search across all the journals at www.ams.org/joursearch/ or link to each individual journal to search its archive at www.ams.org/journals/.

Enhancing MathSciNet

Researchers worldwide who use MathSciNet can access the recent enhancements, including improved display of mathematics using MathJax, an open source JavaScript display engine for mathematics that works in all modern browsers; direct links to books, book chapters, and book series using DOIs registered by publishers; and bibliographic entries and direct links for Ph.D. theses in mathematics, applied mathematics, and statistics from the ProQuest Dissertations & Theses database.

Read more. www.ams.org/mathscinet/.

Publishing Books

The Society now has over 3,000 books in print, from classical works in the renowned AMS Chelsea Publishing series, to contemporary research monographs and textbooks, as well as books of general interest. Highlights of 2010 include Partial Differential Equations: Second Edition, by Lawrence C. Evans; new titles in the AMS Pure and Applied Undergraduate Texts series, founded by Paul J. Sally, Jr.; titles of general interest, including What’s Happening in the Mathematical Sciences, Volume 8, by Dana Mackenzie, and Mathematical Connections: A Capstone Course, by John B. Conway; as well as new works in the Clay Mathematics, Colloquium Publications, Student Mathematical Library and Graduate Studies in Mathematics series, co-publications and more.

Read more. See the AMS Bookstore for all titles, and sign up for the New Publication Email Alert service, at www.ams.org/bookstore/.
Introducing AMS-Simons Travel Grants

With support provided by the Simons Foundation, the AMS is launching a new program, the AMS-Simons Travel Grants. Each grant will provide an early career mathematician with US$2,000 per year for two years to reimburse travel expenses related to research. A mentor will help guide the awardee through the two years of the grant. The department of the awardee will also receive a small amount of funding to help enhance the research atmosphere of the department. A selection committee composed of research mathematicians will choose individuals who are not more than four years past the completion of the Ph.D. Applicants must be located in the United States or be U.S. citizens. One application cycle will be conducted in each of the next three years: 2011, 2012, and 2013, and 60 new awards will be made each year.

The first round of applications will be accepted in the spring of 2011 (the deadline is MARCH 31, 2011).

Read more: For complete details of eligibility and application instructions, visit www.ams.org/programs/travel-grants/AMS-SimonsTG.