



NEWSLETTER

A PUBLICATION FROM THE
AMS PUBLIC AWARENESS
OFFICE TO INFORM MEMBERS
ABOUT SOCIETY ACTIVITIES
AND NEWS

News for Graduate Students in Mathematics



Graduate Student Blog

The AMS Graduate Student Blog is a new blog by and for graduate students, managed by Frank Morgan, Vice-President, AMS, and Professor of Mathematics at Williams College. "Graduate students are the future of the AMS, and they have a lot to talk about," says Morgan. Blog topics include organizing a reading seminar, how to give a good mathematics talk, fellowships, advice for beginning teaching assistants, navigating seminars and finding an advisor.



"I have already found the Graduate Student Blog to be a great resource, and I hope more graduate students will find out about it and read the posts there. First, I knew that choosing an advisor was important, but I didn't realize that it was the most important thing I would do in graduate school until I read Tom Wright's post on the subject."

Being on the graduate student blog board has made me think more about graduate student issues; when the math grad students at Brown are sitting around talking, I'm thinking, "would other people want to know this—would any of this make a good blog post?" I have definitely benefited more from the blog than I have contributed so far, but I think that as I become a second and third year student and beyond, I will enjoy contributing my acquired wisdom about math graduate school to other graduate students."

— Diana Davis

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"The blog is an advice blog for graduate students in mathematics, written by graduate students for other graduate students. The experience of writing can be daunting. It's difficult to give advice about things when you are still figuring them out yourself; each article is a bit of a leap of faith, with the expectation that there will be some people that will find it useful. I think the blog is important as a repository of knowledge because, while each mathematics graduate student's experience is different, there are sure to be similarities and commonalities among students. So, it's good to not reinvent the wheel and it can be comforting to know that other people have gone through the same experience." — Kareem Carr

Read more The AMS Graduate Student Blog is hosted by Williams College at mathgradblog.williams.edu. The AMS encourages all graduate students to join the community by posting comments, questions, and advice, and to serve on the editorial board.

AMS Nominee Members: Keep Connected

Your membership in the AMS entitles you to receive *Notices* and *Bulletin*. *Notices of the AMS* includes feature articles, a calendar of meetings, opportunities, news and commentary. *Bulletin of the AMS* includes research articles, mathematics perspectives and book reviews. Both publications help keep you aware of what's going on in the worldwide mathematical community.

Read more Log on to www.ams.org/cml/update-ams to verify and update your mailing address so that you will continue to receive these publications. This helps prevent wasted printing and postage when issues are undeliverable.



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2010 AMS Travel Grants for Graduate Students

Travel grants for graduate students in mathematics will again be offered. The AMS, with funding from a private gift, is accepting applications for partial travel support for graduate students attending the Joint Mathematics Meetings in San Francisco, CA, January 13–16, 2010. The awards, not to exceed US\$500, must be matched by travel funds from the student's institution. It is expected that awards will be made late in November 2009. Funding is provided on a reimbursement basis. Students at North American institutions are eligible to apply.



The deadline for submitting applications is October 28, 2009. Awards or decline notifications will be made by email in late November 2009.

Read more More information on the graduate student travel grants is available at www.ams.org/employment/student-JMM.html. See current information about the 2010 Joint Mathematics Meetings at www.ams.org/amsmtgs/2124_intro.html.

Mathematics Research Communities 2009



This year's sessions at Snowbird Resort, Utah were:

Mathematical Challenges of Relativity, held June 13–19. Organizers: **Mihalis Dafermos**; **Alexandru Ionescu**; **Sergiu Klainerman**, Chair; and **Richard Schoen**.

Inverse Problems, held June 20–26. Organizers: **Guillaume Bal**; **Allan Greenleaf**; **Todd Quinto**; and **Gunther Uhlmann**, Chair.

Modern Markov Chains and their Statistical Applications, held June 27–July 3. Organizers: **Persi Diaconis**, Chair; **Jim Hobert**; and **Susan Holmes**.

Harmonic Analysis, was also held June 27–July 3. Organizers: **Ciprian Demeter**; **Michael Lacey**; and **Christoph Thiele**, Chair.

"I was extremely moved by the level of enthusiasm and energy displayed by the participants at our workshop in General Relativity. I have never been, I believe, in my entire career, to a more exciting meeting from this point of view, one in which both the young people and not so young, like myself, were talking mathematics almost non-stop, from early on at breakfast until late at night in the hospitality suite. The format of the MRC conferences, which allows all participants to give their best, enabled this magic to take place. The choice of location, the beautiful Snowbird resort, also helped a great deal. Congratulations to AMS for this very unusual and successful initiative." — **Sergiu Klainerman** (co-organizer, *Mathematical Challenges of Relativity*)

"The best part was being able to interact and discuss research with my peers." — a participant

Read more See more photos and feedback at www.ams.org/ams/mrc-2009.html.

2009 Task Force on Employment Prospects Report and Survey

In January, motivated by concern regarding the impact current economic conditions are having on the job market for recent Ph.D.s, AMS President James Glimm appointed a Task Force on Employment Prospects chaired by Linda Keen, who serves on the AMS Board of Trustees. The goal of the task force was to provide information and recommendations to departments, individual job seekers, and professional societies to help them with the challenges of a difficult market. In February, 68 departments were invited to respond to a brief survey designed to help gauge the severity of the current problem, and all 68 departments returned their responses to the online survey. Among other findings, the departments reported a drop of approximately 40 percent in the number of doctorate-required positions that they had tried to fill for the upcoming academic year (compared to the previous academic year). The task force is very grateful for the help of the surveyed departments and believes that the survey provides the most comprehensive snapshot of the current state of the market for early career mathematical scientists.

