
Inside the AMS

Fan China Exchange Program Names Awardees

The Society's Fan China Exchange Program awards grants to support collaborations between Chinese and U.S. or Canadian researchers. Institutions in the United States or Canada apply for the funds to support a visitor from China or vice versa. This funding is made possible through a generous gift made to the AMS by Ky and Yu-Fen Fan in 1999. The total amount available for grants this year was US\$18,000. The awardees for 2009 follow.

RUTGERS UNIVERSITY received a grant of US\$4,000 to support a visit by Wanke Yin of Wuhan University.

THE UNIVERSITY OF KENTUCKY was awarded a grant of US\$2,500 to support a visit by Shijin Ding of South China Normal University.

NORTH CAROLINA STATE UNIVERSITY received a US\$5,000 grant to support a visit by Honglian Zhang of Shanghai University.

OKLAHOMA STATE UNIVERSITY received a grant of US\$3,000 to support a visit by Baoquan Yuan of Henan Polytechnic University.

INNER MONGOLIA UNIVERSITY was awarded a grant of US\$3,500 to support a visit by Anton Zettl of Northern Illinois University.

For information about the Fan China Exchange Program, visit the website <http://www.ams.org/employment/chinaexchange.html> or contact the AMS Membership and Programs Department, email: chinaexchange@ams.org, telephone 401-455-4170 (within the U.S. call 800-321-4267, ext. 4170).

—Elaine Kehoe

Math in Moscow Scholarships Awarded

The AMS has made awards to six mathematics students to attend the Math in Moscow program in the fall of 2009. The names of the undergraduate students and their institutions are NATE BOTTMAN, University of Washington; MICHAEL DONATZ, Oregon State University; LEONARD FORET, Florida International University; NATALIE SHEILS, Seattle University; DAVID SHOR, Florida International University; and MICHAEL WEISS, New York University.

Math in Moscow is a program of the Independent University of Moscow that offers foreign students (undergraduate or graduate students specializing in mathematics and/or computer science) the opportunity to spend a semester in Moscow studying mathematics. All instruction is given in English. The fifteen-week program is similar to the Research Experiences for Undergraduates programs that are held each summer across the United States.

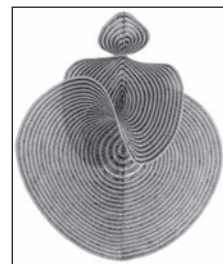
Since 2001 each semester the AMS has awarded several scholarships for U.S. students to attend the Math in Moscow program. The scholarships are made possible through a grant from the National Science Foundation. For more information about Math in Moscow, consult <http://www.mccme.ru/mathinmoscow> and the article "Bringing Eastern European mathematical traditions to North American students", *Notices*, November 2003, pages 1250–4.

—Elaine Kehoe

From the AMS Public Awareness Office

Mathematical Imagery. Two albums, *Crocheted Lorenz Manifolds* (<http://www.ams.org/mathimagery/thumbnails.php?album=24>) and *Simulated Snowflakes* (<http://www.ams.org/mathimagery/thumbnails.php?album=25>), were recently added to Mathematical Imagery. All of the albums, including nearly 200 images that can be sent as e-postcards, may be viewed at <http://www.ams.org/mathimagery/>.

Images: "Crocheted Lorenz manifold, white background" (top, right), by Hinke Osinga, in collaboration with Bernd Krauskopf, Department of Engineering Mathematics, University of Bristol; and "Snowflake Model 12" (bottom, right), by David Griffeath, University of Wisconsin-Madison, and Janko Gravner, University of California, Davis.



—Annette Emerson and Mike Breen, AMS Public Awareness Officers, paoffice@ams.org

Discussion on “The Mathematics behind Tom Stoppard’s *Arcadia*”

The American Mathematical Society (AMS) and the Mathematical Association of America (MAA) hosted a discussion on mathematics and the theatre on May 18, 2009, in Washington, DC. The event was held in conjunction with the production of Tom Stoppard’s acclaimed play *Arcadia*, performed at Washington’s Folger Theatre May 5–June 14, 2009.

Arcadia juxtaposes the past with the present to illustrate the connections between people, their ideas, and scientific understanding. The play references such mathematical topics as iterated algorithms, fractals, chaos, and Fermat’s Last Theorem in its portrayal of our search for knowledge.

Cast member Erin Weaver, playing the child prodigy in *Arcadia*, and the Folger’s Dramaturg, Michele Osherow, joined Production Mathematics Consultant Manil Suri (novelist and professor of mathematics at the University of Maryland, Baltimore County) in leading attendees in a discussion of the challenges of representing mathematics—and mathematicians—on stage. “m(Arcadia)”, a video prepared by Suri to explain the mathematics behind the play, may be viewed at <http://www.YouTube.com>.

