

A PUBLICATION TO INFORM  
MEMBERS ABOUT SOCIETY  
ACTIVITIES AND NEWS.

## AMS Election Results



**George Andrews**, Evan Pugh Professor of Mathematics at Pennsylvania State University, is the new AMS President Elect. Andrews will serve one year as President Elect and then become AMS President in 2009 at the conclusion of the two-year term of the current president, **James Glimm**. As Richard Askey wrote in his Nomination of George Andrews (*Notices of the AMS*, September 2007, p. 1039), "According to Freeman Dyson, George Andrews is the chief gardener in Ramanujan's Garden. This is true, but is only part of who George Andrews is. He is a number theorist with an honorary doctorate in physics... Nationally he has been on the committee which wrote problems for the Putnam Exam; served on the AMS Committee on Libraries, another area of concern for George; the AMS Committee on the History of Mathematics; as well as many others. George is a member of the National Academy of Sciences, and a Fellow of the American Academy of Arts and Sciences."

**Read more** Askey's "Nomination of George Andrews" includes more information about Andrews' life and achievements, at [www.ams.org/notices/200708/tx070801039p.pdf](http://www.ams.org/notices/200708/tx070801039p.pdf). All the AMS election results are at [www.ams.org/secretary/ams-election-results.html](http://www.ams.org/secretary/ams-election-results.html).

## AMS Website Redesign

Have you seen the redesigned AMS website? New navigation makes it easier for users to link to the Society's popular services and programs (such as MathSciNet, Journals, Books, the AMS Bookstore, and Web Account Information) and to information and resources in Membership, Career Services, Meetings, Surveys & Outreach, Government Relations, Math Awareness, and Customer Services. The new presentation allows members, students, teachers, media, and the general public easier access to information about the AMS and makes it easier to find contacts for AMS offices and departments. The coming year will bring phase two of the project—reorganization of the content.

**Read more** See the AMS website at [www.ams.org](http://www.ams.org) for news and bookmark resources of interest.

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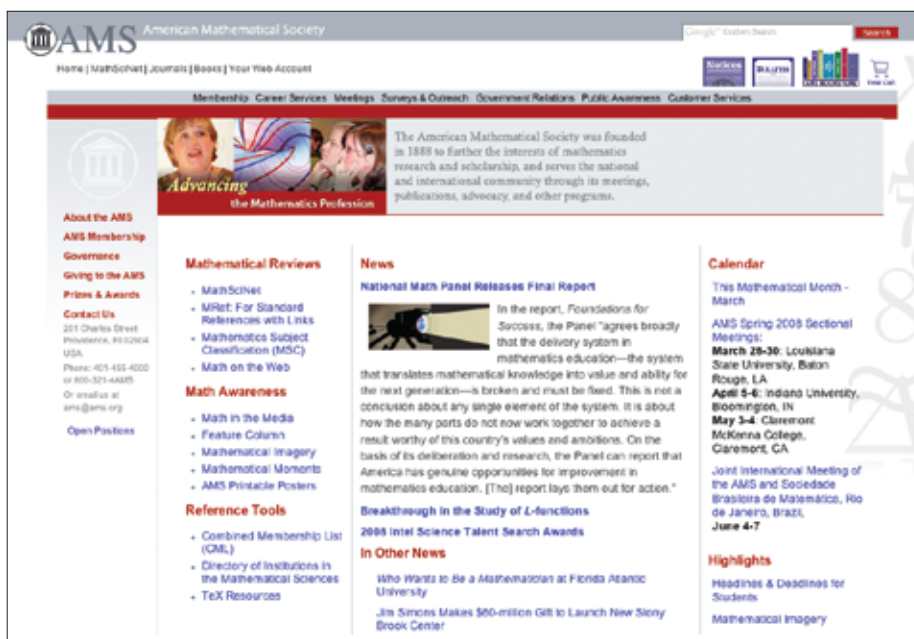
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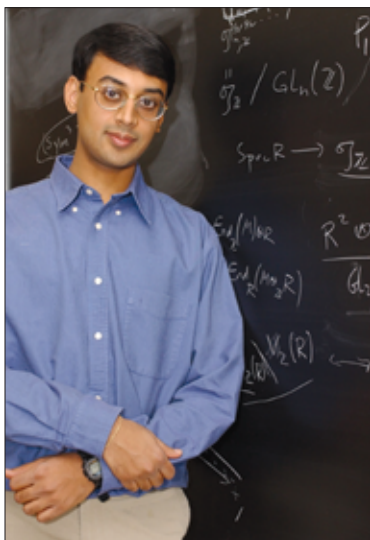
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## Three Questions for... Manjul Bhargava, professor of mathematics at Princeton University



**Was there a time when you were growing up when you realized that you would be a mathematician?**

I've always loved mathematics, as far back as I can remember. At three years of age, I wanted to be a "mountain climber" when I grew up. But by age eight, I think I had pretty much settled on being a mathematician. I just really enjoyed mathematics. The decision of course still changed a number of times over the years—there were

times when I contemplated doing music, economics, physics, chemistry, or Sanskrit language. But I always returned to mathematics, perhaps because I found it to be intertwined with all these subjects, although I did also always try (and still do!) to keep up my other interests to the extent possible.

