For Your Information

United States to Host International Mathematical Olympiad

The United States will be the host country for the 2001 International Mathematical Olympiad. Six-member teams of mathematicians from high schools in 80 to 100 nations are expected to compete in the Olympiad.

Hosted by the National Science Foundation, the Department of Education, and the National Security Agency, the two-day final competition will be held in July 2001 in Washington, DC. This is the first time in twenty years that the United States will host the International Mathematical Olympiad. Preliminary competitions leading to the selections of the national teams will be held in students’ home countries.

—From an NSF announcement

Final Version of Data Disclosure Regulation Issued

The Office of Management and Budget (OMB) has issued the final revision of a regulation pertaining to public access to data produced through grants by federal agencies. Last year this regulation caused a great deal of concern in the scientific community and generated 12,000 comments sent to OMB.

The final version of the regulation may be found in the October 8, 1999, issue of the Federal Register. It is available on the Web at [http://www.access.gpo.gov/su_docs/fedreg/a991008c.html](http://www.access.gpo.gov/su_docs/fedreg/a991008c.html) (look for the heading “Management and Budget Office”). Further information about the regulation may be found in the Notices, June/July 1999, pages 690–691; and November 1999, page 1244.

—Allyn Jackson

Departments Coordinate Job Offer Deadlines

A group of mathematical sciences departments is again this year coordinating their deadlines for acceptance of postdoctoral job offers. The purpose is to ensure that applicants do not have to make decisions about job offers before the results of the National Science Foundation postdoctoral fellowship competition are announced.

The departments have agreed not to require applicants who are less than two years past the Ph.D. to decide on a job offer before Monday, February 7, 2000. This is aimed at postdoctoral positions, not tenure-track offers. The list of participating departments, together with additional information, may be found on the Web site [http://www.ams.org/employment/postdoc-offers.html](http://www.ams.org/employment/postdoc-offers.html).

—Allyn Jackson

Sunley Appointed Interim Head of NSF Education

The National Science Foundation (NSF) has named Judith Sunley as interim assistant director of the Education and Human Resources Directorate, replacing Luther Williams. Sunley’s appointment became effective August 15, 1999.
Since joining NSF, Sunley has served as assistant to the director for Science Policy and Planning, executive officer for Mathematical and Physical Sciences, division director for Mathematical Sciences, and deputy division director and program director in the Division of Mathematical Sciences. Sunley has been the recipient of both the Presidential Rank Award for Meritorious Service and for Distinguished Service. She received her Ph.D. in mathematics from the University of Maryland (1971) and her M.S. (1968) and B.S. (1967) from the University of Michigan.

—Allyn Jackson

Congressional Lunch Briefing

The AMS Washington Office held its annual lunch briefing on mathematics for members of Congress and staff on September 29, 1999, in the Rayburn House Office Building on Capitol Hill.

Despite the frantic pressures of appropriations deadlines in the last week of the government’s fiscal year, a satisfyingly large crowd of around sixty, including two members of Congress and many congressional staff, turned up to hear De Witt Sumners of Florida State University speak on “Calculating the Secrets of Life: Mathematics and Medicine”. Congressman Allen Boyd, R-FL, introduced Sumners, and AMS president Felix Browder acted as master of ceremonies. Also present was Congressman Vernon J. Ehlers, member of the House Committee on Science and, since the death of Congressman George Brown, the current “champion of science” in the House of Representatives.

Presidents of several scientific societies also attended: the American Chemical Society, the American Physical Society, the American Astronomical Society, the Materials Research Society, the Society for Industrial and Applied Mathematics, and the Federation of American Societies for Experimental Biology. The AMS, working with the other societies, had arranged for them to be in town for a day of meetings with National Science Foundation director Rita Colwell and members of Congress with responsibility for overseeing science funding and policy, including House Science Committee chairman James Sensenbrenner; Ralph M. Hall, ranking Democrat on the Science Committee; and legislative assistants for the important appropriations subcommittee on VA/HUD/Independent Agencies.

Sumners held the crowd’s attention with a lively illustrated discussion of a few areas of medical research, indicating how mathematics plays a role in this research. Noting that the human body is an extremely complicated biological system that generates extraordinary data, he pointed out that mathematics is needed to build models and navigation tools in order to turn this huge amount of data into useful knowledge. Mathematics is used to compute the structure and function of life-sustaining enzymes that operate on DNA. These same enzymes that sustain life are also involved in life-threatening diseases, such as cancer; understanding structure and function opens the door to therapy. Geometry is used to build sophisticated heart models so that better heart defibrillators can be designed. Mathematics is also critical in relating brain architecture, as revealed by high-resolution MRI scans, to brain function, as revealed by positron emission tomography and functional magnetic resonance imaging scans.

