

**AMERICAN MATHEMATICAL SOCIETY
EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES MEETING
MAY 16-17-2014**

MINUTES

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**AMERICAN MATHEMATICAL SOCIETY
EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES MEETING
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A joint meeting of the Executive Committee of the Council (EC) and the Board of Trustees (BT) was held Friday and Saturday, May 16-17, 2014, at the AMS Headquarters in Providence, Rhode Island.

All members of the EC were present: H el ene Barcelo, Robert L. Bryant, Ralph L. Cohen, Tara S. Holm, Kenneth A. Ribet, Carla D. Savage, and David A. Vogan, Jr.

All members of the BT were present: Ruth M. Charney, Mark L. Green, Jane M. Hawkins, William H. Jaco, Robert K. Lazarsfeld, Zbigniew H. Nitecki, David A. Vogan, Jr., and Karen Vogtmann.

Also present were the following AMS staff members: Thomas J. Blythe (Chief Information Officer), Graeme Fairweather (Executive Editor, Mathematical Reviews), Sergei Gelfand (Publisher), Robert M. Harington (Associate Executive Director, Publishing), Ellen H. Heiser (Assistant to the Executive Director [and recording secretary]), Ellen J. Maycock (Associate Executive Director, Meetings and Professional Services), Donald E. McClure (Executive Director), Emily D. Riley (Chief Financial Officer), and Samuel M. Rankin (Associate Executive Director, Washington Office).

Robin Marek (Director of Development) was present on Friday, May 16, only.

President David Vogan presided over the EC and ECBT portions of the meeting (items beginning with 0, 1, or 2). Board Chair William Jaco presided over the BT portion of the meeting (items beginning with 3).

Items in these minutes occur in numerical order, which is not necessarily the order in which they were discussed at the meeting.

0	CALL TO ORDER AND ANNOUNCEMENTS
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0.1 **Opening of the Meeting and Introductions.**

President Vogan called the meeting to order and asked those present to introduce themselves.

0.2 **Housekeeping Matters.**

Executive Director McClure mentioned some details about the schedule and arrangements for the events that took place during the current meeting.

1I	EXECUTIVE COMMITTEE INFORMATION ITEMS
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1I.1 **Secretariat Business by Mail. Att. #1.**

Minutes of Secretariat business by mail during the months December 2013 – April 2014 are attached (#1).

2	EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES ACTION/DISCUSSION ITEMS
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2.1 **Report on Committee on Meetings and Conferences (COMC). Att. #2.**

The ECBT received the attached report (#2) on the March 8, 2014 COMC meeting. The Chair of COMC for the period February 1, 2014 – January 31, 2015 is Graham Leuschke of Syracuse University.

2.2 **Report on Committee on the Profession (CoProf).**

The ECBT was informed that CoProf held its most recent meeting on September 28-29, 2013, at the AMS Headquarters in Providence, Rhode Island; a report on that meeting is included in the November 2013 ECBT minutes. The 2013 Annual Report on CoProf activities has been filed with the January 2014 Council and is also posted on the AMS website (www.ams.org/ams/cprof-home.html).

CoProf's next meeting is scheduled for September 13-14, 2014, at the Hilton Chicago O'Hare Airport Hotel. The Committee selected the Society's activities in the area of increasing participation at all levels of underrepresented groups (e.g. women, African Americans, Hispanic Americans, Native Americans) as the topic of its 2014 review. The Chair of CoProf for the period February 1, 2014 – January 31, 2015 is Allan Greenleaf of the University of Rochester.

2.3 Report on Committee on Science Policy (CSP). Att. #3.

The ECBT received the attached report (#3) on the March 13-15, 2014 CSP meeting.

Eric Friedlander, University of Southern California, chairs CSP again in 2014.

CSP held a joint session with the Committee on Education at the Joint Mathematics Meetings in Baltimore, MD. The panel discussion entitled “The Public Face of Mathematics” presented experienced spokespeople to share ideas and lead discussion about how the mathematics community can mobilize more members to become proactive in representing mathematics to the general public and to key audiences of leaders in discussions of public policy. Arthur Benjamin, Harvey Mudd College, moderated the session and panelists included Keith Devlin, Stanford University; Cathy O’Neill, Johnson Research Labs; Tom Siegfried, Freelance Journalist; and Steve Strogatz, Cornell University.

2.4 Report on Committee on Education (COE).

The ECBT was informed that COE co-hosted a session at the Joint Mathematics Meetings with the Committee on Science Policy in Baltimore, MD. The panel discussion entitled “The Public Face of Mathematics” presented experienced spokespeople to share ideas and lead discussion about how the mathematics community can mobilize more members to become proactive in representing mathematics to the general public and to key audiences of leaders in discussions of public policy. Arthur Benjamin, Harvey Mudd College, moderated the session and panelists included Keith Devlin, Stanford University; Cathy O’Neill, Johnson Research Labs; Tom Siegfried, Freelance Journalist; and Steve Strogatz, Cornell University.

Tara Holm, Cornell University, chairs COE again in 2014.

The next COE meeting is October 16-18, 2014 in Washington, DC.

2.5 Report on Mathematical Reviews Editorial Committee (MREC).

The ECBT was informed that MREC has not met since the last ECBT meeting. At this time, there is nothing new to report. The next meeting is scheduled for October 13, 2014 in Ann Arbor.

2.6 Report on Committee on Publications (CPub).

The ECBT was informed that CPub held its most recent meeting September 27-28, 2013, at the AMS Headquarters in Providence, RI. A report on that meeting was provided at the November 2013 ECBT and January 2014 Council meetings.

CPub’s 2013 Annual Report and current committee membership are available on the CPub homepage (www.ams.org/ams/cpub-home.html). Professor Charles Weibel, Rutgers University, will serve as Chair of CPub for the period February 1, 2014 – January 31, 2015.

The next CPub meeting will be Friday and Saturday, September 12-13, 2014, at the Chicago Hilton O'Hare. In accordance with CPub's annual review schedule, a subcommittee will be assembled to evaluate the AMS primary journals (*Journal of the AMS*, *Mathematics of Computation*, *Proceedings of the AMS*, and *Transactions of the AMS*) and present its report at the 2014 meeting. CPub's review of the primary journals was last conducted in 2010.

2.7 Washington Office Report. Att. #4.

The ECBT received the attached report (#4) on the activities of the Washington Office.

2.8 Report on Long Range Planning Committee (LRPC).

The ECBT was informed that the LRPC met on May 16, 2014 and received an update on strategic planning. (See also item item 2E.1 of the executive session minutes of this ECBT meeting.)

2.9 Report from the President.

President Vogan commented as follows:

- Among his duties as President is participating in meetings of umbrella organizations such as the Joint Policy Board for Mathematics (a collaborative effort of AMS, ASA, MAA, and SIAM), which met on April 28, 2014 in Washington, DC; and the Conference Board of the Mathematical Sciences (17 professional societies, including the AMS), which met on May 2, 2014 in Washington, DC. At the CBMS meeting, there was a huge discussion about STEM professionals and the goal of the Obama administration to increase the number of STEM professionals. President Vogan was interested to learn that, because of the way the US Department of Labor categorizes professions in the statistics it keeps, the category of "STEM professional" excludes anyone involved in education (e.g., university professors).
- The term of the current Chief Editor of the *Notices*, Steven Krantz, ends on January 31, 2016, so a search for a Chief Editor has been launched. Applications/nominations are welcome - see www.ams.org/notices/201406/rnoti-p573.pdf.
- The current Executive Editor of *Mathematical Reviews*, Graeme Fairweather, is retiring shortly. A search for his replacement is under way. Applications/nominations are welcome - see www.ams.org/notices/201407/rnoti-p791.pdf.

2.10 2015 Journal Pages and Prices.

The ECBT approved the following numbers of pages, and the BT approved the following prices, for 2015 journal subscriptions.

	2015 pages	2015 list prices
<i>Abstracts of Papers Presented to the AMS*</i>	1,100*	\$ 174
<i>Bulletin of the AMS</i>	768	\$ 555
<i>Conformal Geometry and Dynamics</i>	350	\$ 0
<i>Journal of the AMS</i>	1,200	\$ 380
MR Products		
Data Access Fee	NA	\$9,902
MathSciNet	NA	\$2,550
<i>Mathematics of Computation</i>	3,000	\$ 696
<i>Memoirs of the AMS</i>	3,800	\$ 860
<i>Notices of the AMS</i>	1,550	\$ 592
<i>Proceedings of the AMS</i>	5,240	\$1,489
<i>Proceedings of the AMS, Series B</i>	600	\$ 0
<i>Representation Theory</i>	500	\$ 0
<i>St. Petersburg Mathematical Journal*</i>	1,000*	\$2,282
<i>Sugaku Expositions</i>	240	\$ 255
<i>Theory of Probability and Mathematical Statistics*</i>	375*	\$ 872
<i>Transactions of the AMS</i>	8,880	\$2,445
<i>Transactions of the AMS, Series B</i>	600	\$ 0
<i>Transactions of the Moscow Mathematical Society*</i>	300*	\$ 618
*the numbers of pages for these journals are not completely within the staff's control, so they are currently the staff's best estimates and were included in the version of the 2015 budget presented at this meeting.		

The ECBT discussed the large backlogs in *Memoirs*, *Proceedings*, and *Transactions*, and considered the plans presented for eliminating them over the course of the next four to six years.

Although the ECBT voted to approve the recommended page increases for 2015 for *Memoirs*, *Proceedings*, and *Transactions* as a first step toward decreasing the backlogs, no action was taken on the plans to make other temporary or permanent increases for future years. The ECBT was reluctant to take further action because the reasons for the backlogs are not completely understood at this point, so it is difficult to determine the best course of action to eliminate them and then keep them at acceptable levels going forward. It was suggested that the Editorial Boards Committee and the Committee on Publications be alerted to the concerns about the backlogs in *Memoirs*, *Proceedings*, and *Transactions* and asked for their advice.

2.11 2015 Individual Member Dues.

The process for setting individual dues for year x starts in November of year x-2 when the ECBT makes a recommendation to the Council. The Council then acts on that recommendation and sends it back to the BT for final ratification.

The January 2014 Council approved the BT's recommendation that the 2015 "Regular Member" dues rate for those in the high-income category be set at \$184 (this represents a \$4 increase over the 2014 rate). The income level cutoff remains at \$85,000.

The BT ratified the January 2014 Council's decision.

2.12 2015 Institutional Member Dues.

The ECBT approved an average increase of 3% in institutional member dues for 2015.

2.13 Registration Fees for the January 2015 Joint Mathematics Meetings.

The ECBT reviewed budget summaries for the January 2015 San Antonio, Texas Joint Meetings and exhibits. Based on this information, the ECBT voted to advise the June 2014 Joint Meetings Committee (JMC) that any increase in the member preregistration fee should be $\leq 5\%$, and if there is any increase in the fees for students and unemployed (and other similar categories), it should be minimal. [It is noted for the record that the June 2014 JMC set the member pre-registration fee at \$252, which is a 5% increase.]

2.14 Using AMS Points to Donate to Book Donation Program.

Several years ago, the ECBT approved a trial plan to allow AMS Points to be used for donations to the Book Donation Program. An AMS Point entitles the holder to a \$1 discount on the purchase of AMS publications (and, within certain limits, to their own membership dues). Points are awarded to MR Reviewers and members of certain committees. The idea was to create collections of books that could be purchased partially or entirely by points. These collections would then be donated to the [Book Donation Program](#) and become available to institutions in developing countries. This project had been postponed until the new association management software, Personify, was implemented. Personify has now been implemented, so the ECBT was asked to consider whether to revive the project. The ECBT took no action.

2.15 Report on Petitions for Student Chapters. Att. #7.

The ECBT received the attached report (#7) on the petitions for Student Chapters that have been approved by the Secretariat since the last ECBT meeting. As of April 1, 2014, there were 25 Student Chapters.

2.16 Stipend and Expense Allowance for Centennial Fellowship.

The ECBT approved awarding one Centennial Fellowship for 2015-2016 in the amount of \$87,000, with an expense allowance of \$8,700. (But see also item 2I.6 below.)

2.17 Approval of Proposals Submitted to Funding Agencies and Foundations. Att. #27.

The ECBT received the following report

- Based on approval at the May 2013 ECBT meeting, the following proposal was submitted:
NSF proposal Math In Moscow, support for student participants, renewal, \$333,000.

- Based on approval at the November 2013 ECBT meeting, the following proposal was submitted:
CBMS2015: A Study of Undergraduate Programs in the Mathematical and Statistical Sciences in the United States. Submitted in March to the Directorate for Education & Human Resources, National Science Foundation, \$633,000.

- Based on approval at the May 2013 ECBT meeting, the following proposals are being prepared and will be submitted:
 1. Private foundation proposal for support to broaden and accelerate the development of MathJax. AMS and SIAM will prepare a joint proposal.
 2. NSF proposal for 2015 Summer Institute in Algebraic Geometry

Further details are provided in Att. #27.

2.18 2015 ABC and ECBT Meetings.

The ECBT approved the following dates and sites for 2015 Agenda and Budget Committee (ABC) and ECBT meetings:

ABC	March 27, 2015 (Friday)	by conference call
ECBT	May 15-16, 2015 (Friday-Saturday)	Ann Arbor, Michigan
ABC	October 9, 2015 (Friday)	Providence, Rhode Island
ECBT	November 20-21, 2015 (Friday-Saturday)	Providence, Rhode Island

It was noted that the members of the ABC in 2015 will be: Bryant, Charney, Hawkins, Nitecki, and Savage.

2.19 Motions of the Secretary.

The following motions were approved by acclamation:

*Be it resolved that the Executive Committee and Board of Trustees of the American Mathematical Society accept the retirement of **Ellen J. Maycock** with deep appreciation for her faithful and exceptional service over the past nine years.*

During her tenure at the AMS, Ellen has led the Meetings and Professional Services Division as it has matured and become the

centerpiece for our outreach. Ellen has been instrumental in implementing many successful programs, including Mathematics Research Communities, Fellows of the AMS, Mathprograms.org, Graduate Student Chapters, and Graduate Student and AMS-Simons Travel Grants. In the highest and broadest sense, Ellen has fulfilled the Society's mission to further the interests of mathematical research and scholarship.

The members of the Executive Committee and Board of Trustees appreciate all that she has accomplished for the Society and for the greater mathematical community, and offer Ellen their special thanks and heartfelt good wishes for a happy and well-deserved retirement.

*Be it resolved that the Executive Committee and Board of Trustees of the American Mathematical Society accept the retirement of **Graeme Fairweather** with deep appreciation for his exceptional service to the American Mathematical Society.*

During the past six years, Graeme has led Mathematical Reviews through a period of transition in which it has grown better, year after year. Graeme has built upon the previous success of Mathematical Reviews to create a product that is indispensable to the mathematics community around the world. He has done this while protecting and strengthening the organization that creates that product.

Graeme's wisdom, skill, and dedication in leading Mathematical Reviews have been a great asset to the American Mathematical Society. In the highest and broadest sense, he has fulfilled the Society's mission to further the interests of mathematical research and scholarship.

The members of the Executive Committee and Board of Trustees appreciate all that he has accomplished for the Society and for the greater mathematical community, and offer Graeme their special thanks and heartfelt good wishes for a happy and well-deserved retirement.

2C EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES CONSENT ITEMS

2C.1 November 2013 ECBT Meeting.

The ECBT approved the minutes of the meeting of the Executive Committee and Board of Trustees held November 22-23, 2013, in Providence, Rhode Island, that had been distributed separately. These minutes include:

- ECBT open minutes prepared by the Secretary of the Society:
www.ams.org/about-us/governance/board/ecbt-minutes-1113.pdf
- ECBT executive session minutes prepared by the Secretary of the Society

See also item 3C.1.

2I EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES INFORMATION ITEMS

2I.1 State of the AMS.

As is tradition, the Executive Director's annual report was delivered orally at the April 2014 Council meeting. The written report is then usually delivered to this ECBT meeting, but it was not yet available.

2I.2 Changes in Registration Fees Authorized by the Executive Director. Att. #10.

The Executive Director is authorized to make changes in registration fees for conferences, the Employment Information in the Mathematical Sciences (EIMS), the Employment Center and Short Courses held at the Joint Mathematics Meetings, and for MathJobs.org and MathPrograms.org. Att. #10 reports the changes authorized since the last ECBT meeting.

2I.3 AMS Presence at the SACNAS Annual Meeting. Att. #11.

The AMS provides \$5,000 toward support of the mathematics program at the annual national meetings of the Society for Advancement of Chicanos and Native Americans in Science (SACNAS). Public Awareness Officers Annette Emerson and Mike Breen represented the AMS at the most recent meeting on October 3 - 6, 2013, in San Antonio, Texas. There was also a session of the game, "Who Wants to be a Mathematician," that was very popular. Att. #11 is a report on the activities related to mathematics at this meeting.

SACNAS has shown itself to be highly effective at nurturing talented undergraduates from within their target communities to successful completion of graduate degrees in science and mathematics. AMS's continuing support for and presence at the SACNAS national meetings has enabled it to build strong ties within this community of scholars committed to excellence.

2I.4 Report on Awards from the Epsilon Fund for Young Scholars Program. Att. #12.

The Epsilon Fund was created by the Society in 1999 to provide support for the Young Scholars Program. The Program awards grants, which support student scholarships and program operating costs, to selected summer programs for mathematically talented high school students. This year, the Young Scholars Awards Committee evaluated 25 applications for support from the Epsilon Fund, and recommended funding 22 of them. The members of the Committee are: Douglas Norton, Cornelius Pillen (Chair), Tatiana Shubin and William Velez. A list of the programs funded for summer 2014 is attached (#12).

2I.5 Report on AAAS Meeting. Att. #13.

A report on the AMS-supported activities at the 2014 annual meeting of the American Association for the Advancement of Science (AAAS) is attached (#13).

2I.6 2013-2014 AMS Centennial Fellowship.

Upon recommendation of the AMS Centennial Fellowship Committee, Kate Juschenko (Northwestern) was offered the 2014-2015 Centennial Fellowship. Professor Juschenko has accepted the award. The amount of the Fellowship for 2014-2015 will be \$85,000, with an additional expense allowance of \$8,500. [Subsequent to this meeting, Professor Juschenko declined the Centennial Fellowship because she received a National Science Foundation CAREER Award. It was decided it was too late to select another Centennial Fellow for 2014-2015, so there is the possibility that two awards can be made next year (for 2015-2016) instead of one.]

2I.7 AAAS-AMS Mass Media Fellowship.

The AMS will sponsor a Mass Media Fellow again in 2014. Applications have been reviewed and selections will be made soon.

The Mass Media Fellowship program is organized by the American Association for the Advancement of Science (AAAS) and is intended to strengthen the connections between science and the media, to improve public understanding of science, and to sharpen the ability of the fellows to communicate complex scientific issues to non-specialists. It is a ten-week summer program that places graduate and post-graduate level science, engineering and mathematics students at media organizations nationwide.

An announcement of the selection of AMS Mass Media Fellow for 2014 will be made in the *Notices* and posted on the AMS website.

2I.8 Congressional Fellow.

The AMS, in conjunction with the American Association for the Advancement of Science (AAAS), will again sponsor a Congressional Fellow from September 2014 through August 2015.

The Fellow will spend a year working on the staff of a Member of Congress or a congressional committee, working as a special legislative assistant in legislative and policy areas requiring scientific and technical input.

The fellowship is designed to provide a unique public policy learning experience, to demonstrate the value of science-government interaction, and to bring a technical background and external perspective to the decision-making process in the Congress.

Applications invited from individuals in the mathematical sciences are currently being reviewed and a selection will be made shortly. An announcement of the AMS Congressional Fellow for 2014-15 will be made in the *Notices* and posted on the AMS website.

