Inside the AMS

Bulletin Digitization, 1891–1991

Readers may now view online the first century of the *Bulletin of the AMS*, from 1891 to 1991, searchable and fully integrated with the modern *Bulletin*. The digitization was carried out through the Digital Mathematics Library Project of the Mathematical Sciences Research Institute and was funded by a grant from the Gordon and Betty Moore Foundation.

The approximately 84,000 pages of the *Bulletin* are freely accessible to all. The final phase of the project under way now is work on the references—to verify and add links to MathSciNet where possible—completing the digitization of this important collection of mathematical literature. The archive is also online at Project Euclid.

To access this material, visit the *Bulletin* website, `http://www.ams.org/journals/bull`, and click on "All Issues: 1891–Present".

—AMS announcement

AMS Sponsors NExT Fellows

Each year the AMS sponsors six Project NExT (New Experiences in Teaching) Fellows who are affiliated with Ph.D.-granting institutions and who show promise in mathematics research.

The names, affiliations, and areas of research of the 2007–2008 NExT Fellows are: EMILY GAMBER BURKHEAD, Meredith College, topological and symbolic dynamics; TODD FISHER, Brigham Young University, dynamical systems; HEMANSHU KAUL, Illinois Institute of Technology, discrete math and operations research; JOAN LIND, Belmont University, complex analysis and stochastic analysis; CARL TOEWS, Duquesne University, operator theory/applied mathematics; and DEBBIE YUSTER, Rutgers University, combinatorics (appointed through DIMACS).

Project NExT is a professional development program for new or recent Ph.D.'s in the mathematical sciences (including pure and applied mathematics, statistics, operations research, and mathematics education). It addresses all aspects of an academic career: improving the teaching and learning of mathematics, engaging in research and scholarship, and participating in professional activities. It also provides the participants with a network of peers and mentors as they assume these responsibilities. Each year sixty to seventy new Ph.D.'s receive Project NExT Fellowships, which allow them to attend special events at the summer MathFest of the Mathematical Association of America and at the Joint Mathematics Meetings. The AMS also holds activities for the AMS NExT Fellows at the Joint Mathematics Meetings.

For further information about Project NExT, visit the website `http://archives.math.utk.edu/projnext/`.

—Elaine Kehoe

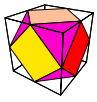
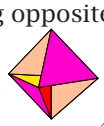
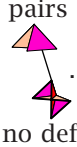
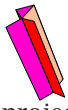
AMS Sponsors Capitol Hill Exhibit

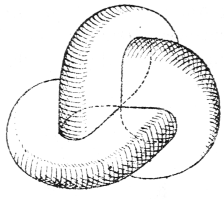
DALIN TANG, professor of mathematical sciences and biomedical engineering at Worcester Polytechnic Institute (WPI), represented the AMS at the 13th annual Exhibition of the Coalition for National Science Funding (CNSF) held June 26, 2007, on Capitol Hill in Washington, DC. Tang highlighted his work on "Computational Models for Cardiovascular Disease Assessment and Surgery Design" by showing how integrating computational modeling, magnetic resonance imaging (MRI), mechanical testing, and pathological analysis can be used to assess the state of cardiovascular disease and the potential that quantitative computational modeling and assessment can be integrated into imaging technologies for better patient screening, early diagnosis, and surgery design.

Tang's presentation at the exhibition was received by members of Congress, congressional staff, administration

About the Cover

Collapsing Boy's Umbrellas

This month's cover accompanies Rob Kirby's *What is Boy's Surface?* A polyhedral model of the real projective plane is obtained by identifying opposite points on a truncated cube  to obtain a  heptahedron whose 1-skeleton is a well known figure  . It possesses at each vertex a copy of a singularity known as *Whitney's umbrella*. One can connect these in pairs along three transverse edges of the heptahedron  . As is often pointed out in the literature, there is no deformation of Whitney's umbrella into an immersion, since the boundary of a small neighborhood disk is a figure eight. But the neighborhood of an edge with two such singularities at opposite ends  may be deformed into an immersion  to obtain Boy's surface, an immersed copy of the real projective plane in three dimensions. The resulting tubes may be seen in the usual pictures of Boy's surface, for example this one taken from Boy's original paper:



A nice image of a smooth version of Whitney's umbrella can be found at `http://www.geom.uiuc.edu/zoo/features/whitney/`.

The smooth version of the heptahedron is called Roman's surace. It can be seen at `http://mathworld.wolfram.com/RomanSurface.html`.

—Bill Casselman, Graphics Editor

(`notices-covers@ams.org`)

representatives, and members of the scientific community. The 2007 exhibition included 34 exhibit booths and drew over 400 attendees.

CNSF is an alliance of over one hundred scientific and professional societies and universities that are united by a concern for the future vitality of the national science, mathematics, and engineering enterprise. This coalition, chaired by Samuel M. Rankin III, associate executive director of the AMS and the director of its Washington office, works to increase the federal investment in the National Science Foundation (NSF).

The annual CNSF exhibition showcases the crucial role the NSF plays in meeting the nation's research and education needs. It highlights research made possible by the NSF through exhibits displaying a wide range of scientific research and education projects. The exhibition provides an opportunity for university researchers and educators to describe their work to leaders on Capitol Hill. For more information, see `http://www.ams.org/government/cnsfex07.html`.

—AMS Washington office

Deaths of AMS Members

WALTER F. BRADY, associate professor, Connecticut College, died on January 23, 2007. Born on October 16, 1933, he was a member of the Society for 39 years.

JOHN A. EWELL, professor emeritus, Northern Illinois University, died on July 21, 2007. Born on February 28, 1928, he was a member of the Society for 34 years.

A. W. GOODMAN, retired, from Clearwater, FL, died on July 30, 2004. Born on July 20, 1915, he was a member of the Society for 60 years.

WILLIAM D. HAHN, from Etnus, Inc., Framingham, MA, died on June 19, 2007. Born on July 25, 1949, he was a member of the Society for 9 years.

WILLIAM H. MILLS, from Newtown, PA, died on March 7, 2007. Born on November 9, 1921, he was a member of the Society for 63 years.

OMAR K. MOORE, from Pittsburgh, PA, died on April 1, 2006. Born on February 11, 1920, he was a member of the Society for 47years.

FRANCIS D. PARKER, professor emeritus, St. Lawrence University, died on July 29, 2006. Born on July 27, 1918, he was a member of the Society for 58 years.

WILLIAM L. ROOT, professor emeritus, University of Michigan, Ann Arbor, died on April 22, 2007. Born on October 6, 1919, he was a member of the Society for 57 years.

DOV TAMARI, professor emeritus, from New York, NY, died on August 11, 2006. Born on April 29, 1911, he was a member of the Society for 56 years.

RADU THEODORESCU, from Quebec, Canada, died on August 14, 2007. Born on April 12, 1933, he was a member of the Society for 37 years.

D. RANSOM WHITNEY, professor emeritus, Ohio State University, Columbus, died on August 16, 2007. Born on November 27, 1915, he was a member of the Society for 65 years.