—Monica Foulkes, AMS Washington Office

Priceless Archimedes Manuscript on Display

Nearly destroyed many times and more than a thousand years old, The Archimedes Palimpsest is one of the most valuable books in the world. Sold at Christie’s auction house for $2 million, this priceless manuscript now belongs to an anonymous collector. Through January 3, 2000, Chicago’s Field Museum will display this unique manuscript in the exhibition "Eureka! The Archimedes Palimpsest". The book contains a compendium of mathematical treatises by Archimedes of Syracuse, the famous Greek mathematician born in 287 B.C. This will be the last showing to the public before the volume enters a five-year conservation program. This exhibition was organized by The Walters Art Gallery, Baltimore.

The Archimedes Palimpsest contains the only copy of the Method of Mechanical Theorems to survive into the twentieth century. When Danish philologist Johan Ludvig Heiberg discovered that the palimpsest contained this missing treatise, hidden under a religious text, it made front-page news in the New York Times on July 16, 1907. Containing the roots of modern calculus, the Method of Mechanical Theorems reveals a genius that parallels that of Einstein and Galileo. More than ninety years after its discovery, scholars and mathematicians still cannot explain how Archimedes arrived at the Method.

The Archimedes manuscript was written in the ancient city of Constantinople, now Istanbul, during the tenth century, over a thousand years after the great mathematician’s death. About two hundred years later, something remarkable happened: the book was cut up and covered over with another text. During the time of the crusades, religious books were in high demand, and parchment for these books was in short supply. The pages were cut in half, and a religious text was written sideways across the original manuscript. Because the Archimedes treatises were rubbed off and overwritten, it has been difficult until now to see their full contents. The hidden text can be seen clearly in the exhibition through computer-aided digital enhancement and interactive ultraviolet light displays.

The Field Museum is located at 1400 South Lake Shore Drive in Chicago. For general museum information, call 312-922-9410, or 312-665-7009 TDD for the hearing impaired. The museum’s Web site may be found at http://www.fieldmuseum.org/
For Your Information

CBMS2000 Survey Announced

The National Science Foundation (NSF) has announced funding of the Fall 2000 Conference Board on Mathematical Sciences (CBMS) survey (CBMS2000), the eighth in a series of quinquennial surveys and reports on undergraduate mathematical sciences education in the United States. In September of the year 2000, survey forms will be mailed to a stratified random sample of about 600 of the country’s 2,400 mathematics departments in two- and four-year colleges and universities. Following the pattern of the previous CBMS surveys, publication of the CBMS2000 report is planned for early in 2002. (The report on the 1995 CBMS survey appeared as the second volume in the MAA Reports series).

CBMS2000 will collect longitudinal data on the national mathematical sciences faculty and on detailed enrollment patterns in a wide spectrum of undergraduate mathematical sciences courses. In addition, there will be questions about certain “topics of opportunity”, chosen after consultation with many professional society committees. These topics include further study of the outcomes of calculus reform, a study of how undergraduate statistics is taught (and by whom), and an investigation of how K–8 teachers are prepared in mathematics during their college years.

To make suggestions about other topics of opportunity that should be studied by the CBMS2000 survey, please contact David Lutzer (Lutzer@math.wm.edu) or James Maxwell (jwm@ams.org), the codirectors of the CBMS2000 project; or Stephen Rodi (rodi@tenet.edu), the associate director for two-year colleges. Other members of the project steering committee are: Ray Collings, John Fulton, Carolyn Mahoney, Emily Puckette, Richard Scheaffer, and Elizabeth Stasny.

—David Lutzer and James Maxwell

DMS Employment Opportunities

Several of the technical staff of the Division of Mathematical Sciences (DMS) of the National Science Foundation (NSF) serve in one- to two-year visiting scientist or Inter-governmental Personnel Act appointments as program directors while on leave from universities, colleges, industry, or national laboratories. Since the timing of these positions is staggered, the division continually seeks talented applicants. In 2000 the division will be seeking to make appointments in all areas. Permanent program director appointments will also be considered.

The positions involve responsibility for the planning, coordination, and management of support programs for research (including multidisciplinary projects), infrastructure, and human resource development for the mathematical sciences. Normally this support is provided through merit-reviewed grants and contracts that are awarded to academic institutions and nonprofit, nonacademic research institutions.

Applicants should have a Ph.D. or equivalent training in a field of the mathematical sciences, a broad knowledge of one of the relevant disciplinary areas of the DMS, some administrative experience, a knowledge of the general scientific community, skill in written communication and preparation of technical reports, an ability to communicate orally, and several years of successful independent research normally expected of the academic rank of associate professor or higher. Skills in multidisciplinary research are highly desirable. Qualified women, ethnic/racial minorities, and/or persons with disabilities are strongly urged to apply. No person shall be discriminated against on the basis of race, color, religion, sex, national origin, age, or disability in hiring by the NSF.

Applicants should send a letter of interest and a vita to Bernard R. McDonald, Executive Officer, Division of Mathematical Sciences, National Science Foundation, 4201 Wilson Boulevard, Suite 1025, Arlington, Virginia 22230; telephone 703-306-1870; fax 703-306-0555.

—NSF announcement