The current AMS Congressional Fellow, Karen Saxe, is working in the office of Senator Al Franken (D-MN).

2I.9 NSF-EHR Grant Writing Workshop.

The AMS, in conjunction with the National Science Foundation (NSF)'s Directorate of Education and Human Resources (EHR), again organized a workshop at the Joint Mathematics Meetings in Baltimore, MD on how to write a competitive proposal to the NSF-EHR. This interactive workshop provided information on EHR programs with the goal of preparing participants in writing a competitive proposal.

2I.10 JMM Session on "Transforming Post-Secondary Education In Mathematics".

The AMS, MAA and SIAM co-sponsored a panel at the Joint Mathematics Meetings (JMM) in Baltimore, MD entitled "Transforming Post-Secondary Education in Mathematics." Panel topics included a more useful undergraduate experience; the evolving needs and expectations of undergraduates who take mathematics; implications for mathematics departments of the economic and productivity issues facing higher education; and lowering barriers to STEM success.

Session organizers were Eric Friedlander, Jim Gates, Mark Green, Phillip Griffiths, Tara Holm and Uri Treisman. The panel was moderated by Phillip Griffiths. Panelists included Michele Cahill, Vice-President, National Programs, Carnegie Corporation of New York; Jo Handelsman, Yale University; Brit Kirwan, Chancellor, University of Maryland; Joan Leitzel, former President, University of New Hampshire; and comments were provided by Congressman Jerry McNerney (CA-9).

2I.11 Transforming Post-Secondary Education in Mathematics Project.

Transforming Post-Secondary Education in Mathematics (TPSE Math), sponsored jointly by the Carnegie Corporation of New York and the Alfred P. Sloan Foundation, aims to effect constructive change in mathematics education at community colleges, four-year colleges and research universities.

The group of organizers of TPSE Math includes several volunteer leaders of the AMS. Spearheading the effort are Eric Friedlander, University of Southern California; Jim Gates, University of Maryland; Mark Green, University of California-Los Angeles; Phillip Griffiths, Institute for Advanced Study; Tara Holm, Cornell University; and Uri Treisman, University of Texas at Austin.

A meeting is being organized at the University of Texas, Austin on June 20-22, 2014, bringing together various stakeholders from mathematics departments, university administrations and foundations and industry. Goals include writing white papers and producing concrete suggestions for implementing change in mathematics departments.

A website has been created for the project at www.tpsemath.org.

2I.12 Report on Use of Funds Collected for FIMU on AMS Membership Renewal Form.

In May 2011, the ECBT approved changing the designated use of contributions by AMS members to Friends of the International Mathematical Union (FIMU). Starting in July 2011, the contributions have been designated to “foster mathematics research and scholarship in developing countries.” In 2012, the International Mathematical Union (IMU) established a new account named the *IMU Developing Country Fund* to segregate the funds received in response to the new designation. (Prior to July 2011, contributions from members of the AMS were designated for the *IMU Special Development Fund* for support of travel to the International Congress of Mathematicians by mathematicians from developing countries.)

The table below summarizes the 2011 and 2012 receipts:

Donations Received	Fund	Amount in US\$
2012	IMU Developing Country Fund	14,666.00
2013	IMU Developing Country Fund	12,134.00

The IMU reports that the funds designated for the *IMU Developing Country Fund* (\$26,800) were used in 2013 and will be used in 2014 and 2015 for the Commission for Developing Countries (CDC) “Capacity & Networking Project (CANP)”; see <http://www.mathunion.org/cdc/education-and-capacity-building/canp-project/>.

CANP aims to enhance mathematics education at all levels in developing countries so that their people are capable of meeting the educational challenges they face. It strives to develop the educational capacity of those responsible for mathematics teachers, and to create sustained and effective regional networks of teachers, mathematics educators and mathematicians, also linking them to international support.

CANP consists of an on-going series of programs in a different developing region each year. The first program held its first workshop in Mali in September, 2011. The second was in Costa Rica in August 2012. The third was in Phnom Penh, Cambodia in October 2013 to build on existing developing initiatives in Cambodia and Nepal. The fourth will be in Dar es Salaam, Tanzania (East Africa) in September 2014. Each program has, at its center, a two-week workshop of about forty participants, half from the host country and half from regional neighbors.

3 BOARD OF TRUSTEES ACTION/DISCUSSION ITEMS
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3.1 Financial Review.

3.1.1 Discussion of Fiscal Reports.

The BT received and discussed various fiscal reports. It was noted that approval of the 2015 budget will be requested at the November 2014 ECBT meeting.

3.1.2 Capital Expenditures – 2013 and 2014 Capital Purchase Plans.

Capital purchases in 2013 totaled \$1,412,127, compared to a budgeted amount of \$1,734,000. The purchases included the Personify association management software implementation. The purchases were under budget, primarily because planned building renovations at the Ann Arbor and Providence facilities were postponed.

The 2014 capital budget totals \$450,000; actual expenditures will most likely exceed that amount because the building renovations that were not done in 2013 will be done in 2014.

3.1.3 Capital Expenditures - Approval of Specific Purchases.

A request for authorization to make computer room renovations at the Ann Arbor office was included in the agenda, but then withdrawn in order to allow more time to address some issues that came to light just prior to this meeting.

3.2 Spendable Income, Operations Support Fund and Other Related Items. Att. #14.

The Society uses its long-term investments for several purposes, and for that reason it divides its investments into various funds. The following five standing items deal with those funds – additions, transfers and spending.

The description of the way in which the AMS uses its long-term investment portfolio is summarized in the diagram in Att. #14, which has labels showing how the five parts of Item 3.2 are connected to the process.

3.2.1 Addition to Operations Support Fund (OSF).

At its November 2013 meeting, the Board approved the staff recommendation that the amount owed to operations¹ from the long-term investment portfolio at December 31, 2013 would remain there and be added to the Operations Support Fund (OSF). The total added at December 31, 2013 to the OSF was \$1,760,239.

¹ The amount owed to operations arises as a result of spendable income netted against contributions to endowment and Board designated funds.

At December 31, 2013, the Society's current assets totaled \$19,837,974 and its current liabilities totaled approximately \$16,108,273 resulting in a current ratio² of 1.2 to 1. In the past, the Society has targeted a ratio of 1 to 1 for current assets to current liabilities. The current ratio is slightly lower than the 2012 ratio of 1.25.

Each year, the operating portfolio, current ratio, and other factors are evaluated to determine if additions can be made to the OSF. The last addition was \$2,000,000, approved to be added to the OSF at the May 2011 ECBT meeting. There is not additional cash from operations available to invest in the long-term portfolio at this time.

3.2.2 Rebalancing of Economic Stabilization and Operations Support Funds.

Under the policy adopted by the Board of Trustees at its May 2006 meeting, at the end of each fiscal year the allocated values of the Economic Stabilization Fund (ESF) and the Operations Support Fund (OSF) are rebalanced such that the ESF always equals the target balance.

The amount and direction of the rebalancing required at each year end is principally dependent upon the return on the long-term investment portfolio in any year. This return was approximately 22.5% for 2013; accordingly, the ESF transferred approximately \$5,900,000 to the OSF at the end of 2013.

3.2.3 Allocation of Operations Support Fund (OSF) Spendable Income.

The May 2001 Board of Trustees approved the following (from item 2E.5 of those minutes):

Income from reserves should be allocated to each year's budget to service and outreach programs of the Society (without specifying exactly which programs). The total amount should be approved by the May ECBT, when revenue projections for the following year are made.

The spendable income from the OSF for 2014 and 2015, determined according to the guidelines approved by the BT is \$1,776,000 and \$2,048,000, respectively. The 2014 amount has been previously approved at the 4% spending rate that was adopted for 2013.

The BT approved Chief Financial Officer Riley's recommendation that \$2,048,000 be designated as OSF spendable income for 2015 at the spending rate of 4%.

3.2.4 Appropriation of Spendable Income from Unrestricted Endowment.

² The current ratio is the Society's current assets from the balance sheet divided by the current liabilities. It is a liquidity ratio that measures the Society's ability to pay short-term obligations. A ratio under 1 generally suggests that an organization would not be able to pay its short-term obligation if they came due at that point in time.

The May 2001 Board of Trustees approved the following (from item 2E.5 of those minutes):

Each year, the budgeting process will include recommendations for allocating spendable income from the Unrestricted Endowment for specific projects. The allocated income will be treated as revenue for operations, offsetting (part of) the expenses. These recommendations will be brought to the Board for approval at its November meeting in the normal budgeting process. The goal will not be to use all the income from such funds each year, but rather to use some of the income every year for the support of mathematical research and scholarship. Using such income should be a regular part of our operations rather than an exceptional situation.

The 2015 preliminary revenue budget includes the full amount of 2015 spendable income from unrestricted true endowment funds under the assumption that appropriate projects will be designated to receive the income. The amounts budgeted for 2014 and 2015 are \$217,400 and \$239,400 respectively. The BT will vote on the use of the spendable income for 2015 by specific projects at its November 2014 meeting.

3.2.5 Report on Changes in Appropriated Spendable Income and Use of EISF Funds.

The Executive Director has the authority to transfer spendable income that will not be used on an approved project to another approved project, in case additional support is needed. There will be no transfer of spendable income at this time.

In 2013, approximately \$31,000 of the Endowment Income Stabilization Fund (EISF) was used to supplement the restricted endowment spendable income. The following endowment funds did not produce enough spendable income to fully fund awards:

- Veblen
- Wiener
- Satter
- Centennial Fellowship
- Exemplary Department
- Art Exhibit Prize

With the exception of Veblen and the Centennial Fellowship, most of the funding from the EISF was under \$1,000. Approximately \$28,000 of the EISF was used for the Centennial Fellowship and about \$2,200 was used for fund the Veblen award.

3.3 Audit Committee. Att. #30.

Audit Committee Chair Jane Hawkins reported that the Committee met on May 16, 2014 with the following representatives from the auditing firm of Mayer Hoffman McCann P.C.:

- Michael Burns, Managing Director
- Joyce Masse Troy, Principal

to hear a report on the 2013 audit and to review the draft audited financial statements for the years ended December 31, 2013 and 2012 (these documents had been provided separately prior to the meeting to all members of the BT). Several other BT and staff members attended the meeting, and the Audit Committee also met with Burns and Troy without staff present.

The BT approved the Audit Committee's recommendation to accept the draft audited financial statements for the years ended December 31, 2013 and 2012 and delegate to management final resolution of minor edits and issuance of the final statements. The final statements are attached (#30).

The BT approved the Audit Committee's recommendation to continue with Mayer Hoffman McCann P.C. as the Society's auditors for three years at the following fees: \$71,500 (2014), \$73,500 (2015), \$75,000 (2016).

The BT was informed that the Audit Committee has decided to get separate liability limits of \$5,000,000 each on the insurances for Directors & Officers and Employment Practices Liability (rather than one shared liability limit of \$5,000,000). Also, the Chief Financial Officer is looking into the possibility of the AMS self-insuring for flood insurance (see also item 3E.4 of the executive session minutes of this ECBT meeting).

3.4 Investment Committee.

Investment Committee Chair Jane Hawkins reported that the Committee met on May 15, 2014, and discussed the following topics (none of which required any action by the BT at this time):

- Performance review (portfolio returns vs. benchmarks)
- Asset allocation (whether any rebalancing is needed to conform to the current asset allocation policy)
- Spending rate (current rate is 4%; next scheduled review by BT in May 2017)
- Commodity funds (preliminary discussion regarding the possibility of including in the long-term portfolio)

3.5 Cash Management and the Operating Portfolio. Att. #15.

The BT received the attached report (#15) summarizing the Society's cash management policies and short-term investment performance during 2013.

The BT approved the Chief Financial Officer's recommendation that the maximum investment limit for the convertible securities fund investment be raised to 30% of the intermediate-term portion of the operating portfolio.

3.6 Report on the Personify Project. Att. #16.

The BT received the attached report (#16) on the Personify Project.

3.7 Meeting of the Mathematical Reviews Corporation.

In 1983, when the building that currently houses Mathematical Reviews was purchased, a Michigan non-profit corporation was formed in order to obtain exemption from local property taxes in Ann Arbor and from sales and use taxes in Michigan. In order to maintain these exemptions, the corporation ("Mathematical Reviews") must be maintained by holding an annual meeting at which the Officers and Directors of the corporation are elected.

The AMS Board of Trustees meeting was therefore temporarily adjourned, and the AMS Trustees convened as the Board of Directors of the Mathematical Reviews Corporation.

The Board of Directors of the Mathematical Reviews Corporation elected the following officers:

President of the Corporation:	William H. Jaco
Treasurer of the Corporation:	Jane M. Hawkins
Secretary of the Corporation:	Zbigniew Nitecki
Directors of the Corporation:	Ruth M. Charney
	Mark L. Green
	Robert K. Lazarsfeld
	David A. Vogan, Jr.
	Karen Vogtmann

The meeting of the Board of Directors of the Mathematical Reviews Corporation then adjourned and the meeting of the AMS Board of Trustees reconvened.

3C BOARD OF TRUSTEES CONSENT ITEMS

3C.1 November 2013 BT Closed Executive Session Meeting.

The BT approved the minutes of the closed executive session meeting of the Board of Trustees held November 23, 2013, in Providence, Rhode Island, which had been distributed separately.

3C.2 Procedures for Appeals for Discounted Subscriptions.

The BT approved the following guidelines for 2015:

- Minimum price for MR Data Access Fee (DAF) of \$200 applicable to institutions in countries found in the two poorest World Bank country listing. Staff can provide this level of discount even if the country does not have a national DAF.
- The discounted price for MR DAF for domestic institutions would not be lower than the greater of 40% of a list price DAF or 40% of the institution's mathematical sciences serials budget, not to exceed regular list price for a DAF.
- The discounted price for MR DAF for non-domestic institutions not included in the first category above would not be lower than 40% of a DAF. To the extent possible, information about serials budgets would also be collected, and, if desired, staff would provide information on publishing activity at the institution.
- Allowable prices for MathSciNet (MSN) can be no less than the lowest published price.
- For other AMS journals, the lowest allowable price would be marginal cost, applicable to the most desperate cases.
- Participation is restricted to academic institutions.

It was noted that, as of 2014, the AMS no longer publicly displays the two separate fees for DAF and MSN; just one fee called MathSciNet is displayed. However, for purposes of pricing MSN Consortia, staff maintains the two-fee pricing structure internally.

3C.3 Resolutions for Retirees.

The BT approved the following proclamations for employees who will retire shortly:

*Be it resolved that the Trustees accept the retirement of **Deborah J. Antuono** with deep appreciation for her faithful service over a period of 15 years. The Board expresses its profound gratitude for this long record of faithful service. It is through the dedication and service of its employees that the Society is able to effectively serve its members and the greater mathematical community. The Trustees offer Deborah their special thanks and heartfelt good wishes for a happy and well-deserved retirement.*

*Be it resolved that the Trustees accept the retirement of **Pamela Ball** with deep appreciation for her faithful service over a period of 27 years. The Board expresses its profound gratitude for this long record of faithful service. It is through the dedication and service of its employees that the Society is able to effectively serve its members and the greater mathematical community. The Trustees offer Pamela their special thanks and heartfelt good wishes for a happy and well-deserved retirement.*

*Be it resolved that the Trustees accept the retirement of **Bogdan Dudzik** with deep appreciation for his faithful service over a period of 40 years. The Board expresses its profound gratitude for this long record of faithful service. It is through the dedication and service of its employees that the*

Society is able to effectively serve its members and the greater mathematical community. The Trustees offer Bogdan their special thanks and heartfelt good wishes for a happy and well-deserved retirement.

*Be it resolved that the Trustees accept the retirement of **Carol Hill** with deep appreciation for her faithful service over a period of 45 years. The Board expresses its profound gratitude for this long record of faithful service. It is through the dedication and service of its employees that the Society is able to effectively serve its members and the greater mathematical community. The Trustees offer Carol their special thanks and heartfelt good wishes for a happy and well-deserved retirement.*

*Be it resolved that the Trustees accept the retirement of **Nancy G. Kaul** with deep appreciation for her faithful service over a period of 32 years. The Board expresses its profound gratitude for this long record of faithful service. It is through the dedication and service of its employees that the Society is able to effectively serve its members and the greater mathematical community. The Trustees offer Nancy their special thanks and heartfelt good wishes for a happy and well-deserved retirement.*

3I BOARD OF TRUSTEES INFORMATION ITEMS

3I.1 Change in Fringe Benefits.

The November 1996 BT authorized the Executive Director to approve changes in benefit plans (except for those changes which would significantly enhance or degrade the Society's financial health or relations with its employees) and asked that these changes be reported to the BT when appropriate.

Effective March 1, 2014, health and dental benefits offered to staff in all locations were standardized (Michigan employees were formerly on a separate plan). Employees are offered a high deductible health insurance plan coupled with a Section 105 Health Reimbursement Arrangement, as well as a base dental plan with an option to buy-up to a plan with a richer benefit level. No changes were made to the contribution percentage paid by the Society; however, the additional cost of the dental buy-up plan is fully funded by employees.

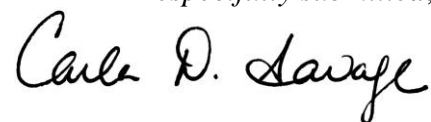
3I.2 Update on the eJournal Package Offering in 2014.

In 2014, the Publishing Division launched an eJournal package for existing MathSciNet (MSN) consortia subscribers. Due to the timing of the approval of the eJournal package (late May), it was offered to a select group of MSN consortia. Because of the late launch, the package offering did not succeed in attracting too many participants and staff had to be flexible on the

80% of subscribers rule; but, overall, staff is encouraged by the results to date and expects the program to grow in 2015.

Current eJournal Package Consortia			
Consortium	# of Participants	# of New Subs added	Additional \$\$
Midwest Library Consortium - US	5	29	\$4,555
Eduserv - UK	6	32	\$4,748
CEPIEC - China	24	155	\$18,361
Totals	35	216	\$27,663

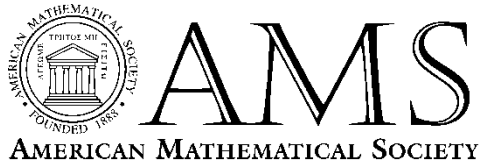
Respectfully submitted,



Carla D. Savage, Secretary

Raleigh, North Carolina

July 25, 2014



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**SECRETARIAT
Business by Mail
December 1, 2013**

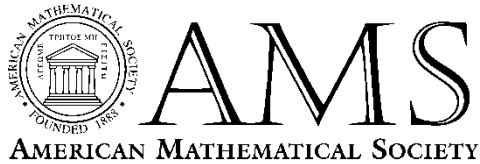
**MINUTES
from the Ballot dated November 1, 2013**

There were five votes cast by Georgia Benkart, Brian Boe, Michel Lapidus, Carla Savage, and Steven Weintraub.

1. Approved electing to membership the individuals named on the list dated October 20, 2013.
2. Approved the minutes of the Secretariat Business by Mail from the ballot dated October 1, 2013.
3. Approved the University of Canterbury, in Christchurch, New Zealand, as a new International Institutional Member.
4. Approved the University of Technology, Sydney, in Broadway, Australia, as a new International Institutional Member.
5. Approved a request to change the date of the AMS-EMS-SPM International Meeting from June 11-14, 2015 to June 10-13, 2015.
6. Approved a proposal from Washington State University in Pullman to host the Spring 2017 Meeting of the AMS Western Sectional Meeting on April 22-23, 2017.
7. Approved a proposal from the College of Charleston to host the Spring 2017 Southeastern Sectional Meeting on Mar. 10-12, 2017.
8. Approved a petition from Boston University to establish a graduate student chapter.