"The task force found the academic employment situation quite severe. Our recommendations for the short term are for departments



to maintain an ethical standard of employment practices in these difficult times. We had no data on the current non-academic employment situation, but believe that it is also a difficult market. We think, though, that it may be more flexible and recover more quickly. In any event, we think it is important that long term mechanisms are set up to help those young mathematicians who might consider non-academic careers be given encouragement and advice." – Linda Keen

The AMS will follow up on the task force recommendations. The Society will publicize to departments and employers the AMS "Policy Statement on Supportive Practices and Ethics in the Employment of Young People in the Mathematical Sciences" (<http://www.ams.org/secretary/supportivepractices.html>); offer training to directors of graduate studies at the Joint Mathematics Meetings on how to give career advice for students who wish to seek employment outside of academia; and keep the importance of mathematical research and the professional development of mathematicians in the minds of legislators, the decision-makers at NSF and the general public through programs of the AMS Washington DC and Public Awareness Offices.

Read more The task force Report and Survey Summary are posted at www.ams.org/prof-services/employtaskforce/ETF.html. The AMS welcomes feedback and suggestions emailed to paoffice@ams.org, subject line "task force."

MSC 2010

The Mathematics Subject Classification (MSC) has undergone a general revision, with some additions, changes, and corrections, to create MSC2010, the successor to the present MSC2000. As anticipated, there are no changes at the two-digit level, but refinements have been made at the three- and five-digit levels. Starting in July, Mathematical Reviews (MR) and Zentralblatt für Mathematik (Zbl) started to use MSC2010 as their classification scheme to categorize items in the mathematical sciences literature.



MR Editors Patrick Ion (standing) and Dean Carlson, who worked on MSC2010.

"We are most grateful to the many members of the mathematical community who assisted in this lengthy revision process."

–MR Executive Editor Graeme Fairweather

Read more The final MSC2010, the result of four working drafts, is available at msc2010.org.

From the AMS Public Awareness Office

Mathematical Moments

Recent Mathematical Moments include Predicting Climate, Matching Vital Needs (on increasing the number of live-donor kidney transplants), Pulling Out (from) All the Stops (visiting all of NY's subway stops in record time) and Working It Out (on math and the Beatles). The packet mailed in September to department chairs to circulate and display in common areas or offices in the department.

Read more View and download over 75 topics in the Mathematical Moments program, hear podcasts, and read versions translated into French, Spanish, German, Polish, Portuguese, Russian, Japanese, Chinese, Arabic, Hebrew and Greek, at www.ams.org/mathmoments/.

Math in the Media

The media covered several mathematicians and mathematics teachers over the spring and summer:

- "Hidden riddle of shapes solved," by Philip Ball. *Nature News*, 1 May 2009.
- "Complex Math, Simple Sum: 3 Awards in 5 Years," by Lisa W. Foderaro. *The New York Times*, 1 June 2009.
- "Swine Flu Simulation Predicts 1,700 Cases by June," by Frank James. *NPR* (blog), 1 May 2009.
- "Math Machine makes debut at Marshall," by Clark Davis. *West Virginia Public Broadcasting*, 1 May 2009.
- "New Yorker Glen Whitney quits hedge fund job to create math museum," by Oren Yaniv. *New York Daily News*, 9 June 2009.

Read more Explore the Math in the Media archive of columns by Tony Phillips and summaries by Math Digest contributors at www.ams.org/mathmedia/.

Mathematical Imagery

Recently added to the site are "Crocheted Lorenz Manifolds" by Hinke Osinga and Bernd Krauskopf (Engineering Mathematics,



University of Bristol), "Simulated Snowflakes" by mathematicians David Griffeath (University of Wisconsin-Madison) and Janko Gravner (University of California, Davis), and works by 36 artists in the 2009 Mathematical Art Exhibition.

Read more View 22 albums of images and send them as e-postcards at www.ams.org/mathimagery/.

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AMS MEMBER NEWSLETTER

Steven G. Krantz appointed *Notices* editor



Steven Krantz of Washington University in St. Louis will begin serving as editor of the *Notices* starting with the January 2010 issue. He succeeds Andy Magid, who has been editor since January 2004. Krantz received his B.A. from the University of California at Santa Cruz in 1971 and his Ph.D. from Princeton University in 1974. He has long been actively involved in the AMS and the mathematical community as an invited speaker, conference organizer, faculty member, graduate student advisor, member of panels and committees, and author, and has served on the *Notices* editorial board since 2004. The Editor, assisted by a board of Associate Editors, helps to form the contents of the *Notices* and solicit material for publication. Krantz is starting some editorial work this fall as production on the January issue is underway.

Notices serves all mathematicians by providing a lively and informative magazine containing exposition about mathematics and its history, news about contemporary mathematics and mathematicians, and information about the profession and the Society.

Read more Browse the current issue and archive at www.ams.org/notices. See the AMS Posters page at www.ams.org/posters to order a copy of the poster of *Notices* covers.