Inside the AMS

Current Events Session at Joint Meetings

The Joint Mathematics Meetings in San Antonio in January 2006 will include a special session entitled "*Bulletin of the AMS* Current Events", featuring four expository lectures on topics at the frontier of mathematical research. The session is organized by AMS past-president David Eisenbud, director of the Mathematical Sciences Research Institute in Berkeley.

The format for the talks follows the model of the famous Bourbaki Seminars in that mathematicians with especially strong expository skills speak on work not their own and written versions of the talks are prepared beforehand and distributed at the session. But there are some novel features, too. The talks are generally more accessible than those of the Bourbaki Seminars, and the coverage is broader and includes applied areas. Often a talk begins with a general, nontechnical presentation of the topic, lasting about twenty minutes. There is a short break, and then the talk continues with a more detailed presentation of how the topic is used in a particular setting. These "Current Events" sessions have drawn large audiences and have turned out to be one of the most popular activities at the Joint Meetings. The written versions of the talks are collected in an attractive booklet distributed at the session.

A tradition has also developed for the talks to appear in print. Some of them have been expanded to appear as articles in the *Bulletin of the AMS*.

For the session in San Antonio, the speakers and their lecture titles follow:

LAUREN ANCEL MEYERS, University of Texas at Austin, *Contact Network Epidemiology: Bond Percolation Applied to Infectious Disease Prediction and Control*.

KANNAN SOUNDARARAJAN, University of Michigan, *Small Gaps between Prime Numbers*.

MADHU SUDAN, Massachusetts Institute of Technology, *Checkable Proofs*.

MARTIN GOLUBITSKY, University of Houston, *Symmetry in Neuroscience*.

The session will take place Saturday, January 14, 2006, from 1:00 p.m. to 5:50 p.m. Information about this and other Joint Meetings activities is available on the AMS Meetings website, `http://www.ams.org/meetings`.

—*Allyn Jackson*

AMS Releases New "Mathematical Moments"

Mathematicians know that their subject is the basis for such scientific and engineering feats as data compression and speech recognition. But when you are trying to communicate such things to students or the public at large, it is sometimes difficult to put your hands on appropriate resources.

Enter "Mathematical Moments"—brief, colorful flyers created by the AMS Public Awareness Office and designed to promote appreciation and understanding of the role mathematics plays in science, nature, technology, and human culture. "Mathematical Moments" provide a handy, eye-catching, and concise way to show the many applications of mathematics. They can be used to reach such audiences as elected officials, students, parents, and school teachers and administrators.

The latest set of "Mathematical Moments" covers topics in archaeology, data compression, CAT-scans, architecture, modern fountain design, the portable *20 Questions* game, bin packing, and machine translation. Altogether the AMS offers nearly fifty different "Mathematical Moments"

flyers. They make excellent handouts for presentations, and their attractive design makes them suitable for bulletin board and wall display.

The AMS has received many positive comments about the "Mathematical Moments", like this one: "I have greatly enjoyed the Mathematical Moments poster series. The posters are very useful; I read the blurb to my calculus students and pass around the poster. They learn something about how math is relevant in the world, and associate it with a cool picture. Having excellent pictures is what makes the 'Moments' effective. Thanks for a great program!"

PDF files containing "Mathematical Moments" may be downloaded free of charge at `http://www.ams.org/ams/mathmoments.html`. Topic suggestions and feedback are welcome and can be sent to the AMS Public Awareness Office at `paoffice@ams.org`.

—Allyn Jackson

Trjitzinsky Memorial Awards Presented

The AMS has made awards to eight undergraduate students through the Waldemar J. Trjitzinsky Memorial Fund. The fund is made possible by a bequest from the estate of Waldemar J., Barbara G., and Juliette Trjitzinsky. The will of Barbara Trjitzinsky stipulates that the income from the bequest should be used to establish a fund in honor of the memory of her husband to assist needy students in mathematics.

For the 2005 awards, the AMS chose seven geographically distributed schools to receive one-time awards of US$3,000 each. The mathematics departments at those schools then chose students to receive the funds to assist them in pursuit of careers in mathematics. The schools are selected in a random drawing from the pool of AMS institutional members.

Waldemar J. Trjitzinsky was born in Russia in 1901 and received his doctorate from the University of California, Berkeley, in 1926. He taught at a number of institutions before taking a position at the University of Illinois, Urbana-Champaign, where he remained for the rest of his professional life. He showed particular concern for students of mathematics and in some cases made personal efforts to ensure that financial considerations would not hinder their studies. Trjitzinsky was the author of about sixty mathematics papers, primarily on quasi-analytic functions and partial differential equations. A member of the AMS for forty-six years, he died in 1973.

Following are the names of the selected schools for 2005, the names of the students receiving Trjitzinsky Awards, and brief biographical sketches of the students.

Abilene Christian University: CARISSA JOY STRAWN. Strawn excelled in high school and was a member of the National Honor Society and the Beta Club. She was the Class of 2005 Historian and competed at the state level in National History Day. While in high school she also tutored in mathematics, chemistry, and physics.

Amherst College: JENNIFER A. ROBERGE. Roberge is a junior at Amherst College working on a double major in mathematics and computer science. Her love for mathematics grew as her high school courses became more challenging. She joined the math team and competed in regional competitions as a high school junior. She enjoys learning foreign languages, particularly French and ancient Greek, and works as a tutor.