9. Approved a petition from California State University, San Marcos to establish a graduate student chapter.
10. Approved a petition from Clemson University to establish a graduate student chapter.
11. Approved a petition from Georgia Institute of Technology to establish a graduate student chapter.
12. Approved a petition from Indiana University - Purdue University Indianapolis to establish a graduate student chapter.
13. Approved a petition from North Carolina State University to establish a graduate student chapter.
14. Approved a petition from Rutgers University to establish a graduate student chapter.
15. Approved a petition from University of British Columbia to establish a graduate student chapter.
16. Approved a petition from University of California, Riverside to establish a graduate student chapter.
17. Approved a petition from University of Houston to establish a graduate student chapter.
18. Approved a petition from University of Kansas to establish a graduate student chapter.
19. Approved a petition from University of Mississippi to establish a graduate student chapter.

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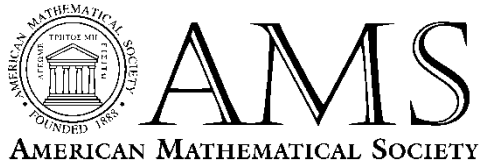
**SECRETARIAT
Business by Mail
January 1, 2014**

**MINUTES
from the Ballot dated December 1, 2013**

There were five votes cast by Georgia Benkart, Brian Boe, Michel Lapidus, Carla Savage, and Steven Weintraub.

1. Approved electing to membership the individuals named on the list dated November 20, 2013.
2. Approved the minutes of the Secretariat Business by Mail from the ballot dated November 1, 2013.
3. Approved the American University of Sharjah, in Sharjah, United Arab Emirates, as a new International Institutional Member.
4. Approved the University of Otago, Dunedin, New Zealand, as a new International Institutional Member.
5. Approved the Sultan Qaboos University, Muscat State, Oman, as a new International Institutional Member.

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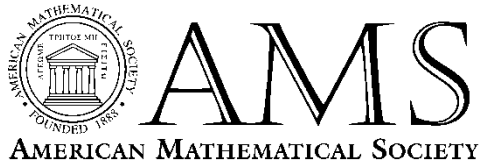
**SECRETARIAT
Business by Mail
February 3, 2014**

**MINUTES
from the Ballot dated January 2, 2014**

There were five votes cast by Georgia Benkart, Brian Boe, Michel Lapidus, Carla Savage, and Steven Weintraub.

1. Approved electing to membership the individuals named on the list dated December 20, 2013.
2. Approved the minutes of the Secretariat Business by Mail from the ballot dated December 1, 2013.

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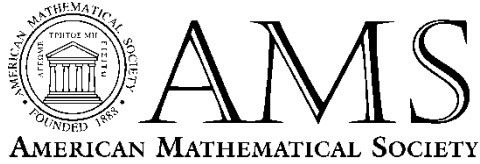
**SECRETARIAT
Business by Mail
March 3, 2014**

**MINUTES
from the Ballot dated February 3, 2014**

There were five votes cast by Georgia Benkart, Brian Boe, Michel Lapidus, Carla Savage, and Steven Weintraub.

1. Approved electing to membership the individuals named on the list dated January 20, 2014.
2. Approved the minutes of the Secretariat Business by Mail from the ballot dated January 2, 2014.
3. Approved the proposal from North Dakota State University in Fargo, ND to host the spring 2016 Meeting of the AMS Central Sectional Meeting on April 16-17, 2016.
4. Approved holding an AMS Council meeting on April 25, 2015, at a facility near O'Hare airport in Chicago, Illinois.

Carla D. Savage



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Carla D. Savage, Secretary

**SECRETARIAT
Business by Mail
April 1, 2014**

**MINUTES
from the Ballot dated March 1, 2014**

There were five votes cast by Georgia Benkart, Brian Boe, Michel Lapidus, Carla Savage, and Steven Weintraub.

1. Approved electing to membership the individuals named on the list dated February 20, 2014.
2. Approved Xiamen University, Fujian, China as a new Institutional Member.
3. Approved the minutes of the Secretariat Business by Mail from the ballot dated February 3, 2014.
4. Approved the petition from the University of Wisconsin, Madison to establish a graduate student chapter.

Carla D. Savage

AMS Committee on Meetings and Conferences

Highlights of 2014 Meeting

The Committee on Meetings and Conferences (CoMC) held its annual meeting on March 8, 2014, at the Hilton Chicago O'Hare Airport Hotel. Graham Leuschke, chair, presided over the meeting

Introductory items

The meeting began with a round of introductions. Time was then devoted to discussing the components that play roles in AMS meetings: the Secretariat, the Meetings and Conferences Department, and CoMC. The history of some decisions made by CoMC was reviewed. Secretary Carla Savage and AMS staff members AED Ellen Maycock and Director of Meetings and Conferences Penny Pina answered questions posed by CoMC members.

Reports

- **Secretariat.** Carla Savage reported on the March 7, 2014, Secretariat meeting.
 - **Upcoming Joint International Meetings:**
 - Israel, June 16-19, 2014, in Tel Aviv.
 - Portugal, June 10-13, 2015, in Porto (with the European Mathematical Society).
 - Tentative: December 2016, to be held with the Indian Mathematical Society and the Ramanujan Mathematical Society.
 - Tentative (contingent on Council approval for the AMS to join the Mathematical Council of the Americas): July 23 – 28, 2017, Mathematical Congress of the Americas, in Montréal.
 - **2013-2014 Einstein Lectures.** The 2013 Einstein Lecture was given by Jon Kleinberg at Washington University in St. Louis, Missouri, on October 12, 2013. The 2014 Einstein Lecture will be held on October 25-26, 2014, at San Francisco State University. James H. Simons will be the speaker.
 - **2013-2014 Erdős Lectures.** A 2013 Erdős Memorial Lecture was held at Iowa State University on April 27, 2013. The lecturer was Endre Szemerédi. Another 2013 Erdős Memorial Lecture was held at Temple University on October 12, 2013. The lecturer was Barry Mazur. The 2014 Erdős Memorial Lecture was given on March 21, 2014. The lecturer was Maria Chudnovsky.
 - **AMS-NZMS Lecture Series.** The first AMS-NZMS Maclaurin Lecturer was Marston Conder. He delivered an Invited Address at the Eastern Sectional Meeting, held in Chestnut Hill, Massachusetts on April 6-7, 2013, and gave colloquia at seven colleges and universities. (Conder was officially the 2012 Maclaurin Lecturer, but his visit was delayed until 2013 to allow scheduling a talk at a Sectional Meeting.) Terrence Tao was the 2013 Maclaurin Lecturer, visiting New Zealand during summer 2013. The third AMS-NZMS Maclaurin Lecturer will be James Sneyd from the University of Auckland. Sneyd's field is applications of mathematics to medicine, physiology, and biology in general. He will give a lecture at the

2014 Fall Southeastern Sectional Meeting in Greensboro, NC. The rest of the itinerary for his Maclaurin Lectures has not yet been determined.

- **CoMC Focus Group Breakfast.** Vicki Powers chaired the CoMC Focus Group Breakfast, held at the Baltimore Joint Mathematics Meetings. As in past years, the breakfast gathered attendees who were diverse in terms of their mathematical ages, their institutions and their reasons for attending the JMM. Suggestions were made about the Sectional Meetings, such as creating links to local industry and having funding for undergraduates to attend. CoMC discussed the value of continuing the tradition of the Focus Group Breakfast, and decided not to continue it in its present form. CoMC would be open to experimenting with other ways to gather input from conference participants.
- **Baltimore Questionnaire.** The responses from the Baltimore questionnaire were reviewed. Once again, the AMS used an electronic survey form and sent email to all participants after the meeting with a link to the survey. Over 1760 participants completed the survey. Specific issues that were discussed included the continuing problems with wireless access, and possible improvements for both the printed program and the online version. CoMC members will make suggestions about revisions to the current survey. During this discussion, CoMC passed the following motion:

CoMC recommends to the Joint Meetings Committee that the JMM be held in either the first or second week of January.

- **2014 Annual Review-- Sectional Meetings.** Laura De Carli, Kailash Misra and Vicki Powers (chair) formed the subcommittee that carried out this review. The subcommittee studied the results from a survey that was sent to Fall 2013 Sectional Meeting attendees. Two of the subcommittee members participated in the CoMC Focus Group discussion held at the 2014 JMM.

Overall, the report was very positive. In summary, the report stated:

The basic finding of the subcommittee is that the Sectional Meetings are valuable and successful and that the participants are for the most part satisfied with the basic structure and organization of the meetings.

The AMS staff, the associate secretaries, and the local organizers deserve a round of applause for making the Sectional Meetings so successful!

The subcommittee made the following recommendations:

1. **Adding more activities for students.** The subcommittee recommends that the AMS encourage local organizers and Special Session organizers to implement activities for increasing the participation of graduate and undergraduate students in Sectional Meetings and for giving them more opportunities for networking.
2. **Choice of location.** Local organizers and associate secretaries should consider the lodging and food possibilities when deciding on the location of a Sectional Meeting.

3. **Invited Talks.** The subcommittee would like to reiterate what was said in the last report on sectional meetings (from 2008): “ *It is important that people giving invited lectures be chosen not only for their mathematical talent, but also for their expository skills.*”
4. **Booklet.** We recommend that the AMS update the on-line schedule of the Sectional Meetings with the most recent changes of the program, and consider discontinuing the (costly) printed booklet.
5. **Publicize funding available for graduate students more.** The AMS should publicize more the availability of graduate student support.

During this discussion, CoMC passed the following motion:

CoMC strongly encourages Special Session organizers at Sectional Meetings to include one 45-minute expository talk aimed at graduate students and non-specialists.

- ***Report on AMS Travel Grants.*** The AMS now administers several travel grants programs on a regular basis. These include a program of travel grants awarded to graduate students in order to attend the Joint Mathematics Meetings and Sectional Meetings, and the AMS-Simons Travel Grants program for early career mathematicians. The National Science Foundation has recently awarded two grants to the AMS to fund travel to international conferences. In 2013, the AMS administered a travel grants program to fund invited speakers and early career mathematicians in order to attend the inaugural Mathematical Congress of the Americas, held in Guanajuato, Mexico, on August 5 – 9, 2013. In 2014, the AMS will administer a travel grants program to fund invited speakers and early career mathematicians in order to attend the International Congress of Mathematicians, August 13 - 21, 2014, to be held in Seoul, Korea.
- ***Report on MRC program.*** The Mathematics Research Community (MRC) program, funded by NSF, is a program run by the AMS to support young mathematicians as they begin their research careers. The program is now in its seventh year. The NSF grant that supports this program has recently been renewed (supporting programs that will begin in summers 2014, 2015 and 2016). The conferences in summer 2014, held in Snowbird, Utah, will be:

Cluster Algebras, June 8 – 14, 2014

Michael Gekhtman (University of Notre Dame)
Mark Gross (University of California, San Diego)
Gregg Musiker (University of Minnesota)
David Speyer (University of Michigan)
Gordana Todorov (Northeastern University)

Algebraic and Geometric Methods in Applied Discrete Mathematics, June 15 – 21, 2014

Carina Curto (University of Nebraska-Lincoln)
Jesus A. De Loera (University of California, Davis)
Christine Heitsch (Georgia Institute of Technology)
Michael Orrison (Harvey Mudd College)
Francis Edward Su (Harvey Mudd College).

Mathematics of Quantum Phases of Matter and Quantum Information, June 24-30, 2014

Siu-Hung Ng (Iowa State University)

Eric C. Rowell (Texas A&M University)

Zhenghan Wang (Microsoft Station Q and U.C. Santa Barbara).

Network Science, June 24-30, 2014

Mason Porter (University of Oxford)

Aaron Clauset (University of Colorado, Boulder)

David Kempe (University of Southern California)

- ***Update on Council actions.*** The members of CoMC were informed about the actions that had been taken on the recommendations made at the 2013 CoMC meeting by the Council during its April 2013 meeting.

Old Business

- ***AMS Community Network.*** CoMC first discussed the possibility of having AMS Activity Groups at its meeting in March 2011. Over the next three years, the initial idea evolved into a program of online communities. The AMS has now launched the AMS Community Network, which will host AMS Activity Groups, Community Forums and private groups such as AMS committees. Currently, there are several Community Forums, including one for directors of undergraduate studies, one for directors of graduate studies and one for directors of summer math camps. CoMC members agreed to participate in a private group to be established in order to handle CoMC committee business.
- ***Policy on a Welcoming Environment.*** The AMS-ASA-AWM-IMS-MAA-NCTM-SIAM Committee on Women in the Mathematical Sciences (JCW) proposed in early 2013 a “welcoming environment policy” and suggested to participating societies that they discuss adoption of such a policy. The objective of such a policy is to encourage members of a society to ensure that all feel welcome at events of all types, including meetings and conferences. CoProf discussed the proposed policy at its meeting in September 2013 and recommended formation of a subcommittee with representatives from CoProf, CoMC and the Committee on Women in Mathematics (CoWiM). The members of the subcommittee are Don McClure (CoProf), Anna Mazzucato (CoMC), and Carol Wood (CoWiM). The subcommittee presented a draft of a proposal, which was viewed positively by committee members. The draft of the policy will also be reviewed by the Committee on the Profession (CoProf), and will be vetted by the AMS attorney.

New Business

- ***The AMS-MAA-SIAM Porter Public Lecture.*** The AMS-MAA-SIAM Gerald and Judith Porter Public Lecture has been delivered each year at the Joint Mathematics Meetings since 2010. Currently the lecturer is selected by a standing committee of the MAA which consists of three MAA representatives and one representative each from the AMS and SIAM. The lecture series is supported by an MAA fund. The first five lecturers in the series were [with estimated attendance]:

- 2010 Steven Strogatz (Cornell): "The calculus of friendship" [600]
- 2011 Robert Lang (Origami): "From flapping birds to space telescopes: The mathematics of origami" [300]
- 2012 Erik Demaine (MIT): "Geometric puzzles: Algorithms and complexity" [900+]
- 2013 Kenneth Golden (University of Utah): "Mathematics and the melting polar ice caps" [1100]
- 2014 Eitan Grinspun (Columbia): "The mathematics behind Hollywood's visual effects" [1100]

The Joint Meetings Committee reviewed the series at its meeting in the summer of 2013 and supported continuing it. MAA has proposed that this committee become a standing joint committee of six with equal representation from all organizations. Additionally, the current charge specifies a two-year term, but the MAA proposes changing this to a three-year term. These measures were approved by the MAA Board of Governors in August 2013. CoMC approved these changes and recommends them to the Council.

- ***The Mathematical Council of the Americas and Invitation for AMS Participation.*** The Mathematical Council of Americas (MCofA) was created during the 2013 Mathematical Congress of the Americas (MCA) held in Guanajuata, Mexico in August 2013. Its purpose is to organize future MCAs and promote development and cooperation in mathematics among all mathematicians in the Americas. The plan is to organize a quadrennial MCA in rotating countries of the Americas, the second of which will be held in Montreal in 2017.

The MCofA has formulated provisional statutes and appointed an interim Executive Committee. Susan Friedlander is on the Executive Committee.

The American Mathematical Society has been invited to join the Mathematical Council of Americas. This requires a membership fee of \$1,000 annually for societies with more than a thousand members. This entitles the member society to three representatives on the Council.

As of January 1, 2014, the following Societies have joined: CMS, MAA, SBM (Brazil), SIAM, SBMAC (Brazil), AMM (Mexico), IMA (Argentina). The following Institutions have joined: CRM, CIMAT (Mexico), CMM (Chile), Fields Institute, IMA, IPAM, IM-INAM (Mexico), MBI, MSRI.

The AMS ECBT approved joining the MCofA at its November 2013 meeting. The Secretariat endorsed joining at its January 2014 meeting. At its 2014 meeting, CoMC approved the proposal to join the MCofA, and recommends this to the Council.

- ***The Number of Invited Addresses at AMS Sectional Meetings.*** At its March 2013 meeting, the Secretariat addressed concerns that at the Sectional Meetings, the Sunday afternoon address is poorly attended. After much discussion, it was moved and seconded to recommend the following policy to the appropriate AMS body:

Sectional Meetings will have three to four plenary speakers, with three being the norm.

This would not include the Einstein Lectures or the Erdős Lectures, which would be in addition to the three to four invited addresses.

CoMC endorsed the policy and recommends that the Council approve it.

2015 CoMC Meeting.

- The committee approved the suggested date of March 21, 2015 for its next meeting, to be held at AMS Headquarters in Providence, RI.
- For the 2015 meeting, the topic to be reviewed will be: Invited plenary, distinguished and joint lectures.

*Ellen Maycock
Associate Executive Director
March 24, 2014*

**American Mathematical Society
Committee on Science Policy Meeting
March 13-15, 2014
Washington, DC**

Summary Report

The Committee on Science Policy (CSP) met over several days with a focus on Capitol Hill meetings between Congressional representatives and meeting attendees to promote mathematics and to urge increased federal funding for the National Science Foundation and its Division of Mathematical Sciences. In total, the group met with 29 offices. The first day of the meeting was devoted to preparation for Hill meetings. Friday was spent making Hill visits and committee business and further discussion occurred on Saturday morning.

Michael Vogelius

Director, Division of Mathematical Sciences (DMS)

Directorate of Mathematical & Physical Sciences (MPS), National Science Foundation (NSF)

Michael Vogelius began his presentation with an update on the FY2014 budget, trends in R&D funding over the last 35 years, recent NSF/MPS divisional budgets and a history of the NSF/MPS-DMS budget. He explained that there has not been strong budget growth in recent years and this trend does not appear likely to change in the near future.

Vogelius provided information on the major award categories within DMS including individual investigator and research group awards, institutes and workforce programs. There was much discussion among attendees regarding funding.

He went on to discuss what the mathematics community could do to help promote increased and sustained federal investment in research. He encouraged those attending to use their meetings with congressional representatives to argue for the importance of funding increases in basic scientific research, not strictly mathematics, as mathematicians are funded through interdisciplinary projects too.

Karen Saxe

AMS Congressional Fellow 2013-14

Office of Senator Al Franken (MN)

Karen Saxe presented an orientation for Congressional meetings developed by the AMS Washington Office. She offered basic information about the importance of advocacy, the federal budget process, the structure of a Congressional office and insights into Members of Congress and their staffs.

Saxe went on to discuss the documents that would be left at each Congressional visit, what to expect and how to conduct these meetings. The AMS Washington Office developed the "Ask," which is a statement of the request of the Member on Congress that was left at each visit, along with other materials. This year's "Ask" was formulated based on recent trends in the budget for the National Science Foundation (NSF) and requested \$7.5 billion for the NSF.

Kei Koizumi

***Assistant Director for Federal Research and Development
White House Office of Science & Technology Policy***

Kei Koizumi began his presentation by describing the effect on research funding of recent difficulties on the federal budget, including sequestration and the government shutdown. He described the FY2015 President's budget as striving to spur innovation and sustain a world-leading science and research enterprise. However, this budget overall is only 0.2% above FY2014, so the President has proposed an additional investment of \$56 billion he calls the Opportunity, Growth and Security Initiative. The difficulty will be in enacting this initiative since it would be above the budget limit agreed to by Congress in December 2013.

Koizumi described some components of the FY2015 federal budget highlighting advanced manufacturing as one area the President wants to concentrate on in order to win the race for the next wave of high-tech manufacturing jobs. He wants to establish a national network of manufacturing innovation institutes where businesses would connect with research universities -- two such hubs have already been launched to further this effort.

Koizumi also talked about the President's priorities in the FY2015 budget for a cleaner energy economy, global change and health research and for preparing Americans with STEM skills

Constituent Meetings

On Friday, March 14 the group went to Capitol Hill to hold meetings in congressional offices. The AMS Washington Office scheduled meetings for all participants with their respective Congressional representatives. These constituent meetings were conducted in small groups and a wrap-up session was held at the end of the day to share experiences and discuss the value of the meetings.