Editor’s Note: A review of the Lincoln Center production of *Arcadia* appeared in the November 1995 issue of the *Notices*.

—Anita Benjamin, AMS Washington Office

AMS Lecturers for Cambodian Master’s Degree Program

In 2008 and again in 2009, the AMS has supported the teaching of a 3-week intensive course in Real Analysis at the Royal University of Phnom Penh in Cambodia. The course was given in spring 2008 by John Lamperti of Dartmouth College and in spring 2009 by Eduardo Cattani of the University of Massachusetts at Amherst. The AMS support of these courses is part of the Visiting Lecturer Program of the U.S. National Committee for Mathematics (USNCM). The AMS donation of approximately US\$5,000 each year covers the lecturer’s travel and living expenses.

The USNCM, a committee of the U.S. National Academy of Sciences, is the United States’s adhering organization to the International Mathematical Union. The USNCM developed the Visiting Lecturer Program to foster productive interaction between the mathematical community of the developed world and the vast, mostly untapped reservoir of talent in the developing world. The series provides intensive courses at the advanced undergraduate level. Courses must be part of a recognized degree program in advanced mathematics at the host university.

The series was created in response to an appeal from French and Cambodian mathematicians for U.S. assistance

in teaching short intensive courses at the advanced undergraduate level in a Master’s degree program organized by the Centre International de Mathématiques Pures et Appliquées (CIMPA) at the Royal University of Phnom Penh. To date, support for lecturers has been provided by the AMS, the Society for Industrial and Applied Mathematics, and USNCM itself.

Although the devastation of Cambodian mathematical infrastructure during the late 1970s, down through even the elementary school level, is well known and perhaps particularly tragic, there are many cases of comparable needs at other universities in the developing world. As a response, the International Mathematical Union is partnering with CIMPA and USNCM to expand the Volunteer Lecturer Program to reach other countries.

In 2009 the Visiting Lecturer Series enabled four U.S. mathematicians to teach courses at the Royal University of Phnom Penh. In addition to Cattani, the other lecturers in the series in 2009 are William Murray (California State University), Jan Hannig (University of North Carolina), and Angel Piñeda (California State University).

The 2008 lecturers supported in Cambodia were, in addition to Lamperti, Jan Hannig (Colorado State University), and Yontha Ath (Aerospace Corporation).

The outpouring of interest in volunteering by AMS membership to give short courses in the developing world, much of it in response to an AMS appeal for the Cambodia program, has been overwhelming. The program size and scope is only limited at the moment by USNCM’s limited ability to raise the US\$5,000 increments, each one necessary to fund the participation of one more lecturer in the program.

For more information about the USNCM and the Visiting Lecturer Program, visit the website <http://sites.nationalacademies.org/pga/biso/IMU/index.htm>.

—Herb Clemens, Ohio State University, USNCM Chair

“Stipends for Study and Travel” to Appear Only on Web

The “Stipends for Study and Travel”, which lists a wide variety of fellowship and postdoctoral opportunities, has for many years appeared annually in the September issue of the *Notices*. The AMS Membership and Programs Department, which prepares the “Stipends” section, identified this service as one that would be more useful to offer on the Web than in print. Starting in 2009, the “Stipends” list will appear only on the Web and not in print in the *Notices*. The Web presentation will allow for continual updates to the “Stipends” information, rather than the once-a-year updates that were possible in the *Notices*.

A preliminary version of the “Stipends” list is available at <http://www.ams.org/employment/stipends-list.html>.

—AMS Membership and Programs Department

Corrections

Due to technical problems, characters were missing in some math expressions in two of the articles in the June/July issue of the *Notices*.

On page 698 in the “Remembering Atle Selberg” article, in Peter Sarnak’s essay, the following sentences were missing characters and should be corrected (adding missing parentheses, a comma, plus signs, and a period) to read:

It was before the days of computers, and Chowla had noted that $L(\frac{1}{2}, \chi)$ must be nonnegative for a quadratic Dirichlet character, for otherwise the Riemann Hypothesis is false for this Dirichlet L -function. He wanted to compute these numbers for various χ ’s, such as the one corresponding to $\mathbb{Q}(\sqrt{-163})$, where he expected the value was small.

In describing his method, Selberg used Dirichlet’s notation for binary quadratic forms, $ax^2 + bxy + cy^2$ (as most of us do today), but Chowla was old-fashioned and used Gauss’s notation, $ax^2 + 2bxy + cy^2$. Once this inconsistency was clarified, the value turned up positive (it is 0.0685...).

