

Inside the AMS

Epsilon Awards for 2008

The AMS Epsilon Fund for Young Scholars was established in 1999 to provide financial assistance to summer programs for mathematically talented high school students in the United States. For many years these programs have provided mathematically talented youngsters with their first serious mathematical experiences. The name for the fund was chosen in remembrance of the late Paul Erdős, who was fond of calling children “epsilons”.

The AMS has chosen eight summer mathematics programs to receive Epsilon grants for activities in the summer of 2008. The grants will support program expenses and student scholarships and, in some cases, scholarships only. The programs were chosen on the basis of mathematical excellence and enthusiasm. Award amounts were governed by the varying financial needs of each program and total US\$100,000.

The programs receiving grants are: All Girls/All Math, University of Nebraska, Lincoln; Hampshire College Summer Studies in Mathematics, Amherst, Massachusetts; MathPath, University of Vermont, Burlington; Michigan Math and Science Scholars Summer Program, University of Michigan, Ann Arbor; PROMYS, Boston University; PROTaSM (Puerto Rico Opportunities for Talented Students in Mathematics), University of Puerto Rico, Mayaguez; Ross Mathematics Program, Ohio State University, Columbus; and Texas State University Honors Summer Math Camp, Texas State University, San Marcos.

The grants for summer 2008 are paid for by the AMS Epsilon Fund for Young Scholars (supplemented by the AMS Program Development Fund). The AMS is continuing to build the endowment for the Epsilon Fund, with a goal of raising US\$2 million through individual donations and grants.

For further information about the Epsilon Fund for Young Scholars, visit the website <http://www.ams.org/giving-to-ams/> or contact development@ams.org. Information about how to apply for Epsilon grants is available at <http://www.ams.org/outreach/epsilon.html>. A fairly comprehensive listing of summer programs

for mathematically talented high school students (including those with and without Epsilon grants) is available at <http://www.ams.org/outreach/mathcamps.html>.

—AMS Development Office

From the AMS Public Awareness Office

Podcasts with Mathematical Moments. Now you can listen to researchers talk about their work, such as investigating connections in the U.S. Congress or the mathematics associated with recent results on invisibility. Look for the POD icon at <http://www.ams.org/ams/mathmoments.html> to listen or download, or get the podcasts at iTunes.

AMS Exhibit at the Annual AAAS Meeting. The Public Awareness Office hosted an exhibit at the American Association for the Advancement of Science (AAAS) annual meeting held in Boston, MA, February 15–18, 2008. The exhibit provided another way for mathematics to be represented at this meeting, which draws scientists from many disciplines, science writers and media, students, and families. On display were a sampling of AMS books, the *Calendar of Mathematical Imagery*, and a selection from the 60-plus *Mathematical Moments* that show the role mathematics plays in science, nature, technology, and human culture.

AMS Presidents: A Timeline. AMS presidents have played a key role in leading the Society in its publications, meetings, professional visibility, and support for research, and many have interesting biographies. Some presidents came from humble backgrounds, others from families

MATHEMATICAL MOMENTS
AMS Podcast Series

Unearthing Power Lines

Votes are cast by the full membership in each house of Congress, but much of the important maneuvering occurs in committees. Graph theory and linear algebra are two mathematics subjects that have revealed a level of organization in Congress—groups of committees—above the lowest level of subcommittees and committees. The result is based on strong connections between certain committees that can be detected by examining their memberships, but which were virtually unknown until uncovered by mathematical analysis.

Mathematics has also been applied to individual congressional voting records. Each legislator's record is represented in a matrix whose larger dimension is the number of votes cast (which in a House term is approximately 1000). Using eigenvalues and eigenvectors, researchers have shown that the entire collection of votes for a particular Congress can be approximated very well by a two-dimensional space. Thus, for example, in almost all cases the success or failure of a bill can be predicted from information derived from two coordinates. Consequently it turns out that some of the votes important to Washington are, in fact, superfluous.

For More Information: Purser, Mason A.; Mucha, Peter J.; Newman, M. E. J.; and Wamboldt, Casey M. "A Network Analysis of Committees in the United States House of Representatives." *Proceedings of the National Academy of Sciences*, Vol. 102 (2005), No. 20, pp. 7057–7062.