Other Discussion

There was much discussion throughout the meeting about a piece of legislation called the Frontiers in Innovation, Research, Science and Technology (FIRST) Act (H.R. 4186 introduced on March 10, 2014). The bill comes out of the Subcommittee on Research and Technology of the House Committee on Science, Space and Technology and one of its tenets would be to shift the responsibility for determining the distribution of funds to eight scientific directorates from the National Science Foundation to Congress. There was vast agreement that this bill, if enacted, would do serious harm to advancing scientific research. The Act was mentioned frequently in the congressional meetings held during this meeting and in follow up to the discussions about the Act, David Vogan wrote an opinion piece against the bill that will hopefully be picked up by media outlets.

Another discussion centered on how to improve the effectiveness of congressional visits. It was decided that future meetings should include invitations to six AMS members outside the committee in strategic areas of the country for whom the AMS would pay travel expenses for these members to participate. The committee will set priorities for whom to invite with input from the Director of the AMS Washington Office and with a desire to reach out to women and minorities for this effort. The committee endorsed adding \$7,200 to the CSP 2015 travel budget for this purpose.

In follow up to congressional meetings, participants were encouraged to write thank you notes to those they met with and to offer themselves as a resource to the congressional office in the future. Other discussion also focused on cooperation with other societies.

Date of Next Meeting

The 2015 Committee on Science Policy meeting is scheduled for April 9-11, 2015 in Washington, DC. However, there was continued discussion about the most appropriate dates to meet in order to ensure productive meetings with Members of Congress, so the dates of the 2015 meeting have not been entirely settled at this writing.

*Submitted by Anita Benjamin
Assistant Director, Washington Office
April 16, 2014*

Washington Office Report
March 24, 2014

Federal Budget

The federal government finally passed a FY 2014 budget in January, 2014 almost four months after the start of the fiscal year. This budget caps discretionary spending at \$1.012 trillion, a cap based on the December, 2013 Ryan-Murray budget agreement. The cap includes sequestration.

Under this budget, the National Science Foundation (NSF) receives a total of \$7.172 billion, a 4.2 percent increase over the FY 2013 budget of \$6.884 billion. The budget of the Division of Mathematical Sciences (DMS) is estimated to be \$225.64 million, a 3.0 percent increase over the FY 2013 DMS budget of 219.02 million.

The FY 2015 Federal Budget Request was introduced on March 4, 2014, a month later than the February 3, 2014 date mandated by law. Details of the Budget Request came a week later. The NSF Request is \$7.255 billion, a 1.2 percent increase over the FY 2014 budget and the DMS Request is \$224.40 million, a drop of 0.5 percent from the FY 2014 estimate.

In FY 2015, DMS estimates providing \$9.38 million for CAREER grants; \$3.0 million for the BioMaps program, which includes \$980,000 for the BRAIN initiative; \$2.5 million for the Science, Engineering, and Education for Sustainability program; \$4.0 million for Cyber-enabled Materials, Manufacturing, and Smart Systems; \$4.92 million for Clean Energy Technology; and \$29.5 million for Mathematical and Statistical Sciences Institutes. Approximately 76 percent of the DMS budget is used to support individual investigators and research group awards.

DMS will commit \$810,000 to NSF Research Traineeships (NRT) in FY 2015, of which \$700,000 is for out year commitments to the Integrative Education and Research Traineeship (IGERT) program. DMS will invest \$4.1 million in Mathematical Sciences Postdoctoral Research Fellowships.

The Advanced Scientific Computing Research (ASCR) program of the Office of Science in the Department of Energy (DOE) has a FY 2014 enacted budget of \$478.1 million, an increase of 18.0 percent over the FY 2013 budget of \$405.0 million. Included in the ASCR budget is \$49.5 million for the Applied Mathematics activity, a 14.3 percent increase over a FY 2013 budget of \$43.3 million, and \$46.9 million for the Scientific Discovery through Advanced Computing (SciDAC) activity, a 11.6 percent increase over the FY 2013 level of \$42.0 million

The FY 2015 Budget Request for ASCR is \$541.0 million, a 13.2 percent increase over FY 2014. The ASCR Request includes \$52.2 million for Applied Mathematics, a 5.5 percent increase and \$46.9 million for SciDAC, which is no change from FY 2014.

The Applied Mathematics activity supports research and development of applied mathematical models, methods, and algorithms for understanding complex natural and engineered systems related to DOE's mission. Applied Mathematics research underpins all of DOE's modeling and simulation efforts. The SciDAC program accelerates progress in scientific computing through partnerships among applied mathematicians, computer scientists, and scientists in other disciplines.

It is expected that appropriation committees will begin agency hearings on the FY 2015 budget in March. Senate appropriators have stated a desire to markup appropriation bills by July. The Ryan-Murray budget agreement placed a cap of \$1.014 trillion on FY 2015 discretionary spending.

Open Access

In a February, 2013 memorandum from the Office of Science and Technology Policy (OSTP), federal agencies with over \$100 million in annual research and development expenditures were asked to submit a draft plan to support increased public access to results of research funded by the federal government. The draft plan was due to OSTP no later than August 22, 2013. OSTP, in coordination with the Office of Management and Budget (OMB), will review these plans. Once a plan is accepted, the agency will begin implementing its plan. Implementation will take place during FY 2014 with plans being operational in FY 2015. This development of agency plans is part of the process on open access contained in Public Law 111-358.

All agencies subject to the requirements in the memorandum have submitted draft plans. These plans have not been made public. Apparently, the plans include a variety of approaches for increasing public access to the results of federally funded research.

Even though the process put forth in Public Law 111-358 is working, this does not stop Members of Congress from presenting new bills or adding open access language to appropriations or other bills. The Government Affairs Task Force (GATF) has been busy monitoring these bills and bill and report language. At issue in every bill that concerns GATF is the length of embargo periods, the amount of time from when a journal article is published to when the article has to be made freely available to the public. Journal articles based on National Institutes of Health (NIH) funding have to be made freely accessible within 12 months of publication. Several organizations lobbying for open access would like to see embargo periods of six months. The Labor, Health and Human Services, Education and Related Agencies (Labor-HHS) portion of the Omnibus Appropriations Act of 2014 included a rider that expanded the twelve month NIH embargo period to all of the agencies funded through the Labor-HHS bill and meeting the over \$100 million in annual research and development expenditures criteria.

GATF would like to have flexible embargo periods based on journal usage characteristics of disciplines. For example, based on usage statistics, mathematics should have a longer embargo period, perhaps twenty-four months to thirty-six months.

Education

Interest in improving undergraduate mathematics education seems to be increasing. This interest has motivated departments to consider online technologies, interactive classrooms, rethinking the mathematics courses that non-majors take in the first two years, and that mathematics majors need broader training to meet future workforce needs. The recent Committee on Education (COE) meeting and Department Chairs Workshop illustrated this interest.

Online technologies can provide platforms for students to actively engage in problem solving rather than be passive listeners of lectures; allow students to learn at their own pace; provide flexibility in course structure; facilitate collaboration; and, provide data on learning that can help improve instruction.

The use of massive open online courses (MOOC) is gaining momentum. MOOCs are a delivery platform as well as a tool to provide a different approach to teaching and learning. A creative MOOC developer can make a course come alive.

The FY 2015 NSF Budget Request for the Education and Human Resources directorate of NSF will continue developing the Improving Undergraduate STEM Education (IUSE) framework begun in FY 2014. Total funding available for IUSE in FY 2015 is \$118.48 million, a 33.2 percent increase over FY 2014 funding of \$88.98 million. The goals for IUSE are to improve STEM learning and learning environments; broaden participation in STEM; and, build the STEM workforce of tomorrow. IUSE funding is aligned with these goals.

The Budget Request for the EHR Graduate Education Division includes funding for 2,000 new Graduate Research Fellowships, a cost of education allowance of \$12,000, and an increase in stipend from \$32,000 to \$34,000. The NSF Research Traineeship will include a track on transforming graduate education, inviting proposals for designing, implementing, and testing new approaches to STEM graduate education.

Coalitions

The Washington Office continues to work with coalitions and ad hoc groups including the Coalition for National Science Funding (CNSF); the Government Affairs Task Force (GATF); the Task Force on American Innovation; NDD UNITED; and, small groups representing several professional societies and organizations. Issues of focus by one or more of these coalitions include federal funding for basic research; open access to publications based on federally funded research; caps on defense and non-defense discretionary spending; attacks on the Social, Behavioral and Economic Sciences directorate of NSF; and continuing education of new Members of Congress on the importance of federal support for STEM research and education.

Through CNSF, the Washington Office organized two sign-on letters sent to the Chair of the House Committee on Science, Space and Technology speaking against the NSF portion of the Frontiers in Innovation, Research, Science, and Technology Act of 2014 (FIRST Act). Eighty-five organizations signed on to the first letter, sent in December, 2013. The second letter, sent in March, 2014, had eighty-three organizations sign on. The bill was passed by the Research and Technology subcommittee of the House Science Committee and now will be considered by the full Committee. The Senate Commerce, Science, and Transportation Committee has not yet introduced a companion bill.

Sam Rankin has been participating in meetings in the House and Senate regarding the FIRST Act and the companion Senate bill, as well as meetings regarding a major cut to the NSF Directorate of Social, Behavioral, and Economic Sciences. He has also participated in Hill meetings organized by GATF regarding open access. The GATF meetings are for the purpose of keeping the agency open access process initiated by the Office of Science and Technology, per Public Law 111-358, alive and to argue for flexible embargo periods, based on disciplinary journal usage statistics.

Currently, Anita Benjamin, who directs the Annual CNSF Capitol Hill Exhibition, is organizing this year's Exhibition, which will take place on May 7, 2014. This will be the twentieth CNSF Exhibition.

Other Activities

The annual Committee on Science Policy (CSP) meeting was held in Washington, Thursday through Saturday, March 13-15, 2014. The meeting began Thursday afternoon with an orientation session directed toward the Hill office visits that CSP members would have on Friday. CSP members were divided into five two-person (California had a three-person team) teams. Each team had at least six office visits. Offices chosen for visits were based on the states and congressional districts of CSP members. The conversations in the offices were about FY 2015 appropriations for NSF, CSP concern about the FIRST Act as it relates to NSF re-authorization, and the importance of mathematics research and its contributions to innovation and new technologies. At each meeting were left several *Mathematical Moments* and a copy of *Fueling Innovation and Discovery, The Mathematical Sciences in the 21st Century*, a National Research Council publication.

On December 11, 2013, the annual AMS Congressional Briefing was given by Mark Green, professor emeritus, UCLA. His presentation entitled "How Math Fuels the Knowledge Economy," drew an interested audience of congressional staffers, two Members of Congress, and several scientists and mathematicians. David Vogan, president of the AMS, introduced Mark.

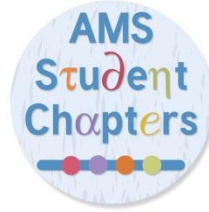
The Washington Office had a part in organizing several sessions at the January, 2014 Joint Mathematics Meetings in Baltimore. These sessions included: a NSF-EHR Grant Proposal Writing Workshop; the Annual Department Chairs Workshop; AMS Conversation on Non-Academic Employment; CSP-COE Joint Session, "The Public Face of Mathematics;" AMS-MAA-SIAM Joint Panel Discussion, "Transforming Post-Secondary Mathematics Education;" and, the AMS Congressional Fellowship Session.

Samuel M. Rankin
Associate Executive Director, Washington Office
April 2014

AMS Graduate Student Chapters

The AMS Graduate Student Chapters were launched during the 2012-13 academic year with an initial set of chapters:

- Brown University
- Oklahoma State University
- Tufts University
- Wesleyan University



For the 2013-14 academic year, 21 more schools submitted petitions and have been approved:

- The University at Albany
- Boston College
- Utah State University
- Bryn Mawr College
- University of Nebraska-Lincoln
- Purdue University
- University of Minnesota
- Texas A&M University
- University of Houston
- Boston University
- Georgia Institute of Technology
- University of Mississippi
- Rutgers University
- University of British Columbia
- University of California, Riverside
- Clemson University
- Indiana University – Purdue University Indianapolis
- North Carolina State University
- University of Kansas
- California State University San Marcos
- University of Wisconsin-Madison

Each petition was reviewed and approved by the AMS Secretariat. Each of these chapters received \$500 in funding for uses that encourage mathematical activity for and among graduate students. Some chapters requested an additional \$500 due to a large number of student participants and variety of events and activities.

It is expected that the number of chapters will continue to grow, and plans are in place to publicize this opportunity as much as possible. Typically, the AMS will expect to receive petitions for new chapters, or annual payment requests from existing chapters, in early fall each year. Final reports for the year are due in late spring.



Tickets for the AMS Dinner Celebration were distributed to 20 chapter representatives who were present at the Joint mathematics Meetings in Baltimore. Students participated in raffle prizes, took pictures in the photobooth, and had a chance to meet with members of other chapters for the first time. A picture was taken with President Vogan and Executive Director Don McClure.

During the Joint Mathematics Meeting, the AMS Associate Executive Director for Meetings and Professional Services held a focus group and invited representatives of the Graduate Student Chapter program. The main goal was to explore ideas of JMM activities and discuss possible directions for the future. Students expressed interests in the following ideas:

- Hold a poster session to discuss what events and activities other chapters are doing
- Have a reception or social outing with student chapter members
- Create an online forum for all chapters to collaborate, plan events, discuss ideas, issues, etc.

Looking ahead

Decisions will have to be made about what elements to add to the Graduate Student Chapter program and how to help the students interact with each other both at JMM and otherwise.

*Diane Boumenot
Manager, Membership & Programs
April 2014*

The following changes for fees for MathPrograms.org, MathJobs.org, EIMS, the Employment Center and the AMS Short Course have been approved by the Executive Director.

Fees for Mathprograms.Org

The following fees are proposed for 2014/15 Mathprograms.org registrations. Academic institutions and nonprofit and government organizations who are seeking applications from the mathematical sciences community for programs or funding may create a 12-month account. They may post program announcements, accept applications and confidential letters of reference, assign access to those who will evaluate the applications, respond to applications, and store the applications in the system.

There are 33 accounts currently in the system, mostly aimed at undergraduate and graduate students, in addition to various AMS programs. REU programs account for the majority of the listings.

The fees will be in effect from July 1, 2014 through June 30, 2015. A one-program fee allows smaller programs to benefit from the service. The service is free to applicants.

MathPrograms.org <i>Summary of recent and proposed fees</i>				
	<i>2011/12</i>	<i>2012/13</i>	<i>2013/14</i>	<i>2014/15</i>
<i>Regular account, up to 7 programs, 12 months from date of sign up</i>	\$500	\$525	\$535	\$540
<i>Regular account, 1 program, 12 months from date of signup</i>	\$250	\$260	\$270	\$275

Fee changes for Mathjobs.org

The following fees have been approved for 2014/15 Mathjobs.org employer registrations (from July 1, 2014 through June 30, 2015). The service is free to applicants.

There has been consistent pressure in the last few years to open up full application accounts to countries outside of North America. Beginning July 1, 2014 full accounts will be open to employers around the world. This will be a quiet rollout in hopes of gaining experience and troubleshooting before the use gets widespread. The institutions that currently use Mathjobs will be the first to notice the opportunity.

Based on the experience of the similar site, AcademicJobsOnline.org, also written and managed by the Duke University Department of Mathematics, staff believe that foreign schools will use the service primarily to recruit in the U.S. and other English-speaking countries, not necessarily locally. Staff expect to continue to conduct all business in English and will continue to work with employers to help them make payments in dollars.

The fee structure allows for one-ad (but otherwise full service) accounts to be purchased by employers for a slight discount. This offer is meant to accommodate the needs of smaller schools and to encourage employers from outside academia to try using Mathjobs.org.

Proposed employer fees:

Regular account (for up to seven ads), 12 months from date of sign up	\$600
Regular account (for one ad only), 12 months of usage from date of sign-up	\$410
Upgrade from single-ad account to seven ad account	\$290
Advertising-only account (for one ad), 12 months from date of sign up	\$300

MathJobs.org		<i>Previous fees</i>					
		<i>2008/09</i>	<i>2009/10</i>	<i>2010/11</i>	<i>2011/12</i>	<i>2012/13</i>	<i>2013/14</i>
<i>Regular Account</i>	<i>Up to 7 ads</i>	\$450	\$500	\$525	\$550	\$585	\$595
	<i>1 ad</i>				\$385	\$395	\$405
<i>Upgrade from 1 to 7 ads</i>							\$290
<i>Ad-only account</i>	<i>Up to 7 ads</i>				\$440	\$475	\$485
	<i>1 ad</i>		\$250	\$260	\$275	\$285	\$295

Fee changes for Employment Information in the Mathematical Sciences (EIMS)

The following fees have been approved for the 2014/15 Employment Information in the Mathematical Sciences.

This electronic job ad system, aimed at a general mathematical audience as well as the PhD market, utilizes software and web hosting provided by Boxwood Technology. This service has the appearance of being housed on the AMS website. The “Featured Job” functionality allows employers to have their job featured more prominently in search results, and has been quite popular.

As more and more job ads are migrating to Mathjobs.org, we are attempting to maintain EIMS as a simpler, lower cost alternative.

EIMS <i>Summary of recent and proposed fees</i>				
	<i>2011/12</i>	<i>2012/13</i>	<i>2013/14</i>	<i>2014/15</i>
<i>60 day listing, unlimited size</i>	215	220	225	230
<i>120 day listing, unlimited size</i>	290	300	305	310
<i>180 day listing, unlimited size</i>	365	375	380	390
<i>“Featured Job” add-on</i>	75	80	80	85

Fee changes for the Employment Center

The fees listed in the chart below have been approved for the 2015 Employment Center in San Antonio, Texas.

Costs of running this program include space and equipment fees, computer rental fees, internet service, and staff time and travel. Also, a significant fee is paid annually to Duke University Math Department for the customized registration system attached to MathJobs.org.

Each year the employer fees cover less and less of the actual expenses. Currently, the employer use is dropping off. To meet the needs of employers, we are offering, in 2015, a One Day table available for purchase on site. This table carries with it no access to any of the registration features found on MathJobs.org, no public listing at all, and no electricity. Employers using them will be required to have applicants wait in the Waiting Area; no admittance is allowed to any table without being escorted by an employer.

In 2014, a Skype booth was added for use by registered employers. No extra fees were charged. The booth saw some use, and we anticipate increased use.

Applicants pay no fees but are required to have a meeting badge.

Fees have been raised slightly. For those employers who would like power to run a laptop at their own table, outlets are now provided, for a fee. The actual cost for providing electricity to one employer table was \$150 in 2014, so that rate is being increased to \$85 this year.

Employment Center	<i>Summary of recent and proposed fees</i>					
	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
<i>Quiet Area table (1-2 interviewers)</i>	265	295	285	310	315	320
<i>Second Quiet Area table</i>	100	105	110	125	130	130
<i>Committee table (3-6 interviewers)</i>	365	400	365	385	390	400
<i>Second Committee table</i>	100	105	110	135	140	145
<i>Electricity, per table</i>				50	75	85
<i>One Day table, available on site, seats 3 interviewers</i>						190

2015 Short Course Fees

The following chart indicates the history of fees for the Short Course since 2005 and the fees that have been set for 2015.