In the same article, in Brian Conrey’s essay, on page 706, the following sentence should be corrected (adding a slash between the 1 and the 2) to:

What is striking about Selberg’s formulation is that he got exactly the right set of axioms (down to the—at first sight mysterious— $\theta < 1/2$) to provide an analytic framework for future work.

Several instances of missing characters occurred in the book review by Chelluri C. A. Sastri on pages 726–728. In the first instance, on page 727, the following sentence should be corrected (adding parentheses) to read:

In this connection, he mentions two examples, the first of which trips people up because they don’t know or understand the monotonic nature of probability (if $A \subset B$, then $P(A) \leq P(B)$), while the second one causes trouble because in it a single event is described in two different ways, leading to the misperception that two distinct events are being referred to.

On page 728, equal signs should have appeared in the following sentence so it would correctly read:

For example, on page 68 he refers to what is called the Weber-Fechner Principle, which says $S = k \log R$, where $S =$ Sensory Response and $R =$ Stimulus; k is presumably a constant.

The *Notices* regrets these errors.

Deaths of AMS Members

MICHAEL O. ALBERTSON, professor, Smith College, died on March 21, 2009. Born on June 24, 1946, he was a member of the Society for 40 years.

C. D. ALIPRANTIS, professor, Purdue University, died on February 27, 2009. Born on May 12, 1946, he was a member of the Society for 37 years.

ALLAN G. ANDERSON, from Basking Ridge, NJ, died on November 5, 2008. Born on October 30, 1923, he was a member of the Society for 56 years.

CHARLES S. BALLANTINE, professor emeritus, Oregon State University, died on December 23, 2008. Born on August 27, 1929, he was a member of the Society for 54 years.

ROBERT D. BARNARD, retired professor, Wayne State University, College of Engineering, died on April 2, 2008. Born on March 17, 1929, he was a member of the Society for 43 years.

CLAUDE W. BURRILL, professor, University of Iowa, died on October 20, 2008. Born on February 19, 1925, he was a member of the Society for 55 years.

ELVY L. FREDRICKSON, professor emeritus, Lewis and Clark College, died on December 11, 2008. Born on July 11, 1921, he was a member of the Society for 54 years.

EDWARD D. GAUGHAN, from Mesilla Park, NM, died on March 6, 2009. Born on January 30, 1931, he was a member of the Society for 50 years.

IRVING JOHN GOOD, professor, Virginia Polytechnic Institute and State University, died on April 5, 2009. Born on December 9, 1916, he was a member of the Society for 40 years.

RICHARD A. GOOD, from McLean, VA, died on November 24, 2008. Born on September 24, 1917, he was a member of the Society for 67 years.

EDMUND HLAWKA, retired, Vienna University of Technology, died on February 19, 2009. Born on November 5, 1916, he was a member of the Society for 49 years.

HARRY HOCHSTADT, retired professor, Polytech University, Brooklyn, died on May 4, 2009. Born on September 7, 1925, he was a member of the Society for 55 years.

RICHARD A. HUNT, professor, Purdue University, died on March 22, 2009. Born on June 16, 1937, he was a member of the Society for 42 years.

KI HANG KIM, professor, Alabama State University, died on January 15, 2009. Born on August 5, 1936, he was a member of the Society for 40 years.

JOHN R. KNUDSEN, from Austin, TX, died on February 6, 2009. Born on July 12, 1916, he was a member of the Society for 50 years.

BRUCE E. MESERVE, from Green Valley, AZ, died on November 14, 2008. Born on February 2, 1917, he was a member of the Society for 66 years.

F. VIRGINIA ROHDE, retired professor, Mississippi State University, died on December 5, 2008. Born on May 15, 1918, she was a member of the Society for 58 years.

PAUL T. ROTTER, from San Diego, CA, died on February 24, 2009. Born on February 21, 1918, he was a member of the Society for 60 years.

DOMINICK A. RUSSO, from Chappaqua, NY, died on August 2, 2008. Born on October 21, 1928, he was a member of the Society for 51 years.

JOSEPH A. SCHATZ, professor emeritus, University of Houston, died on August 10, 2007. Born on June 23, 1924, he was a member of the Society for 58 years.

JACOB T. SCHWARTZ, professor, New York University, died on March 2, 2009. Born on January 9, 1930, he was a member of the Society for 62 years.

JOHN J. SWEENEY, retired professor, Indiana University of Pennsylvania, died on September 19, 2008. Born on April 10, 1928, he was a member of the Society for 2 years.