AMS
American Mathematical Society
The Mathematical Moments program promotes appreciation and understanding of the role mathematics plays in science, nature, technology, and human culture.
www.ams.org/mathmoments

of privilege. Several of the Society's presidents were born or trained outside the U.S. The early presidents had been awarded honorary Ph.D.'s. Some stayed at the same institution for decades, others traveled the world to do research, give talks, and represent the AMS. Most worked in academia, and a few worked in applied mathematics; some trained in well-known mathematics departments, others at small colleges. Some were quiet leaders, others outgoing and highly visible. All have in common an international recognition for their mathematical achievements and effective leadership. See a brief biography of each AMS president from 1888 through 2008 at <http://www.ams.org/ams/amspresidents.html>.

—Annette Emerson and Mike Breen
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MathSciNet Links to Mathematics Genealogy Project

MathSciNet now offers direct linking to the Mathematics Genealogy Project (MGP, <http://www.genealogy.ams.org/>) through the MathSciNet "Authors" search tab. The results obtained after doing an author search on this page include a drop-down menu (hover the cursor over the author of interest) that includes a link to the author's MGP page. On MGP users can find information about that author: name of the university that awarded his or her degree, the year in which the degree was awarded, the complete title of the dissertation, the name(s) of the advisor(s), and for some, a list of the mathematician's students.

—AMS Announcement

Deaths of AMS Members

RICHARD D. ANDERSON, former AMS vice president, died on March 4, 2008. Born on February 17, 1922, he was a member of the Society for 62 years.

NIKOLAY V. AZBELEV, professor, Perm State Technical University, Russia, died on November 3, 2006. Born on April 15, 1922, he was a member of the Society for 11 years.

CHARLES L. CLARK, professor emeritus, California State University, Los Angeles, died on February 22, 2008. Born in November 1917, he was a member of the Society for 68 years.

HELEN F. CULLEN, from Harwich, MA, died on August 25, 2007. Born on January 4, 1919, she was a member of the Society for 58 years.

BELMONT G. FARLEY, former faculty member at the University of Pennsylvania, and professor emeritus of Temple University, died on February 28, 2008. Born on December 29, 1920, he was a member of the Society for 66 years.

DAVID GALE, professor emeritus, University of California, Berkeley, died on March 7, 2008. Born on December 13, 1921, he was a member of the Society for 61 years.

ALFRED W. GOLDIE, from Cumbria, England, died on October 8, 2005. Born on December 10, 1920, he was a member of the Society for 18 years.

RAOUL HAILPERN, from Amherst, NY, died on February 9, 2008. Born on July 19, 1916, he was a member of the Society for 45 years.

JAMES E. HOUSEHOLDER, from Las Vegas, NV, died on January 23, 2008. Born on December 26, 1916, he was a member of the Society for 52 years.

RAYMOND F. KRAMER JR., from Manhattan Beach, CA, died on February 23, 2008. Born on June 6, 1932, he was a member of the Society for 49 years.

BENJAMIN N. MOYLS, from Vancouver, Canada, died on November 10, 2007. Born on May 1, 1919, he was a member of the Society for 61 years.

GEN-ICHIRO SUNOUCHI, from Sendai, Japan, died on March 7, 2008. Born on October 29, 1911, he was a member of the Society for 53 years.

PETER SZÜSZ, professor emeritus, SUNY Stony Brook, died on February 16, 2008. Born on November 11, 1924, he was a member of the Society for 42 years.



Noticed

Kevin Short, a mathematician at the University of New Hampshire, is co-recipient of a 2008 Grammy Award. Short used 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. The result, *The Live Wire: Woody Guthrie In Performance 1949*, earned him and the team of producers and engineers the 2008 Grammy Award for Best Historical Album.

Manil Suri, a mathematician at the University of Maryland, Baltimore County, has published his second novel. His first novel, *The Death of Vishnu*, was published to high acclaim and has been translated into twenty-two foreign languages. Suri received a Guggenheim Fellowship for fiction in 2004. His latest novel, *The Age of Shiva*, appeared in February of this year.