Year	Name of Course	Preregister-member/non	On-site-member/non	S/U/E-prereg*	S/U/E-onsite*
2005	The Radon Transform and Appl. to inverse Probability.	\$85/\$108	\$115/\$140	\$37	\$55
2006	Modeling and Simulation of Biological Networks	\$87/\$115	\$118/\$148	\$38	\$57
2007	Aspects of Statistical Learning	\$90/\$120	\$120/\$151	\$40	\$60
2008	Applications of Knot theory	\$94/\$125	\$125/\$155	\$42	\$63
2009	Quantum Computation and Quantum Information	\$96/\$130	\$130/\$160	\$44	\$65
2010	Markov Chains and Mixing Times	\$98/\$135	\$132/\$165	\$46	\$67
2011	Computational Topology	\$100/\$140	\$134/\$170	\$48	\$69
	Evolutionary Game Dynamics	\$100/\$140	\$134/\$170	\$48	\$69
2012	Random Fields and Random Geometry	\$102/\$145	\$136/\$175	\$50	\$71
	Computing with Elliptic Curves using Sage	\$102/\$145	\$136/\$175	\$50	\$71
2013	Random Matrices	\$104/\$150	\$138/\$180	\$52	\$73
2014	Geometry and Topology in Statistical Inference	\$106/\$155	\$140/\$185	\$54	\$75
2015	Finite Frame Theory: A Complete Introduction to to Overcompleteness	\$108/\$160	\$142/\$190	\$56	\$77

*S/U/E: Student/Unemployed/Emeritus

Ellen J. Maycock
Associate Executive Director
April, 2014

Report to the AMS on the Mathematics activities at the 2013 SACNAS conference

Prepared by Ricardo Cortez

The success of Research Experiences for Undergraduate programs (REU) has shown a persistent need for minority undergraduate students to be exposed to areas of active research in mathematics, and in particular to enhance the opportunities available to them to present their research findings at national venues such as the SACNAS conference. Mathematics has always been a part of SACNAS and together with our partnering and sponsoring agencies and organizations such as the National Security Agency (NSA), National Geospatial Intelligence Agency (NGA), National Science Foundation (NSF), American Mathematical Society (AMS), and 8 NSF-funded Mathematics Institutes we continue to sponsor a coordinated effort to both increase and sustain the pipeline of underrepresented mathematicians through a strong presence at the SACNAS conference.

There was funding from NSA and NSF for undergraduate and graduate students to attend the SACNAS conference in San Antonio, TX on October 3-6, 2013. This conference also celebrated SACNAS's 40th anniversary. Additional funding was provided by AMS support. SACNAS effectively implemented a broad range of educational, and professional and leadership development activities for undergraduate, graduate, post-doctoral and young professionals. These provided critically important opportunities for mathematics students and professionals to establish and maintain contact with a strong network who, as mentors and role models, have and will support them throughout their college and university years and their professional lives. Students' oral or poster presentations, attendance at mathematics focused symposia and mini-courses addressed current research in mathematics. The events were captured beautifully by AMS Public Awareness Officer, Annette Emerson at: <http://www.ams.org/meetings/sacnas2013-mtg>

The 2013 SACNAS national conference offered the following activities and events:

PRECONFERENCE ACTIVITIES

Undergraduate Mini courses in Mathematics

This session ran in parallel with the Modern Mathematics Workshop (MMW) organized by the Mathematics Institutes. While the MMW highlights programs for graduate students, postdocs and professionals, the institutes are also interested in reaching undergraduate students by organizing two mini courses in different mathematics topics and combining the audiences of the MMW with the undergraduates during a keynote speech.

1. Math Mini Course I: A Tour of Dynamical Systems

Sponsored by Mathematical Sciences Collaborative Diversity Initiative of the Mathematical Sciences Institutes

Speaker: [Araceli Bonifant](#), PhD, Associate Professor, University of Rhode Island. "We will start by describing the dynamics under iteration of a simple family of maps (real quadratic polynomials) and we will work our way through to the study of the dynamics of quadratic complex polynomials. We will tour the parameter space of complex quadratic polynomials,

known as the Mandelbrot set, and will describe the Fatou and Julia sets for some parameters.”

2. Math Mini Course II: A Survey of Diophantine Equations

Sponsored by Mathematical Sciences Collaborative Diversity Initiative of the Mathematical Sciences Institutes

Speaker: Edray Goins, Associate Professor, Purdue University. “In this session, we'll focus on various types of so-called Diophantine Equations, discussing such topics as the Postage Stamp Problem, Pythagorean Triples, Pell's Equations, Elliptic Curves, the ABC Conjecture and Fermat's Last Theorem.”

Math Institutes Modern Mathematics Workshop: Session I (Wednesday and Thursday)

Sponsored by Math Institutes

Nine National Science Foundation institutes band together to present this workshop on the latest in cutting-edge mathematics. The workshop features presentations from speakers on behalf of each institute, a keynote lecture, and informational panels describing upcoming programs, how to participate in them, and career opportunities.

Schedule:

Oct 2	Presentation Title	Speaker
1:00 - 1:25	The mathematics of materials	IAS: Charles Radin, University of Texas, Austin
1:30 - 1:55	Conceptual Climate Models: Energy Balance, Feedback Elements, and Tipping Points	IMA: Anna Barry, IMA Postdoc, University of Minnesota
2:00 - 2:25	Modeling the immune response of cattle suffering from Johne's Disease	NIMBioS: Gesham Magombedze (Postdoc) University of Tennessee
2:45 - 3:10	Neural mechanisms underlying limb coordination in crayfish swimming	MBI: Lucy Spardy (Postdoc) The Ohio State University
3:15 - 3:40	Applications of Non-negative Matrix Factorization in Statistics	SAMSI: Kenny Lopiano (Postdoc)
4:15 - 5:00	Keynote Lecture: Tutte polynomials in combinatorics and geometry	Federico Ardila, San Francisco State University
5:15 - 6:25	Math Institutes Panel	
Oct 3	Presentation Title	Speaker
9:00 - 9:25	Convection, Stability, and Turbulence	IPAM: Charlie Doering, University of Michigan
9:30 - 9:55	Change-point detection for non-stationary high-dimensional time series with missing data	ICERM: Rebecca Willett, University of Wisconsin-Madison
10:00 - 10:25	Shimura varieties, Galois representation and Automorphic forms	MSRI: Elena Mantovan, Caltech
11:00 - 12:00	Information Session with funding agency representatives	

Mathematics Reception: Reception for all attendees of the Modern Mathematics Workshop and concurrent Undergraduate Mini courses in Mathematics.

CONFERENCE ACTIVITIES

Prof. Cristina Villalobos, Mathematics Department, Texas Panamerican University, received the **2013 Distinguished Undergraduate Institution Mentor Award**. “She has become a respected national leader in her understanding and outreach to underrepresented minorities at both the local and the national level.”

SCIENTIFIC SYMPOSIA

Mathematics Applied To Ecology and Evolution

Mathematical methods are applied to the analysis and understanding of phenomena arising in ecology, and in evolution of social and biological systems. The speakers present recent work on population dynamics models of predator-prey situations, environmental pollution, and social phenomena such as crime patterns. **Chair:** Ricardo Cortez, Tulane University

Speakers:

Rosalyn Rael, Postdoctoral Researcher, University of Michigan. *Patterns of species abundance among competing species*

Jose Flores, Professor, University of South Dakota. *Dynamics of Predator-Prey Interaction Under Allee Effect*

Nancy Rodriguez, NSF Postdoctoral Researcher, Stanford University. *Traveling-Wave Solutions in a Model for Criminal Activity*

Michael Cortez, Postdoctoral Researcher, Georgia Institute of Technology. *Understanding the effects of rapid evolution on predator-prey interactions*

Mathematics of Climate and Sustainability: Stimulating Interplay Between Research and Education

The speakers will describe how sustainability and climate challenges raise interesting new mathematical questions that infuse fresh ideas into the undergraduate curriculum. How do we develop insight for climate feedback interactions? Or use inherent stochasticity to probe the resilience of systems? Or assimilate observational data with models to improve predictions?

Chairs: Mary Lou Zeeman, PhD, Wells Johnson Professor, Bowdoin College and Mary Silber, PhD, Professor, Northwestern University

Speakers:

Mary Lou Zeeman, Wells Johnson Professor, Bowdoin College. *Tipping points, resilience and data: mathematical overview and opportunities for students*

Esther Widiasih, BioMathematics Teaching Postdoctoral Fellow, University of Arizona. *Conceptual climate models*

Karna Gowda, Graduate student, Northwestern University. *Regime shifts in noisy time series: injecting innovative interdisciplinary research into the classroom*

Juan Durazo, Graduate Student, Arizona State University. *Introduction to Data Assimilation, with applications to satellite observations in the ionosphere*

Mathematical Modeling In Context

Mathematical modeling is the process of describing, explaining and predicting the world around us. This session addresses recent research in teaching mathematical modeling in secondary and postsecondary levels, and mathematical modeling within scientific investigations. The presentations highlight common elements of mathematical modeling from the classroom to scientific research. **Chair:** Ricardo Cortez, Tulane University.

Speakers:

Cynthia Anhalt, Director, Secondary Mathematics Education Program, University of Arizona. *Modeling in the High School Curriculum: Promoting Mathematical Discourse Through Familiar Contexts*

Eric Hsu, Professor, San Francisco State University. *Modeling, Representations, Sense-Making and Metaphors*

Cristina Villalobos, Associate Professor, University of Texas – Pan American. *A Model of Faculty Teaching Workload in a Department for Automated Class Assignments*

Rene Salinas, Associate Professor, Appalachian State University. *An Individual-Based Model for Black Bears in the Southern Appalachians*

The Mathematical Geosciences: Using Mathematical Models To Explore The Earth

Scientists with backgrounds in engineering, physics, or math can find themselves at home in the Atmospheric, Earth, and Ocean Sciences. Many scientific inquiries rely on mathematics to simulate real-world environments to evaluate hypotheses. Speakers in this session will show how their research relies on computational methods to conduct their research. **Chairs:** Benjamin Gutierrez, Geological Survey, U.S. Geological Survey and Chris Andronicos, Associate Professor, Purdue University

Speakers:

Jeff Weber, Researcher, University Corporation for Atmospheric Research. *Tackling weather with Math: meteorological modeling*

Lucy Flesch, Associate Professor, Purdue University. *Exploring the Lithosphere with Geodynamic Models*

Eve Kuniansky, Senior Scientist, U.S. Geological Survey. *Math Underground: Numerical Model Applications in Groundwater Resources*

Maitane Olabarrieta, Assistant Professor, University of Florida. *Using Maths and Numerical Models to Study the Ocean Dynamics*

It's All Math! Using Mathematics To Solve World Problems

The field of mathematics is known as the “language of the sciences.” The speakers will show how mathematics is used to solve world problems such as improving our health care system, the manufacturing of electrical equipment, and discovering interesting data patterns. **Chairs:** Monica Jackson, Associate Professor, American University and Michael Young, Alliance Postdoctoral Fellowship, Iowa State University

Speakers:

Erika Camacho, Assistant Professor, Arizona State University at West Campus. *Developing An Integrative Framework to Understand Calcium-Related Diseases Through Genetic Networks*

Kimberly Sellers, Associate Professor, Georgetown University. *Don't Count on the Poisson Distribution: Introducing a Generalized Distribution Model for Count Data and Its Use in Various Applications*

Otis Jennings, Visiting Associate Professor, Columbia University. *Separation of Time Scales and a Hierarchical Approach to Design and Management*

Michael Young, Alliance Postdoctoral Fellow, Iowa State University. *Zero Forcing and It's Applications*

Low Dimensional Topology: Introduction and Open Problems

From DNA topology to Khovanov homology to knot theory, low-dimensional topology is in a period of amazing activity and development. This session will introduce the audience to this important subject, including applications and active research areas. All students, postdocs, professionals and faculty are welcome! **Chairs:** Dagan Karp, Assistant Professor, Harvey Mudd College and Mariel Vazquez, Associate Professor, San Francisco State University

Speakers:

Fabiola Manjarrez-Gutierrez, Postdoctoral Fellow, Centro de Investigacion en Matematicas.
Knots and Surfaces

Javier Arsuaga, Associate Professor of Mathematics, San Francisco State University. *Analysis of Breast Cancer Genomic Data Using Computational Homology*

Roberto Pelayo, Assistant Professor, University of Hawaii. *Complexes of Surfaces for Knots*

Kenneth Millett, Professor, California State University. *Knots and Slipknots: Applications and Problems*

Current Contributions By Women Mathematicians

Women's contributions to mathematics can be traced back to Hypatia of Greece (AD 350–370). These contributions span all types of research areas. The women mathematicians in this session will discuss their recent contributions in areas such as abstract algebra, graph theory, mathematical modeling, and mathematical education. **Chairs:** Pamela Harris, Assistant Professor, United States Military Academy and Shannon Talbott, Assistant Professor, College of Mount St Joseph

Speakers:

Maria Vega, Postdoctoral Fellow, North Carolina State University. *Twisted Frobenius-Schur indicators for semisimple Hopf algebras*

Erika Camacho, Assistant Professor, Arizona State University at West Campus. *Inferring Gene Regulatory Networks from Mathematical Models*

Rebecca Garcia, Associate Professor, Sam Houston State University. *Strict Hypergraphs of Critical Pairs for Generalized Crowns*

Perla Myers, Chair and Full Professor, University of San Diego. *Innovations in Education Using Mobile Technology*

Where Is The Fruit? Successful Collaborations Between Mathematicians and Biologists

Biologists may not readily “see” all possible dynamics of a system while mathematicians may not “see” natural restrictions on parameters or functions appearing in models. Collaboration between the two makes it more likely that “correct” models will be proposed and “correct” conclusions about the underlying biological system can be drawn. **Chairs:** Fabio Milner, PhD, Professor and Director, Arizona State University and Karen Ríos-Soto, PhD, Assistant Professor, University of Puerto Rico at Mayaguez

Speakers:

Robert Álvarez, Graduate Student, Arizona State University. *A Competition Model for Hypertumors*

Fabio Milner, Professor and Director, Arizona State University. *Immunological Models of Epidemics*

John Nagy, Professor, Scottsdale Community College. *The Evolutionary Ecology of Cancer: How Natural Selection Drives Proliferation and Angiogenesis*

Karen Ríos-Soto, Assistant Professor, University of Puerto Rico at Mayaguez. *Competition Model Between the Invasive Sahara Mustard and Native Plants in the Sonoran Desert*

Rethinking Mathematics Teacher Preparation To Meet The Needs Of Latin@ and Native American Youth: Integrating Mathematics, Power, Culture, and Language

This session showcases innovative research in mathematics teacher preparation that examines the interplay among mathematics, power, culture, and language in learning to teach mathematics. Presenters will discuss how to best prepare the next generation of teachers to meet the mathematics education needs of Latin@, Native American and immigrant youth.

Chair: Julia Aguirre, Associate Professor, University of Washington Tacoma

Speakers:

Julia Aguirre, Associate Professor, University of Washington Tacoma. *Preparing Culturally Responsive Mathematics Teachers: Analyzing Mathematical Thinking, Culture, Language, and Power in Learning to Teach Mathematics*

Maria Zavala, Assistant Professor, San Francisco State University. *Beyond Vocabulary: Examining the Supports and Challenges of Preparing Bilingual Elementary Teacher Candidates Learning to Teach Mathematics in Spanish and English*

Sandra Crespo, Associate Professor, Michigan State University. *Getting Smarter Together: Learning to Challenge Inequitable Mathematics Instruction in a Math Methods Course*

Christa Jackson, Assistant Professor, University of Kentucky and Alejandra Salinas, Assistant Professor, Boston University. *Secondary Mathematics Preservice Teachers' Conceptions of Equity*

Learning To Do Math Inside and Outside Of School: Fostering Productive Mathematical Practices and Identity Development For Latin@ Youth and Native American Youth

This session showcases cutting-edge research on mathematical practices and identities of Latin@, Native American, and immigrant youth. By critically examining how youth engage mathematics inside and outside school, more can be learned about the supports and challenges to mathematical learning. **Chair:** Julia Aguirre, University of Washington Tacoma

Speakers:

Sylvia Celedón-Pattichis, Associate Professor, University of New Mexico. *Advancing Out-of-School Learning in Mathematics and Engineering with Underrepresented Middle School Students.*

Filiberto Barajas-López, Assistant Professor, University of Washington Seattle. *“Por una persona pagan muchos”*: Student perspectives on culturally responsive teaching and learning in high school mathematics.

Lee Bitsoi, Research Associate, Harvard University. *Counting Coup: Math in Native Cultures*.

Implementing The Common Core State Standards For Mathematics: Supporting Or Stalling Advancement Of Latin@ and Native American Students In STEM?

The Common Core Mathematics Standards are a high-profile math education policy adopted in 46 states that informs K-20 STEM preparation. Will this reform policy support or stall mathematics advancement for Latin@ and Native American youth? This session will discuss current research, policy, and implementation impacts in K-12 mathematics education. **Chair:** Julia Aguirre, University of Washington Tacoma

Speakers:

Guadalupe Lozano, Visiting Assistant Professor of Mathematics, University of Arizona. *Implementing the Common Core State Standards in Mathematics (CCSS-M): Policy and practical considerations for the mathematics education of underrepresented students*

Julia Aguirre, Associate Professor, University of Washington Tacoma. *Leveraging the Common Core State Standards in Mathematics (CCSS-M) through culturally responsive pedagogy: Policy and practice in mathematics teacher education*

James Epperson, Associate Professor, University of Texas at Arlington. *The Texas Mathematics Standards and the Common Core: Contrasts, Interpretations, and Implications*

KEYNOTE ADDRESS

Robert E. Megginson, Arthur F. Thurnau Professor of Mathematics at the University of Michigan. *An Appeal to Students: Careers and Opportunities in Climate Science – and your role in it. Strengthening the Nation and World through Diversity, Innovation and Leadership in these Fields*

BREAKFAST & MATHEMATICS GAME

Who Wants to Be a Mathematician? This session is a fun and exciting contest for undergraduates. All contestants win prizes, with a top prize of \$2,000.

Chairs: Michael Breen, PhD, Public Awareness Officer, American Mathematical Society, and Bill Butterworth, PhD, Associate Professor, DePaul University.

PROFESSIONAL DEVELOPMENT SESSIONS

Mathematics + Mathematics Education Research = A Partnership For a Better Education

Partnerships between mathematicians and mathematics educators are creating new work in teacher preparation based on the 2012 recommendations of the Conference Board of the

Mathematical Sciences. We discuss successful collaborations; initiating partnerships at undergraduate, graduate, and professional levels; understanding each partner's role; and sustaining the partnership through professionalism. **Chair:** Cynthia Anhalt, PhD, Director, Secondary Mathematics Education Program, University of Arizona

Panel Members:

Ricardo Cortez, Professor, Tulane University,

Minerva Cordero-Epperson, Associate Professor, University of Texas at Arlington

Hortensia Soto-Johnson, Associate Professor, University of Northern Colorado

Alfinio Flores, Professor of Mathematics Education, University of Delaware

MENTORING SESSIONS

Math Institutes Reception (Wednesday 6:30-8:00pm)

Sponsored by the Mathematical Sciences Institutes in North America and the National Science Foundation. Reception for all attendees of the Modern Mathematics Workshop and concurrent Undergraduate Minicourses in Mathematics.

Conversations with Scientists

Representing the spectrum of science disciplines, SACNAS professionals renowned for their scientific and mentorship activities gather with student attendees to engage in informal roundtable discussions about careers in the sciences. Conversations are intended to break down the barriers that often exist between students and professionals. Through Conversations with Scientists interactions, mentors share their personal experiences and insights offering students guidance and inspiration regarding educational and career choices. The personal connections made during Conversations with Scientists set the stage for ongoing mentorship and support throughout the conference. There were two different rooms of roundtables for Mathematics and Statistics.