One of my earliest mathematical memories, from when I was eight years old, is stacking oranges (which were meant for the family juicer!) in large pyramids. I wanted to know: how many oranges would one need to make a triangular pyramid with  $n$  oranges on a side? I thought a lot about it, and eventually figured out that the answer is  $n(n+1)(n+2)/6$  oranges. That was a very fun and exciting moment for me! I loved that I could predict exactly how many oranges would be needed for any given size of pyramid. I guess I must have found this even more exciting than the idea of climbing mountains!

**What is your favorite part of doing mathematics?**

There are so many things to like—it is hard to pick a favorite! I love the creativity... the surprises... the mysterious connections that arise between seemingly unrelated areas that one strives to make sense of... the artistic and yet precise nature of mathematical thought... Perhaps what I like most, though, is how mathematics never ceases to cater to one's child-like curiosity, even as an adult.

**How does playing the tabla affect your mathematics?**

I do spend a lot of time on music, and so that obviously affects the total number of hours I can devote to mathematics. But overall I feel that, for me, playing the tabla has had a positive influence also in my mathematical life. Music stimulates the mind in beautiful ways, and that can only help the creative process of mathematics



(and vice versa!). I remember having one of my best/favorite ideas for my Ph.D. thesis while I was at a tabla workshop in California for three weeks in the summer of 1999. During that visit, I was playing tabla nearly eight hours a day! I hadn't imagined that that would be when I would end up doing some good mathematics.

That kind of thing tends to happen pretty often. Sometimes I am playing tabla, and in between I get this feeling that I want to try out a new mathematical idea. And sometimes when I am doing mathematics, I get the urge to try out a new tabla composition. So mathematical and musical ideas can frequently bounce off one another, not because they are directly related in any way, but because the creative processes involved are quite similar and they complement each other well.

**Read more** Bhargava received the 2008 Frank Nelson Cole Prize in Number Theory. The Prize Booklet includes a brief biographical sketch, the citation for the award, and his response, at [www.ams.org/ams/prizebooklet-2008.pdf](http://www.ams.org/ams/prizebooklet-2008.pdf).

## Math in the Media



photo by Doug Prince, UNH photo services

University of New Hampshire mathematician **Kevin Short** was part of a team that won the 2008 **Grammy Award for Best Historical Album**. Short was noted in newspapers and television for using his Chaotic Compression Technology to restore a bootleg wire recording of a Woody Guthrie concert that is the only known recording of the folk singer performing before a live audience.

Newsweek published an article about mathematics and voting ("When Math Warps Elections," by Sharon Begley, February 4, 2008). Begley quotes voting method experts **Don Saari** (University of California, Irvine) and **Steven Brams** (New York University).

**Toshikazu Sunada's** article "Crystals That Nature Might Miss Creating" (*Notices of the AMS*, January 2008, p. 208) received coverage in *Science* (January 18, 2008, p. 263). Recent developments in mathematics research appeared among the top 2007 science stories in *Discover* (January 2008) and *Nature* (December 20/27, 2007 p. 1130).

**Read more** **Math in the Media** at [www.ams.org/mathmedia](http://www.ams.org/mathmedia) summarizes media coverage of mathematicians, mathematics research and applications, and links to reviews of books, films, plays, and television shows related to mathematics.

## What was your recipe for success in graduate school?



**Pizza Muffins, Katherine Socha**, St. Mary's College of Maryland.

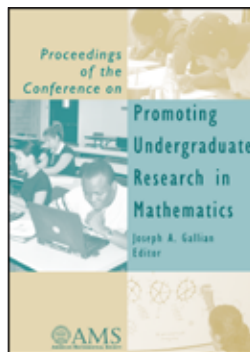
Take two or three English muffins (Thomas's is my favorite), split in half (the normal way, with circular cross-sections). Toast lightly. Then spread on each muffin face a big spoonful of tomato sauce. Top with oregano and grated or thin-sliced mozzarella. Put (face up) on a baking pan in a toaster oven or in a regular oven, set to broil. Broil until the cheese is melted and the whole thing is warm and a little crispy.