Arizona State University: YUKIKO KOZAKAI. Kozakai was born in Japan and for seventeen years worked for one of Japan's largest department stores. During this time she learned about marketing and management and realized that she needed a better knowledge of English to advance in these areas. She came to the United States intending to stay long enough to refine her knowledge of English while working toward an associate degree in business administration. She became aware of the beauty of mathematics through business mathematics courses and soon developed a passion for the subject. After going back to Japan she decided to return to the U.S. to pursue mathematics. In August 2003 she was accepted into Arizona State University and is working toward a mathematics degree. She has an excellent record and has become interested in pursuing actuarial science.

University of Missouri, Kansas City: MELANIE MARIE MEYER. Melanie began studying computer science, with a mathematics minor, at Truman State University. After her child was born, she moved back to the Kansas City area to be closer to her family and is now raising her three-year-old son while attending the University of Missouri as a mathematics major. She works part-time but has not missed a semester of college and has not reduced the number of courses. Her grades have been very strong, and she is planning to go on to earn at least a master's degree in mathematics. "Melanie shows talent, perseverance, and strength of character," the mathematics department told the AMS. "The scholarship will allow her to stop working and spend more time on her studies." The department contributed an additional US$1,000 to the Trjitzinsky Award.

University of North Carolina at Greensboro: CHRISTIAN SYKES. After dropping out of high school, Sykes enrolled in a community college, where he took a precalculus course to fulfill academic requirements. Sensing his mathematical talent, his teacher urged him to take more courses in the subject. He took his teacher's advice after transferring to the University of North Carolina at Greensboro, and he soon found mathematics enthralling. He has excelled as a mathematics major and is currently interested in evolutionary game theory. He plans to pursue graduate studies in pure mathematics. He also has interests in ecology, sound synthesis and audio signal processing, and musical composition.

University of Rhode Island: CHRISTOPHER PIECUCH. Piecuch enrolled in the University of Rhode Island in 2001 as a mechanical engineering major. Shortly thereafter he switched to a double major in mathematics and physics and later added a third major in German. He was involved in several research projects in both the physics and the physical

oceanography departments at the university. He was elected to Pi Mu Epsilon, Phi Kappa Phi, and Phi Beta Kappa. He spent a year in Germany, where he took courses at the Technische Universität Braunschweig and held an internship at Bosch GMBH in Stuttgart. He plans to pursue a graduate degree in either education or mathematics and then to teach at the high school or college level.

Ohio State University: SOPHIA LEIBMAN and GABOR REVESZ. Leibman is a very talented student who completed two years of challenging and rigorous honors mathematics courses—including advanced analysis, linear algebra, differential equations, complex analysis, and vector analysis—while still in high school. She placed first in an OSU mathematics olympiad for first- and second-year students. She is now doing a double major in mathematics and physics and is a mentor in the honors advanced analysis sequence. Revesz is an older student who began his studies at a community college and transferred to OSU in 2004. He has taken many challenging courses, including honors courses in advanced analysis, abstract algebra, and number theory. He has been an active participant in VIGRE working groups and was involved in a project to translate classic works. He placed first in a recent OSU olympiad for advanced undergraduates. He will graduate in spring 2006 and plans to pursue graduate studies in mathematics. The OSU mathematics department contributed matching funds to the Trjitzinsky Award, so that Leibman and Revesz each received a US$3,000 scholarship.

—Allyn Jackson

Erdős Memorial Lectures

In October 2005, Persi Diaconis of Stanford University delivered the Paul Erdős Memorial Lecture at the Eastern Sectional Meeting at Bard College. The title of his lecture was "Erdős picture of 'most things'".

The Erdős Memorial Lectures are presented annually at AMS sectional meetings. This lecture series is made possible through the generosity of Andrew Beal, a Dallas banker who has committed US$100,000 as a prize for the solution of the so-called Beal Conjecture. The AMS holds the prize funds, and Beal has requested that income from the funds be used to support the lecture series. See the Web page `http://www.math.unt.edu/~mauldin/beal.html` for more information about the Beal Conjecture and prize.

Previous Erdős Lecturers are Bernd Sturmfels, Avi Wigderson, Hillel Furstenberg, Carl Pomerance, John H. Conway, and Ronald L. Graham. Béla Bollobás, University of Memphis and University of Cambridge, will present the 2006 Erdős Memorial Lecture at the Central Section Meeting at the University of Notre Dame in April 2006. For further information, see the Web page `http://www.ams.org/meetings/erdos-lect.html`.

—Allyn Jackson

AMS Annual Report Issued

The Annual Report of the AMS for 2004–2005 was issued in the fall of 2005. It contains a wealth of information about the Society, its activities, and its finances. The report may be downloaded from the Web at `http://www.ams.org/ams/AnnualReport04-05.pdf`.

—Allyn Jackson

Deaths of AMS Members

ARTHUR A. BROWN, retired, from Cambridge, MA, died in March 1999. Born on September 2, 1913, he was a member of the Society for 59 years.

WEI-NUNG LIU, from St. Louis, MO, died on September 1, 2004. Born on June 24, 1936, he was a member of the Society for 33 years.

RODNEY J. ROTH, retired, from Montclair, NJ, died in 2003. Born on March 13, 1927, he was a member of the Society for 44 years.