Mathematics Student Presentations

At the 2013 SACNAS National Convention there were a total of 1292 student research presenters, including 963 undergraduates, 272 graduate students and 57 postdocs. Of these, 65 research presentations were in the mathematical sciences (43 undergraduates, 13 graduate students and 9 postdocs). SACNAS considers this opportunity to be an important feature of the conference. All student presentations are judged by at least two professionals and the judges give students helpful supportive feedback about their work and presentation style. This is an important way in which students are initiated into the world of scholarship, preparing them to present at professional conferences within their discipline in the future.

Mathematics & Statistics Graduate Oral Winners

- **Alicia Machuca**, University of Texas at Arlington, *An Exact Solution Formula for the Kadomtsev-Petviashvili Equation*,
- **Vianey Leos Barajas**, Iowa State University, *Developing An Estimator For Fishery Withdrawals By The For-Hire Recreational Sector In The Gulf of Mexico*.

Mathematics & Statistics Undergraduate Poster Winners

- **Wendy Caldwell**, University of Tennessee, Knoxville, *Substance Abuse via Legally Prescribed Drugs: the Case of Vicodin in the USA*
- **Ryan Contreras**, Columbia University, *The Algebra of Block Permutations*
- **Alyssa Loving**, University of Hawaii at Hilo, *Calculation of the Mapping Class Group of a Genus 2 Surface*
- **Ana Perez-Gea**, Instituto Tecnológico Autónomo de México, *Fast Generation and Tracking of GPS Dilution of Precision Regions Using Level Sets*
- **Sofia Velazquez**, Harvard University, *Testing for Tail Behavior with Refined Spacing*

CONFERENCE ATTENDANCE

Table 1: Mathematics Representation at SACNAS Conferences

Year	Number of Total Math Students	Total Math Attendance	Location
2002	109	147	Anaheim, CA
2003	129	234	Albuquerque, NM
2004	124	249	Austin, TX
2005	164	312	Denver, CO
2006	169	276	Tampa, FL
2007	152	271	Kansas City, MO
2008	150	269	Salt Lake City, UT
2009	146	235	Dallas, TX
2010	170	293	Anaheim, CA
2011	212	326	San Jose, CA
2012	196	312	Seattle, WA
2013	unavailable	276	San Antonio, TX

The total attendance at the 2013 SACNAS conference was over 3,400. The overall attendance of mathematics students and professionals in the last several years is shown in Table 1. The table shows the number of conference participants that identified themselves in the area of mathematics. The totals include student participants, postdocs, faculty, teachers and professionals and illustrate our strong commitment not only to maintaining a strong mathematics presence at the SACNAS conference, but also to increase our mathematics attendance at future conferences.

Overall, the 2013 SACNAS national conference provided a broad range of highly effective educational, mentoring and networking activities that supported and served the minority scientific community at all levels of the higher education pipeline. These activities benefited all conference attendees and certainly impacted mathematics students equally included opportunities to:

- Engage via Scientific Symposia and Keynote Addresses with nationally recognized scientific and mathematic role models and mentors.
- Gain professional skills essential for advancement in the sciences and mathematics, including professional development workshops that focused on communication of scientific and mathematical research methods and findings.
- Receive feedback from faculty judging poster and oral presentations and in the process make meaningful connections with prospective mentors.
- Make informed decisions about their professional future and to establish lasting connections with university, government agency, industry, and research organization representatives.
- Engage in structured mentoring activities such as the Conversations with Scientists and the Mathematics Institutes Reception, where professional scientists, mathematicians and administrators provided essential information to students at all stages of the higher education pipeline, and assisted them to develop an academic and career roadmap that will guide effectively as they navigate their way to professional success in the science and mathematics world.

FISCAL REPORT

The AMS sponsorship was used to fund speakers for one session and student participants as indicated below.

	Airfare	Lodging	Partial registration	
Cynthia Anhalt	\$0.00	\$0.00	\$406.65	
Minerva Cordero	\$153.00	\$371.00	\$406.65	
Ricardo Cortez	\$343.60	\$557.00	\$406.65	
Alfinio Flores	\$524.20	\$557.00	\$406.65	
Hortensia Soto-Johnson	\$274.94	\$186.00	\$406.65	
TOTAL	\$1295.74	\$1671.00	\$2033.25	\$4,999.99

Epsilon Awards to Mathcamps 2014

All Girls/All Math	<i>University of Nebraska, Lincoln, NE</i>	\$5,000
Camp Euclid	<i>online</i>	\$5,000
Canada/USA Mathcamp	<i>Lewis and Clark College, Portland, OR</i>	\$5,000
Governor's Institutes of Vermont	<i>University of Vermont, Burlington, Vermont</i>	\$5,000
KSU Math Circle Summer Camp	<i>Kennesaw State University, Kennesaw, GA</i>	\$7,500
MathILy	<i>Bryn Mawr College, Bryn Mawr, PA</i>	\$10,000
MathPath	<i>Mount Holyoke College, South Hadley, MA</i>	\$5,000
Mathworks Honors Summer Math Camp	<i>Texas State University, San Marcos, TX</i>	\$5,000
Michigan Math and Science Scholars Summer Program	<i>University of Michigan, Ann Arbor, MI</i>	\$5,000
New York Math Circle High School Summer Program	<i>NYU Courant Institute of Mathematical Sciences, New York, NY</i>	\$7,500
PROMYS	<i>Boston University, Boston, MA</i>	\$2,500
PROTaSM (Puerto Rico Opportunities for Talented Students in Mathematics)	<i>University of Puerto Rico, Mayagüez Campus</i>	\$5,000
Research Science Institute	<i>Massachusetts Institute of Technology, Cambridge, MA</i>	\$2,500
Ross Mathematics Program	<i>The Ohio State University, Columbus, OH</i>	\$5,000
SMaRT (Summer Mathematics Research Training Camp)	<i>Texas A&M University, College Station, TX</i> Note – this award is on hold until 2015 at the request of grantee	\$10,000

Epsilon Awards to Mathcamps 2014

Stanford University Mathematics Camp (SUMaC)	<i>Stanford University, Stanford, CA</i>	\$5,000
Summer Program for Applied Rationality and Cognition	<i>University of California at Berkeley, Berkeley, CA</i>	\$5,000
Summer Program in Mathematical Problem Solving	<i>Bard College, New York</i>	\$7,500
UMTYMP Summer Program	<i>University of Minnesota, Minneapolis, MN</i>	\$5,000
We Do Math	<i>Clemson University, Clemson, SC</i>	\$5,000
Williams College Math Camp (WCMC)	<i>Williams College, Williamstown, MA</i>	\$7,500
Young Scholars Program	<i>University of Chicago, Chicago, IL</i>	\$5,000
Grand Total		<hr/> \$125,000

To: Executive Committee and Board of Trustees (ECBT) of the AMS
From: Edward Aboufadel, Former Secretary of AAAS Section A (Mathematics)
Subject: Symposia at the 2014 AAAS Annual Meeting
Date: April 7, 2014

Overview: The 2014 AAAS Annual Meeting was held in mid-February in Chicago. The theme for the meeting – “Meeting Global Challenges: Discovery and Innovation” – focused on finding sustainable solutions through inclusive, international, and interdisciplinary efforts that are most useful to society and enhance economic growth. There were a variety of presentation formats, especially symposia (of three or more talks) on themes of contemporary interest, as well as individual topical area lectures and plenary lectures. There was also a graduate student poster session, with nearly a half-dozen posters in the area of applied mathematics. About 10,000 people registered, including a significant turnout for the Family Science Days program. Actual attendance was about 8000 and was affected this year by that week’s brutal winter storms.

The generous support of the AMS continues to be centrally important in enabling Section A to offer programs and speakers that communicate to general scientific audiences and the press (and by extension, the public at large) the nature, excitement, and usefulness of mathematics

We appreciate the efforts by the AMS to report on the AAAS meeting, such as at this URL: <http://www.ams.org/meetings/aaas2014>. Of important note from the meeting is the following from the AMS writers: Steven Strogatz, Jacob Gould Schurman Professor of Applied Mathematics at Cornell University, received the 2014 AAAS Award for Public Engagement with Science for “his exceptional commitment to and passion for conveying the beauty and importance of mathematics to the general public.”

Below are summaries of the four symposia that were sponsored this year by section A. Included with each report is a list of AAAS Sections (other than Section A) that indicated in the program their interest in the symposium. The mathematics section makes up a bit more than 1% of the AAAS membership, so we are certain that the symposia speakers are reaching a broad audience of scientists and the media. All of the reports this year were written by Edward Aboufadel, who has now stepped aside as section Secretary after serving for eight years (2006-2014). In addition, Section A officers helped to arrange for the Illinois Geometry Lab to be a part of Family Science Days.

The Importance of Recreational Mathematics in Solving Practical Problems

Friday, 14 February 2014: 3:00 PM-4:30 PM

Organizers: Jason Rosenhouse and Laura Taalman, James Madison University

The speakers were Gary McGuire (University College Dublin) and Francis Su (Harvey Mudd College). Neither Laura Taalman nor Jason Rosenhouse were able to attend due to the weather, so McGuire and Su extended their talks, and Su led a discussion with the audience to complete the session.

The session began with Su describing how what is considered “recreational mathematics” has led to breakthroughs in applied mathematics. For instance, the study of Latin squares has informed the development of error-correcting codes and experimental design in statistics. Su also noted that the theme of the 2014 Mathematics Awareness Month is “Mathematics, Magic, and Mystery”, celebrating the 100th anniversary of the birth of Martin Gardner, the leading light in the pursuit of recreational mathematics when he was alive.

The session was then turned over to Gary McGuire, who spoke on “How We Proved the 17 Clue Conjecture” from the study of Sudoku. The basic question is this: what are the minimum number of clues you can have in a Sudoku puzzle so that the puzzle has a unique solution. A few years ago, no one could find a puzzle with 16 clues, and only a few with 17 clues were known to exist. He then began to describe how his research group proved the theorem that no 16-clue puzzle exists. To start, there are of the order of 10^{31} possible way to fill 16 numbers into a Sudoku board, so a brute force check of all of these boards was impossible. Instead, his research group turned the question into the “hitting set” NP-complete problem. (The hitting set problem has applications in gene expression analyses and the distribution of mobile phone towers.) Through their analysis, an application of Burnside’s lemma, and distributed computing, they were able to perform the computer calculations needed in 2011 to prove their theorem, and a group in Taiwan recently finished separate computations as an independent check. McGuire was asked many questions by the audience after his talk.

Then, Francis Su gave a wide-ranging talk on applications of Sperner’s Lemma to a variety of problems. Sperner’s Lemma, which involves the labeling of subtriangles of a triangulated object, is equivalent to Brouwer’s Fixed Point Theorem. Su gave a nice expository explanation of how the Lemma leads to the existence of Nash equilibria, as well as how solutions to highly nonlinear equations are found. He also deduced how a board game from the 1950’s called Hex cannot end in a draw. Su followed this discussion with two proofs of Sperner’s Lemma – one that was a non-constructive odd/even argument, and the other a constructive proof that involved path-following in triangulated objects. This led to other applications: a dual Sperner problem, envy-free cutting of a cake, division of rent in a building, and finally a new proof by

contradiction of the Hex theorem. It was refreshing to see the breadth and depth of mathematics at the AAAS meeting.

Attendance at this symposium was robust, with 60 to 80 people in the audience.

Other sections that listed interest in this symposium in the printed program: Chemistry, Education, Statistics, and General Interest in Science and Engineering.

Elections Through the Lens of Mathematics

Saturday, 15 February 2014: 8:00 AM-9:30 AM

Organizer: D. Marc Kilgour, Wilfrid Laurier University

The speakers were Steven Brams (New York University), James I. Forshee (Epic Systems Corporation), and Samuel Merrill III (Wilkes University). The first two speakers replaced Vik Amar and Judy Goldsmith, both who were unable to attend due to the weather.

Steven Brams is well-known in election theory, and his talk focused on the so-called “non-competitive states” in the Electoral College. Using mathematical arguments, he made the case that these states do count, because they give the leading candidate more ways to win with coalitions that are less fragile and less vulnerable, and Brams provided formal, mathematical definitions of his terms. He worked through a toy example with five battleground states, calculating measures of “winningness”, “vulnerability”, and “fragility”, and then he turned to the 2012 U.S. presidential election. There, he showed that due to Obama’s dominance of the “non-competitive states”, he had many more paths to winning on Election Day than Romney did. Brams concluded his talk with computations using the Banzhof Index of Voting Power.

James Forshee gave a talk prepared by Judy Goldsmith, “An Empirical Study of Voting Rules and Manipulation with Large Datasets”. Most theoretical election schemes require a complete ranking of candidates by each voter, but in practice we don’t have this data, so do any of our theoretical results actually happen in practice? There are some real data sets that are useful, and Forshee described a new project to collect these sets for researchers, called PrefLib: A Library for Preferences (<http://www.preflib.org/>). PrefLib currently houses over 3,000 datasets for research communities that deal with preferences, including computational social choice, recommender systems, data mining, machine learning, and combinatorial optimization. In addition, Forshee explained how to think of the Netflix Prize data as an election, in order to fit it into election theory.

The third talk was by Sam Merrill, and he described the study of voting results over time (e.g. the percentage of popular vote won by the Democrats in the U. S. presidential election), using Fourier and wavelet analyses to find cycles and other behavior. In the first part of his talk, he provided statistical support for the cyclical theory model predicted by historian Arthur Schlesinger in the early part of the 20th century, identifying a 27-year cycle of liberalism and conservatism in the United States using a spectral analysis of 1856-2012 data. Then, Merrill described a recursive model to explain the data, with equations like this:

$$R(t + 1) = R(t) + \alpha(M(t) - R(t)) + \beta(P_R - R(t))$$

where R represents the position of the Republican parts in a liberal/conservative spectrum, M is the location of the median voter, P_R is the ideal position of the Republican party, and α and β are parameters that measure motivation and other factors based on the data. Merrill concluded his talk by reporting on results from Luís Aguiar-Conraria and Maria Joana Soares, who have applied wavelet analysis to voter data. Bottom line on all of these studies: voting systems are self-correcting. Times of extremes in political leadership (either conservative or liberal) are followed by movements in the opposite direction.

Attendance at this symposium started at 30 and rose to 40 at this Saturday morning session.

Other sections that listed interest in this symposium in the printed program: Social, Economic, and Political Sciences; Information, Computing, and Communications; and Statistics.

Your Genome: To Share or Not To Share?

Sunday, 16 February 2014: 10:00 AM-11:30 AM

Organizer: Yaniv Erlich, Whitehead Institute for Biomedical Research

This symposium raised many questions about risks to privacy when sharing genomic data. The speakers were Yaniv Erlich (Whitehead Institute for Biomedical Research), Kristin Lauter (Microsoft Research), and John Wilbanks (Sage Bionetworks). Barbara Jasny of the AAAS was the Discussant.

Yaniv Erlich was the first speaker, and he described his success of matching genomic data in public databases with donor surnames by using other databases. Y-STR is a short tandem repeat (STR) on the male Y-chromosome, and Y-STR data is available in public databases such as <http://www.ysearch.org/>. Because age and state of a patient/donor are not protected identifiers in the HIPAA law, this information is often attached to genomic data, which allows a “genetic hacker” to make some matches between that data and donor names. This might involve finding

obituaries on-line which indicate people who are relatives. Erlich provided some the details of his work, and pointed to an article in *Science* with more details: “Identifying Personal Genomes by Surname Inference.”

The second speaker, Kristin Lauter, introduced “homomorphic encryption” as a mathematical method to protect genomic privacy of individuals while still embracing the societal goals of genomic research. Using a commutative diagram, she explained the key ideas of this type of encryption as: (1) put your gold in a locked box, (2) keep the key, (3) allow your jeweler to work on the gold through a glove box, and (4) unlock the box when the jeweler is done. Like this:



So, the idea mathematically is to design an encryption/decryption system that will commute with the mathematics of our genetic analysis. If such a system can be created, this would lead to putting encrypted data “in the cloud”, and allowing for analysis to occur there. Latuer hinted at results in creating homomorphic encryption, but did not provide any technical details in her talk. Rather, she discussed the type of computations that could be implemented (basically based on additions and multiplications) and issues of scalability and efficiency.

In his talk, John Wilbanks wrestled with several questions revolving around donating genomic data for science. He noted that data in itself is free of intellectual property rights, and that these days genomic (and other health) data can be collected outside the traditional research universe. But, the current regulatory environment for data and communication is based on when fax machines were new, so what can be done today? He was troubled that after he allowed his own genetic data to be available online, someone “harvested his genotype”, did an analysis, and sent him an e-mail saying that there was “no suggestion of consanguinity” in his genomic data.

Wilbanks described a new system (and web site) which includes an online, informal consent, with statements such as: “Do not attempt to re-identify me,” and “Do not harm me.” He can see this approach gaining traction, especially as other data sets begin to be explored (prescription history, exercise logs).

In brief comments, Barbara Jasny noted that new restrictions of research use of this data are being considered in Europe, and she said a few words about “Lattice-Based Cryptography”, which is thought to be resistant to quantum computing.

This symposium was very popular, with over 120 people in attendance, and many questions from the audience.

Other sections that listed interest in this symposium in the printed program: Biological Sciences, Anthropology, Medical Sciences, Dentistry and Oral Health Sciences, Pharmaceutical Sciences, Statistics, and Neuroscience.

Re-Identification Risk of De-Identified Data Sets in the Era of Big Data

Sunday, 16 February 2014: 1:30 PM-4:30 PM

Organizers: Leslie Taylor (VA Puget Sound Health Care System) and Xiao Hua Andrew Zhou, University of Washington

The speakers were Bradley Malin (Vanderbilt University), Eran Halperin (Tel Aviv University and University of California, Berkeley), Daniel Barth-Jones (Columbia University), Xiao Hua Andrew Zhou (University of Washington), and Paul Ohm (University of Colorado). LaTanya Sweeney (Harvard University) was also scheduled to speak, but could not attend.

All of the speakers in this symposium addressed issues related to the availability of health data, including genomic data, expanding on ideas brought up in the previous symposium organized by Erlich. For instance, Ohm provided more details on what is not covered by HIPAA, so most states sell anonymized hospital discharge data with lots of details (e.g. zip code of patient). He was part of a research project that identified 43% of these cases “uniquely and exactly” by comparing the discharge data with information from local newspaper stories. Malin reported that the entire medical record set from Vanderbilt University has been “de-identified” and made available, and he recommends that “ k -anonymity” be used, with $k = 5$. (If $k = 5$ and the potentially identifying variables are age and gender, then a k -anonymized data set has at least 5 records for each value combination of age and gender.)

Halperin made a key point that the right rules are still in flux. For instance, allele frequency for single nucleotide polymorphism used to be made public until 2008, when a paper by Homer, *et al* showed how this approach jeopardizes privacy. Then, he spent time describing “spatial ancestor analysis” (see <http://genetics.cs.ucla.edu/spa/>) and showed how DNA data leads to a map of Europe where we can find a person’s ancestry with 100 miles. Barth-Jones argued that the broad availability of de-identified data has been used for decades to enable innumerable essential health system improvements, but we have to be careful because rare individuals can be easily identified (e.g. in segregated cities, a person of one race in an area populated by another race).

Zhou started his talk with another area of concern: Freedom of Information acts that request the release of medical data from the Veterans Administration (VA). This led him to calculate an estimate of re-identification risk which led to a conclusion that this risk is equivalent to measuring rareness (e.g. a 16-year old widow). Applying his calculations to the VA database, he developed risk measures for individuals, the highest being 95% chance of re-identification, but most were close to 0.

Attendance varied between 30 and 50 for this symposium. In addition, the speakers seemed to relish that they were at odds with each other about some of their conclusions.