**An even easier pizza "recipe," Barry Cipra**, Northfield, MN

My wife worked at a pizza place the first couple of years we were in grad school, so we got by on "dead" pizzas—i.e., the ones that were ordered but never picked up!

**Read more** If you have a favorite, time-saving, and/or cost-saving recipe, send it (and a photograph) to [paoffice@ams.org](mailto:paoffice@ams.org). We'll post selected submissions for **Headlines & Deadlines for Students** ([www.ams.org/news-for-students](http://www.ams.org/news-for-students)) readers.

## Resources for Department Leaders



Every five years since 1965, the Conference Board of the Mathematical Sciences ([www.cbmsweb.org](http://www.cbmsweb.org)) (CBMS) has sponsored a national survey of undergraduate mathematical and statistical sciences in the nation's two-year and four-year colleges and universities. The **2005 CBMS Survey** was conducted during the fall of 2005 with National Science Foundation support, and the report, including enrollments, faculty demographics,

courses, instructional practices, is freely available as a pdf file. In 2006, with funding from the National Security Agency, the AMS organized the conference, "**Promoting Undergraduate Research in Mathematics**," which brought together a diverse group of people who are actively involving undergraduates in research programs of all types. They shared their experiences and explored ways of creating more opportunities for talented students. The proceedings of that conference are published in a free pdf file accessible on the AMS website.

**Read more** View and download the **2005 CBMS Survey** at [www.ams.org/cbms/cbms2005.html](http://www.ams.org/cbms/cbms2005.html), and **Proceedings of the Conference on Promoting Undergraduate Research in Mathematics** at [www.ams.org/outreach/PURMproceedings.pdf](http://www.ams.org/outreach/PURMproceedings.pdf).

## AMS Holds Congressional Briefing



**Kenneth M. Golden**, University of Utah

**Kenneth M. Golden**, professor of mathematics at the University of Utah, spoke to Congressional representatives at a briefing sponsored by the AMS in Washington, DC. His presentation, entitled "Mathematics of Ice to Aid Global Warming Forecasts," explained how polar sea ice is both an indicator and regulator of climate change and how it also serves as a primary habitat for microbial communities which sustain marine food webs. He explained how understanding how salt water flows through sea ice promises to improve forecasts of the effects of global warming on the earth's ice packs, how polar ecosystems may respond, and how related advances in understanding electrical properties will help in monitoring ice thickness. Video from Golden's 2007 Antarctic expedition was shown.

The Washington office is actively involved in several programs that cultivate communication between the mathematical community and Congress. These include the AMS-AAAS Congressional Fellowship, reporting on the annual federal budget, serving as liaison with the AMS Committee on Science Policy, participating in the Coalition for National Science Funding, and organizing the Town Meeting with Congressional Representative Jerry McNerney (the only member of the U.S. House of Representatives who holds a Ph.D. in mathematics). The Town Meeting was held at the Joint Mathematics Meetings in January 2008.

**Read more** See what's going on at the AMS Washington office at [www.ams.org/government](http://www.ams.org/government).



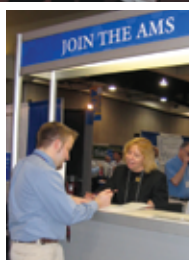
201 Charles Street  
Providence, Rhode Island 02904-2294 USA

## AMS MEMBER NEWSLETTER



### Record-breaking Joint Mathematics Meetings

A record number of attendees, over 5,500, came to the 2008 Joint Mathematics Meetings of the American Mathematical Society (AMS) and Mathematical Association of America (MAA) in San Diego, CA, January 6–9. Over 1,900 papers were presented from all specialties of mathematics. Mathematicians of all ages presented work, met colleagues, mentors and new friends, attended the annual Prize Ceremony, and saw a wide range of exhibitors. A Graduate School Fair was offered for the first time. The Association for Symbolic Logic, Association for Women in Mathematics, National Association of Mathematics, National



Science Foundation, Pi Mu Epsilon, Rocky Mountain Mathematics Consortium, Society for Industrial and Applied Mathematics, the Young Mathematicians Network and others hosted receptions and social events. A record number of students attended, and fourteen families used the Day Care Service. The AMS *Who Wants to Be a Mathematician* game gave out \$1500 to local high school students and was covered by two local television stations. The AMS Public Awareness Office hosted the JMM Blog, written by AMS-AAAS Media Fellow and University of Texas at Austin graduate student **Adriana Salerno**.

[Read more](http://www.ams.org/ams/jmm08-highlights.html) See descriptions of selected events and browse through the photographs of this year's impressive Joint Mathematics Meetings at [www.ams.org/ams/jmm08-highlights.html](http://www.ams.org/ams/jmm08-highlights.html).