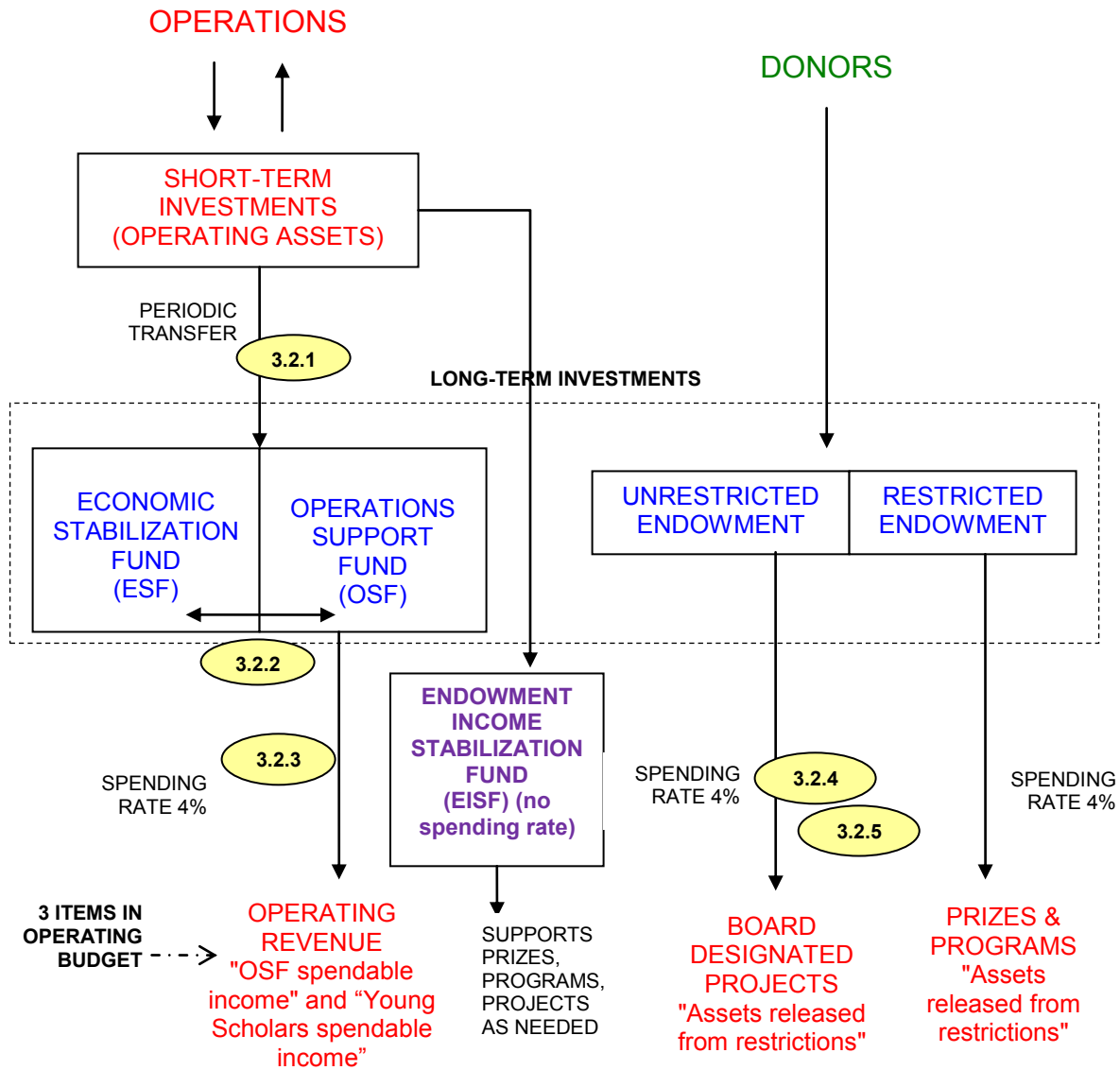
Other sections that listed interest in this symposium in the printed program: Industrial Science and Technology; Information, Computing, and Communication; Statistics; and Societal Impacts of Science and Engineering.

A Final Note: Big Data

Along with the sessions described above, the AAAS organized a seminar called “Big Data: Applications and Implications”, which included three symposia: “Data Availability: Making Sure the Gift Keeps Giving,” “How Big Data Supports Biomedical Discovery”, and “A new Era for Urban Research: Open Data and Big Computation”. The idea of “Big Data” was present in Chicago.

AMS Long-term Investments Cliffs Notes

(For details, see section D of Fiscal Reports)



ESF = 75% annual operating expenses + unfunded medical liability (APBO)

OSF = remainder of quasi-endowment (spending on 3-yr rolling average)

Rebalanced annually, December 31

EISF = Created 12/31/12 from amounts the Long Term Portfolio owed to Operations. The fund supplements prizes, programs, board designated projects when endowment funds from 4% spending rate are not adequate. Invested in an intermediate term investment.

Note: Spendable income from true endowment funds held in Temp Restricted net assets and 'released' to operations as related expenses are incurred.

Values as of:	12/31/13	12/31/12
ESF	\$ 25.8 M	\$25.9 M
OSF	72.2 M	53.8 M
EISF	.5 M	.5 M
Unrestricted	7.4 M	6.2 M
Restricted	6.1 M	4.9 M

AMERICAN MATHEMATICAL SOCIETY

To: Board of Trustees
From: Emily Riley, CFO
Subject: Operating Fund Portfolio Management Report

Date: April 17, 2014

SUMMARY RETURNS

The purpose of this memorandum is to summarize the Society's cash management policies and report on the operating portfolio's investment income performance during 2013. There is one proposal for changes in authorized investment limits or additional investment vehicles presented.

Investment earnings results by type and in total and other pertinent portfolio information for 2013 and the preceding six years are as follows:

	2013	2012	2011	2010	2009	2008	2007
Money Market Funds	0.01%	0.04%	0.05%	0.16%	1.0%	2.9%	5.0%
Vanguard Fixed Income Mutual Funds:							
Short Term Corporate Bond Fund	1.05%	4.63%	2%	5.3%	14.2%	(4.7%)	6.0%
GNMA Fund	(2.13%)	2.45%	7.8%	7.1%	5.4%	7.3%	7.1%
Long Term US Treasury Fund	(12.94%)	3.56%	29.4%	9.1%	(11.9%)	22.7%	9.4%
Fidelity Floating Rate Fund (12/04)	3.92%	6.81%	1.7%	7.8%	28.9%	(16.5%)	2.7%
Vanguard Convertible Securities	19.46%	14.47%	(6.8%)	19.2%	40.8%	(29.8%)	10.6%
TIPs (April 2005)					7.4%	(1.3%)	8.9%
Certificates of Deposit	0.76%	1%	1%	1.3%	2.7%	4.0%	5.2%
Common Stock	14.6%	11.5%	12%	3.0%	23.3%	(24.4%)	(1.4%)
Annual total portfolio return	2.5%	3.33%	2.2%	4.5%	7.1%	(0.7%)	5.8%
AMS benchmark – Avg 6 month CD rate per Federal Reserve Bank	0.27%	0.44%	0.42%	0.44%	0.8%	3.1%	5.2%
AMS returns versus benchmark	2.23%	2.89%	1.78%	3.86%	6.3%	(3.8%)	0.6%
Wkly Average Operating Portfolio (in 000's)	\$12,708	\$12,977	\$13,245	\$13,866	\$13,858	\$15,525	\$15,459
Annual Investment Income (in 000's)	\$263	\$460	\$270	\$626	\$984	(\$105)	\$895

At December 31, 2013 operating fund investments equaled \$11,214,480 which is a decrease of approximately \$3,586,479 from the previous year. In addition to the operating portfolio investments, there was an increase in cash available for operations of \$3,630,161 at the end of 2013, due to cash receipts received at year end from publishing sales.

The return for 2013 was 2.5% for the operating investments as a whole, despite the drop in interest rates on money market funds and certificates of deposit. This 2.5% return was 2.3% over the benchmark used for the operating portfolio, the average annual 6-month CD rate per the Federal Reserve Bank. The decreasing return on the certificates of deposits and money market funds was expected for 2013. These low rates may start to rise slowly in 2014. The returns from the fixed income funds were negative or very low. This low return was counterbalanced by excellent returns from the convertible securities fund and from the floating rate high income fund, which carries more risk than the other

bond funds. The mix of funds in this operating portfolio continues to be an excellent choice due to its diversity.

The weekly average balance in the operating portfolio dropped in 2013 from \$12,977,000 in 2012 to \$ 12,707,595. This decrease was partially due to the delay in sending out subscription renewals with the implementation of Personify.

History of Authorized Investment Vehicles and Limits.

At the May 1996 ECBT meeting it was agreed that the Society should have as a goal an accumulation of current assets such that they exceed current liabilities. To help achieve this objective, at the May 1997 ECBT meeting a plan for the creation of an intermediate term investment portfolio was adopted. Increased limits of \$1,000,000 (to \$4,000,000) in our money market funds, \$1,000,000 (to \$2,000,000) in our Vanguard fixed income funds, and \$500,000 (to \$1,500,000) in Treasury Notes were approved. In addition, a \$1,500,000 combined limit for other mutual funds, consisting of high yield and convertible bond funds, was established at this time.

In May 2000, the limits for money market funds, fixed income funds and the high yield/convertible funds were each increased by \$500,000. At the May 2002 ECBT meeting, the limit on the money market fund was increased to \$5,500,000, primarily to accommodate the larger investment balance carried in the operating portfolio. In May 2004, the Board of Trustees added floating rate bond funds to the authorized investments, with an investment limit of \$2,000,000. In May 2005, the Board changed the limit on money market investments to be 50% of the operating portfolio balance at any point in time, again to accommodate the larger portfolio balance and liquidity needs of the Society. In December 2013, the Board of Trustees authorized the inclusion of the Endowment Income Stabilization Fund (EISF) in the intermediate-term portion of the operating portfolio. This added approximately \$500,000 to the portfolio.

The strategy of using an intermediate portfolio has occasionally resulted in greater volatility, but overall has generated an increase in the earnings of our operating fund investments. By shifting a portion of operating fund investments into slightly riskier investment vehicles we have, on average, increased the earnings compared to those that would have been achieved in low risk, short term investments.

Recent Portfolio Adjustments.

Finding suitable banks with higher-than-average rates of returns on certificates of deposits has become increasingly difficult over the past few years. Accordingly, the certificates of deposit portfolio continues to decline and the money market funds have been used to 'stockpile' the funds needed to support operations for the near term. However, the money market interest continues to decline as well.

Changes in the Cash Management Environment.

The Federal Reserve recently indicated that it will not raise federal funds rates before 2015. This news has spurred a rally in the bond market, but it is uncertain this rally will be sustained throughout the year. CD rates will probably continue to be low. We have seen a slight rise in the availability of better CD rates, but those slightly higher rates are rare, so we will continue to have lower levels of CD investments compared to prior years. Due to the investing environment, it is likely that the operating portfolio will have a lackluster return in 2014.

Cash Management at the AMS.

The following rules govern AMS's management of cash:

1. **Availability and Liquidity.** The placement of investments in the operating portfolio is coordinated with the Society's immediate and estimated future cash requirements, which are based on actual and projected revenue and disbursement streams. Cash needs to be available at the appropriate times to cover the operating expenses of the Society as they are incurred - payroll, payroll taxes and other withholdings, and vendor liabilities comprise the bulk of our cash needs. Adequate portfolio liquidity is the ability to turn investments readily into cash without suffering undo loss of principal.
2. **Income.** Cash in excess of immediate operating needs should be invested so as to optimize returns. The Society has intentionally accreted such excess cash, so that the ratio of current assets to current liabilities remains at least 1 to1. This ratio was 1.2 at December 31, 2013, and 1.25 as December 31, 2012.
3. **Preservation of principal.** Safety is of prime concern in investments of operating capital. Diversifying investment vehicles and monitoring investment maturity dates and market value fluctuations greatly reduces an investment portfolio's exposure to risk. Maximum allowable positions should and have been established for different types of investments.

Authorized Investments.

The investment vehicles authorized by the Board of Trustees for the operating portfolio are as follows:

- **Certificates of Deposit.** As in prior years, part of the Society's operating investment portfolio has been invested in certificates of deposit, although it has declined in recent years for the reasons discussed above. The weekly balance in certificates of deposit averaged 9% of the total portfolio during 2013, about 12% in 2012, and 16% of the portfolio in 2011.

We generally purchase "jumbo" CD's of federally insured savings institutions and commercial banks that are assigned an acceptable safety rating by a weekly bank rating newsletter. Current investment policies limit the amount of investment in each bank issuing CDs to the Federal Insurance Deposit limit of \$250,000 (exclusive of accrued interest). There is no limit to the total amount of CDs that can be held by the operating investment portfolio.

Issuer	Banks & Savings and Loans
Risk of default	None - federally insured
Risk of market decline	None
Maximum Amount	\$250,000 per bank, unlimited in total

Most often we intentionally accumulate the CD portfolio (generally for one-year terms, shorter terms are used to take advantage of rising interest rates) in order to increase the yield on the portfolio, even if slightly. However, the typical CD rates are now so low and the cash flow needs of the Society have been greater in recent years because of planned investments in plant and equipment, that accumulating the money market funds is more efficient to do.

- **Treasury Bills.** T-Bills are convenient to use when we have a large planned expenditure for a predetermined future date, such as contributions to the Economic Stabilization Fund; however, better rates are available on alternative forms of short-term operating investments. Treasury Bills have no market risk associated with them because they are backed by the full faith and credit of the US government, are issued for short durations and are highly liquid. Accordingly, there is no limit to the total amount of T-Bills we may hold in our portfolio.

Issuer	U.S. Government
Risk of default	None
Risk of market decline	None if held to maturity
Maximum Amount	Unlimited

- **Cash and repos (repurchase agreements).** The AMS uses a concentration account at Citizens Bank - Massachusetts into which all receipts are automatically deposited and from which all disbursements are made. Under a repurchase agreement, cash above an established minimum balance is "swept" on a daily basis and invested overnight in repurchase agreements. Under a repurchase agreement, the customer (AMS) purchases government securities and the bank agrees to "repurchase" them the following day. The rate earned on these depends on the dollar amount of the repo; it is generally very low in comparison to rates available on other investment vehicles. Interest rates on repurchase agreements have been extremely low for a number of years. Unless one is sweeping large amounts of cash throughout the year, the interest earned does not justify the fees charged to maintain the agreement in place. The AMS has not used this investment vehicle since 1999 and it is not expected to be used in the near future.

Issuer	Citizens Bank - Massachusetts
Risk of default	Minimal
Risk of market decline	None
Maximum Amount	\$1,000,000
Comments	Collateralized by US Gov't securities

- **Money market funds.** The Board of Trustees has authorized a maximum investment of 50% of the balance in the operating portfolio at any point in time. At the end of 2013 the balance in money markets was \$2,194,570 or 20% of the entire portfolio, exclusively in Vanguard's Money Market Prime portfolio. Yields on the funds averaged 0.01% in 2013, and will likely not increase significantly anytime soon. There is little risk to principal because the valuation of the initial investment is generally not subject to change because of its short-term duration. Balances in these funds are usually maintained only at levels needed for short-term operating needs in excess of short-term maturities, or for planned investments to be made in the near future (which avoids the administrative costs of 3 month CD's or T-bills), or to take advantage of rising interest rates, since they generally under-perform alternative authorized investment vehicles.

Issuer	Vanguard and Fidelity
Risk of default	Minimal
Risk of market decline	Very Low
Maximum Amount	50% of operating portfolio balance

- **US Treasury Notes.** The Board of Trustees has authorized a maximum investment of \$1,500,000 in US Treasury Notes. A loss of market value may be incurred on these investments in a rising interest rate environment if funds are needed before maturity and have to be sold; however this risk is slight as the Society's liquidity is deemed extremely adequate. Treasury Notes can be an attractive investment when interest rates are expected to decline and the yield curve is fairly steep. This has not been the case in recent history.

Issuer	U.S. Government
Risk of default	None
Risk of market decline	None if held to maturity, otherwise value moves inversely to interest rate changes
Maximum Amount	\$1,500,000
Comments	Best used just before interest rates decline

- **Fixed Income (Bond) Mutual funds.** The Board of Trustees has authorized a maximum investment of \$2,500,000 in fixed income mutual funds (initial investment, exclusive of reinvested income and share price increases, with appropriate disclosure to Treasurers and Board), and at the end of 2013 we had \$ 4,205,810 invested. The initial investment amount is well below the limit. All of these investments are with the

Vanguard Group of Valley Forge, PA. A combination of three funds is used: the High Grade Short-Term Corporate Bond portfolio, the GNMA portfolio, and the Long-Term US Treasury portfolio.

Issuer (currently used)	The Vanguard Group
Risk of default	Minimal
Risk of market decline	The longer the maturities of underlying investments, the higher the risk.
Maximum Amount	\$2,500,000
Comments	Market value will decline as interest rates rise and increase as rates fall.

Historically, most of the volatility in the Society's short-term portfolio has been the result of market valuation adjustments on these investments (they are marked to market monthly); however, gains or losses technically are not realized on these funds until they are redeemed. The GNMA fund is less affected by interest rate volatility than the Long-Term US Treasury, despite similarity in term length of the underlying securities, as these debt instruments support the housing industry (and are unrelated to the problems at FNMA and FreddyMac).

Since these funds are different in nature, it is helpful to look at their characteristics separately, keeping in mind that the limit applies to the combined total.

Vanguard High Grade Short-Term Corporate Bond Fund:

Issuer (currently used)	The Vanguard Group
Risk of default	Low, due to quality of underlying debt instruments and borrowers
Risk of market decline investments	Low, due to short duration of underlying investments
Comments	Share price is usually relatively stable; return is determined by recent interest rates, as underlying debt is short duration
2013 return	1.05%

Vanguard GNMA Fund:

Issuer (currently used)	The Vanguard Group
Risk of default	Low – while not backed by the full faith and credit of the US government, it isn't likely that the US government would allow GNMA to default on its obligations
Risk of market decline	Medium, as duration is longer
Comments	Since the GNMA obligations are linked to collateralized mortgage obligations, and mortgage rates tend to change more slowly

2013 return (2.13%) than other long term rates, this fund is a bit less volatile when interest rates change.

Vanguard Long-Term US Treasury Fund:

Issuer (currently used)	The Vanguard Group
Risk of default	Low, as most underlying securities are US government direct issues
Risk of market decline	Highly sensitive to interest rate changes, as duration of underlying securities is long-term
Comments	This fund has caused most of the volatility in the Intermediate portfolio; staff mitigates some risk by adjusting investment amount
2013 return	(12.94%)

- **High Yield and Convertible Bond Mutual funds.** The Board of Trustees has authorized a maximum investment of \$2,000,000 in any combination of high yield bond and convertible securities accounts. At December 31, 2013 we had \$2,202,033 invested in these vehicles, in one convertible securities mutual fund managed by the Vanguard Group. Gains or losses technically are not realized on these funds until they are redeemed, although, for financial statement purposes, the Society records these investments at market.

The initial investment into the fund was \$570,000 in 1998. Also included in the total funds are realized and unrealized gains since 1998. In December 2013, EISF funds of \$249,000 were moved to the convertible securities account in order to invest the funds in the intermediate portfolio. Although the funds were invested in the convertible securities account, the EISF actually owns a percentage of the entire intermediate-term portion of the portfolio. The high returns in 2013 in addition to the EISF invested funds have resulted in a balance that exceeds the maximum investment limit of \$2,000,000. At a balance of \$2,202,033, the convertible bond fund investment was 27% of the intermediate-term portion of the operating portfolio at December 31, 2013. **The CFO is recommending that the limit be increased to a maximum of 30% of the intermediate-term portion of the portfolio.**

It is not unusual for an intermediate-term portfolio to have a small exposure to investments with some equity-like risk, such as convertible securities.¹ Per Vanguard, a portfolio consisting of 0 to 30% stocks and 70 to 100% bonds “seeks current income with minimal risk to principal, is comfortable with only modest long-term growth of principal, and has a short- to mid-range investment time horizon.”

¹.Per Morningstar, “Convertible bond portfolios are designed to offer some of the capital-appreciation potential of stock portfolios while also supplying some of the safety and yield of bond portfolios. To do so, they focus on convertible bonds and convertible preferred stocks. Convertible bonds allow investors to convert the bonds into shares of stock, usually at a preset price. These securities thus act a bit like stocks and a bit like bonds.”

Issuer (currently used)	The Vanguard Group
Risk of default	Medium to High
Risk of market decline markets	Sensitive to movements in the equity
Maximum Amount	\$2,000,000
Comments	Total returns often parallel those of equity markets
2013 Return	19.46%

- ***Floating Rate Income funds.*** The Board of Trustees has authorized a maximum investment of \$2,000,000 in Floating Rate funds. \$1,000,000 was invested in the Fidelity Floating Rate High Income Fund in December 2004. The return for 2013 was 3.92%. Gains or losses technically are not realized on these funds until they are redeemed, although, for financial statement purposes, the Society records these investments at market.

Issuer	Fidelity
Risk of default	Low
Risk of market decline significantly	Low, possibly medium if economy falters
Maximum Amount	\$2,000,000
Comments	The fund is expected to have a relatively stable NAV with yield providing most of the return
2013 Return	3.92%

See Summary of Operating Portfolio Investments, December 31, 2013 on next page →

Summary of Operating Portfolio Investments, December 31, 2013.

<u>Description</u>	<u>Value at 12/31/13</u>	<u>Current Board Limit</u>	<u>Excess over Limit</u>
Money Market Funds	<u>\$2,194,570</u>	50% of total portfolio	NA
Certificates of Deposit	<u>951,529</u>	\$250,000 per inst.	NA
Treasury Notes		1,500,000	NA
<i>Vanguard Bond Funds:</i>			
GNMA Fund	1,655,573		
Short-Term Corp Bond Fund	1,788,039		
LT US Treasury Fund	<u>762,198</u>		
Subtotal	<u>4,205,810</u>	2,500,000 (1)	NA
<i>High Yield and Convertible Funds:</i>			
Vanguard Convertible	<u>2,202,033</u>		
Subtotal	<u>2,202,033</u>	2,000,000(2)	\$202,033
<i>Floating Rate Funds:</i>			
Fidelity Floating Rate High Inc			
Subtotal	<u>1,641,285</u>	2,000,000	NA
Common Stock	<u>\$19,561</u>	Unrestricted gifts	
Total (3)	<u>\$11,214,788</u>		

- (1) Limit is exclusive of reinvested dividends and share price increases. See discussion above.
- (2) The CFO recommends that the limit be raised to 30% of the intermediate-term portion of the portfolio.
- (3) The total share of the portfolio owned by the EISF was \$497,710 as of 12/31/13.

REPORT ON THE PERSONIFY PROJECT

Since going live in January 2013, Personify has been used for processing of orders, fulfillment of subscriptions, membership renewal, tracking of inventory, maintenance of committees by the Secretary's office, and other business functions. Personify is being used for the Society's online bookstore for establishing web accounts, PCI-compliant checkout and the sending of transaction notifications to customers and members. Data is being synchronized between Personify and our legacy publication tracking application (PUBL). Since the last report, the Computer Services Division (CSD) has worked with other departments on a number of major additions to the use of Personify at the Society, including:

- On-site registration for the Joint Mathematics Meeting (JMM) was done using Personify. A number of modifications were made to streamline the printing of badges and receipts to accommodate the number of on-site registrations that need to be handled. After the JMM, CSD staff met with the Meetings Department to identify inefficiencies that could be addressed and to determine post-meeting reporting needs. Modifications have been made and new reports written while the memories of the meeting are fresh in everyone's minds.
- Our intranet-based Sales Analysis application has been enhanced to work with Personify and made available to all staff. Previously, CSD had worked with the Fiscal staff to beta test the application and the new data loads from Personify. The Sales Analysis application is used by a wide range of staff to provide sale and credit data.
- The AMS Community Network has been launched, using Higher Logic's community software integrated with Personify. A discussion group has been created for Mathematics on the Web, as well as 7 closed groups and 1 committee discussion group.

In 2014 work on Personify will be devoted to refining, enhancing, and expanding the existing use of Personify and exploring the possible use of new modules. In addition, planning will begin for an upgrade to the most recent version, which may occur in 2015.

*Tom Blythe
Chief Information Officer
May 2014*

Update on proposals planned or submitted

Proposal for support to broaden and accelerate the development of MathJax

- A request to partially support software development by the MathJax Consortium for two years
- Expected to be submitted to the Sloan Foundation and to request about \$290,000

The MathJax Consortium was established in 2009 as a joint venture of the AMS, SIAM, and Design Science, Inc. One of the original leaders of the project, Robert Miner of Design Science, passed away in fall 2011. Because of changes in personnel and business priorities, Design Science withdrew from the venture at the end of February and the AMS became the Managing Joint Venturer in March 2013. The project is now run out of the Computer Services Division in Providence. It has been generously funded by a number of sponsors, seven of whom now contribute \$20,000 per year and thirteen of whom contribute at a more modest, but still significant level. See www.mathjax.org/sponsors/.

Don McClure and Jim Crowley, Executive Director of SIAM, have submitted a “letter of inquiry” to the Sloan Foundation about a proposal that is being prepared by Peter Krautzberger, the current project manager, and the two Executive Directors. The funds would allow the project to support additional developers to accelerate the project and broaden efforts in directions such as (1) incorporating semantic information with MathML to enable accessibility, responsive rendering of mathematical expressions, and improved searchability of mathematics content, (2) achieving the ability of MathJax to pass 100% of the MathML test suite, and (3) integration of MathJax into nonproprietary e-book standards such as ePub3.

2015 Summer Institute in Algebraic Geometry

- July 27 – August 13, 2015
- Location: University of Utah
- Proposal to NSF for \$200,000 to \$250,000

During the period 1953 – 1999, the AMS held a series of yearly Summer Research Institutes supported by grants from the National Science Foundation (NSF). Each was a 3-week long institute focused on one (relatively broad) area of mathematics. Typically, the scientific program was arranged by a group of volunteer organizers. The logistics were handled by the AMS Meetings and Conferences Department. The grant provided travel funds for some of the participants, and also covered the expenses of the AMS staff members. Algebraic Geometry was the topic in 1954, 1964, 1974, 1985, and 1995. In 2005, the AMS agreed to continue the tradition of managing a Summer Institute for Algebraic Geometry once every ten years, even though the yearly series had been discontinued. Attendance at these Summer Research

Institutes in Algebraic Geometry grew significantly, from 28 in 1954 (which was joint with Several Complex Variables) to 83 (1964), 270 (1974), 310 (1985), 430 (1995) and 518 (2005).

The 2005 Summer Institute was supported in three ways. The grant from the National Science Foundation for the 2005 Summer Institute was \$135,000. Of this, \$103,497.20 was dispersed for participant travel, housing and meal expenses (\$82,572.90 went to junior mathematicians and graduate students). Approximately \$30,000 was used to pay the expenses of AMS staff. The National Security Agency provided \$15,000 (its usual amount of support for an individual conference), and the Clay Foundation reimbursed the expenses of several speakers each week (for a total of around \$20,000).

In January 2012, the Board of Trustees agreed (via email) that the AMS should once again handle the logistics for a Summer Institute in Algebraic Geometry in the summer of 2015. AMS staff members have been working with a group of organizers to begin making the arrangements for this event. The Director of Meetings and Conferences, Penny Pina, has negotiated a contract with the University of Utah, which has offered us favorable rates and concessions. This location was the first choice of the Institute organizers. The organizers have recently learned that they have been awarded a grant of \$100,000 from the Clay Mathematics Institute to fund travel and subsistence for invited speakers and young international mathematicians, and some audio-visual expenses.

Final decisions about the budget for the grant proposal to NSF are now being made, after consultation with the organizers and Program Director Tie Luo at NSF. The budget for the 2015 Summer Institute will be in the range of \$200,000 to \$250,000.

Organizing Committee:

Tommaso de Fernex, University of Utah
Brendan Hassett, Rice University
Mircea Mustata, University of Michigan
Martin Olsson, University of California, Berkeley
Mihnea Popa, University of Illinois, Chicago
Richard Thomas, Imperial College

Ex officio:

Nick Woodhouse, Clay Mathematics Institute
Ellen Maycock, AMS

Travel Support for the *Math in Moscow* Program (submitted)

The Independent University of Moscow (IUM) is a small, elite institution of higher learning that focuses primarily on mathematics. It was founded in 1991 at the initiative of a group of well-known Russian research mathematicians, who now comprise the Academic Council of the University. Since April 2001, the National Science Foundation (NSF) has awarded four continuing grants to the American Mathematical Society (AMS) with funds to be used to support mathematically talented U.S. undergraduates for a semester of study at the *Math in Moscow*

program of the IUM. Based on the success of the existing Travel Support for the *Math in Moscow* Program, the AMS has requested a continuation of funding for three years, in the amount of \$333,000. The proposal was submitted in February 2014. These funds will be used to underwrite a substantial part of the typical cost for a semester of study in the program for ten undergraduates per (academic) year.

The *Math in Moscow* program is a fifteen-week-long research experience for mathematically talented students. This program consists primarily of courses in mathematics and theoretical computer science, and provides an academically enriching experience because it allows mathematically talented students to meet and work with other students who share a talent and interest in mathematics, as well as the chance to work with some of the world's leading mathematicians. The program provides an experience of mathematics that the students would not find in the U.S. This is because students experience the field of mathematics as it is practiced in the Russian tradition, the main feature of which has always been the development of a creative approach to mathematics, with the emphasis being on problem solving rather than memorizing theorems. Indeed, for the Independent University, discovering mathematics under the guidance of an experienced teacher is the central principle of its program, and the *Math in Moscow* program emphasizes in-depth understanding of carefully selected material rather than broad surveys of large quantities of material.

In addition to the academically enriching experience that the *Math in Moscow* program provides, there is another strong rationale for supporting such a program. It is a way to build vital scholarly connections between the Russian and U.S. mathematics communities, which are certainly in the best interest for the future scientific research of both countries. Creating ties between mathematicians in our two communities, both young and old, will promote scientific cooperation far into the future.

CBMS2015: A Study of Undergraduate Programs in the Mathematical and Statistical Sciences in the United States (submitted)

- Funding to support the 2015 CBMS Survey and Report
- \$618,000 requested.
- Proposal submitted in March 2014 to the Directorate for Education & Human Resources, National Science Foundation

The proposed project (CBMS2015) carries out a comprehensive stratified random sample survey of the nation's undergraduate mathematical and statistical sciences programs at two-year and four-year institutions in the fall of 2015. A report of the survey findings will be published online in the spring or summer of 2017. The project continues a cross-sectional survey of undergraduate programs that has been done every five years since 1965. The project is coordinated by the Conference Board for the Mathematical Sciences (CBMS) and will be managed by the AMS.

Ellen J. Maycock
Associate Executive Director
April 30, 2014



Financial Statements

American Mathematical Society

December 31, 2013 and 2012



Mayer Hoffman McCann P.C.
An Independent CPA Firm
Tofias New England Division

AMERICAN MATHEMATICAL SOCIETY

Financial Statements

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Mayer Hoffman McCann P.C.
Tofias New England Division
An Independent CPA Firm

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Independent Auditors' Report

The Board of Trustees
American Mathematical Society
Providence, Rhode Island

We have audited the accompanying financial statements of American Mathematical Society (the "Society"), which comprise the balance sheets as of December 31, 2013 and 2012, and the related statements of activities and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of American Mathematical Society as of December 31, 2013 and 2012, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Mayer Hoffmann McCann P.C.

May 16, 2014
Providence, Rhode Island

AMERICAN MATHEMATICAL SOCIETY

Balance Sheets

	<i>December 31,</i>	
	<i>2013</i>	<i>2012</i>
Assets		
Cash	\$ 4,724,387	\$ 1,094,226
Certificates of deposit	951,529	1,520,000
Short-term investments	10,432,357	13,255,356
Accounts receivable, net of allowances of \$263,224 and \$338,805 in 2013 and 2012, respectively	678,298	912,349
Deferred prepublication costs	555,294	728,923
Completed books	1,282,908	1,384,432
Prepaid expenses and deposits	1,213,201	1,614,823
Land, buildings and equipment, net	5,127,278	5,367,801
Long-term investments	<u>115,196,217</u>	<u>93,748,205</u>
Total assets	<u>\$ 140,161,469</u>	<u>\$ 119,626,115</u>
Liabilities and Net Assets		
Liabilities:		
Accounts payable and accrued expenses	\$ 4,006,141	\$ 3,260,488
Accrued study leave pay	685,363	803,202
Deferred revenue	11,671,731	12,376,468
Postretirement benefit obligation	<u>6,108,330</u>	<u>6,656,993</u>
Total liabilities	<u>22,471,565</u>	<u>23,097,151</u>
Net assets:		
Unrestricted:		
Undesignated	1,448,012	2,261,743
Designated	<u>101,007,256</u>	<u>82,388,405</u>
	102,455,268	84,650,148
Temporarily restricted	9,968,645	6,782,825
Permanently restricted	<u>5,265,991</u>	<u>5,095,991</u>
Total net assets	<u>117,689,904</u>	<u>96,528,964</u>
Total liabilities and net assets	<u>\$ 140,161,469</u>	<u>\$ 119,626,115</u>

AMERICAN MATHEMATICAL SOCIETY

Statements of Activities

	<i>Years Ended December 31,</i>	
	2013	2012
Changes in unrestricted net assets:		
Operating revenue, including net assets released from restrictions:		
Mathematical Reviews	\$ 10,868,077	\$ 11,087,637
Journals	5,062,348	4,829,242
Books	3,623,632	4,023,584
Dues, services, and outreach	3,839,958	3,696,895
Investment returns appropriated for spending	1,459,970	1,772,400
Other publications-related revenue	636,881	419,591
Grants, prizes and awards	1,233,313	1,171,264
Meetings	1,253,181	1,229,138
Short-term investment income	262,762	460,062
Other	67,791	54,202
	<hr/>	<hr/>
Total operating revenue	28,307,913	28,744,015
Operating expenses:		
Mathematical Reviews	7,075,759	7,055,203
Journals	1,415,180	1,426,643
Books	3,220,413	3,421,212
Publications indirect	1,168,463	1,138,659
Customer services, warehousing and distribution	1,567,644	1,227,921
Other publications-related expense	194,186	204,347
Membership, services and outreach	4,016,715	3,727,374
Grants, prizes and awards	1,504,294	1,329,423
Meetings	1,254,622	1,130,959
Governance	553,239	472,553
Member and professional services indirect	740,306	704,489
General and administrative	4,317,500	4,364,657
Other	66,021	83,619
	<hr/>	<hr/>
Total operating expenses	27,094,342	26,287,059
Excess of operating revenue over operating expenses	1,213,571	2,456,956
Nonoperating revenues and expenses:		
Investment returns less investment returns available for spending	16,968,778	9,227,195
Use of board designated funds from Endowment Income		
Stabilization Fund	(31,112)	-
Use of board designated funds from Retrodigitization Fund	(129,481)	-
Effect of capitalization of labor for in house software development	-	667,014
Depreciation of labor for in house software development	(66,701)	-
Loss on change in paid personal leave policy	(935,360)	-
Postretirement benefit-related changes other than net periodic cost	785,425	(458,200)
	<hr/>	<hr/>
Change in unrestricted net assets	17,805,120	11,892,965

AMERICAN MATHEMATICAL SOCIETY

Statements of Activities (Continued)

	<i>Years Ended December 31,</i>	
	<i>2013</i>	<i>2012</i>
Changes in temporarily restricted net assets:		
Contributions	\$ 1,161,387	\$ 79,860
Investment returns less investment returns appropriated for spending	2,632,530	1,562,538
Net assets released from restrictions	<u>(608,097)</u>	<u>(612,858)</u>
Change in temporarily restricted net assets	<u>3,185,820</u>	<u>1,029,540</u>
Change in permanently restricted net assets:		
Contributions	<u>170,000</u>	<u>111,477</u>
Change in permanently restricted net assets	<u>170,000</u>	<u>111,477</u>
Change in net assets	21,160,940	13,033,982
Net assets, beginning of year	<u>96,528,964</u>	<u>83,494,982</u>
Net assets, end of year	\$ <u><u>117,689,904</u></u>	\$ <u><u>96,528,964</u></u>

AMERICAN MATHEMATICAL SOCIETY

Statements of Cash Flows

	<i>Years Ended December 31,</i>	
	<i>2013</i>	<i>2012</i>
Cash flows from operating activities:		
Change in net assets	\$ 21,160,940	\$ 13,033,982
Adjustments to reconcile change in net assets to net cash provided by operating activities:		
Depreciation	766,504	612,631
Provision for (recovery from) losses on accounts receivable	(75,581)	5,261
Net realized and unrealized gains on long-term investments	(19,313,874)	(9,680,510)
Net realized gains on short-term investments	(262,762)	(460,062)
Contributions restricted for permanent investment	(170,000)	(111,477)
Loss (gain) on disposal of equipment	(3,597)	4,140
Changes in assets and liabilities:		
Accounts receivable	309,632	(446,730)
Deferred prepublication costs	173,629	36,239
Completed books	101,524	69,499
Prepaid expenses and deposits	401,622	62,341
Accounts payable and accrued expenses	627,814	194,050
Deferred revenue	(704,737)	(139,066)
Postretirement benefit obligation	(548,663)	662,436
	<u>2,462,451</u>	<u>3,842,734</u>
Net cash provided by operating activities	2,462,451	3,842,734
Cash flows from investing activities:		
Purchases and sales of short-term investments, net	3,085,761	(1,119,975)
Purchases and redemptions of certificates of deposit, net	568,471	544,000
Purchases of property and equipment, net	(522,384)	(1,155,861)
Sales of long-term investments	3,153,656	-
Purchases of long-term investments	(5,287,794)	(2,881,623)
	<u>997,710</u>	<u>(4,613,459)</u>
Net cash provided by (used in) investing activities	997,710	(4,613,459)
Cash flows from financing activities:		
Contributions restricted for permanent investment	<u>170,000</u>	<u>111,477</u>
Net cash provided by financing activities	170,000	111,477
Net increase (decrease) in cash	3,630,161	(659,248)
Cash at beginning of year	<u>1,094,226</u>	<u>1,753,474</u>
Cash at end of year	\$ <u>4,724,387</u>	\$ <u>1,094,226</u>

See accompanying notes to financial statements.

AMERICAN MATHEMATICAL SOCIETY

Notes to Financial Statements

Note 1 - Description of Organization and Summary of Significant Accounting Policies

Description of Organization

The American Mathematical Society (the “Society”) was created in 1888 to further mathematical research and scholarship. It is an international membership organization, currently approximately 30,000 members. The Society fulfills its mission with publications and professional programs that promote mathematical research, increase the awareness of the value of mathematical research to society and foster excellence in mathematics education.

The Society is incorporated under the laws of the District of Columbia and follows the provisions of the Uniform Prudent Management of Institutional Funds Act (the “Act”) as enacted.

Basis of Financial Statement Presentation

The financial statements of the Society have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America (“GAAP”).

The Society presents information regarding its financial position and activities according to three classes of net assets described as follows:

Unrestricted - All resources over which the governing board has discretionary control. The governing board of the Society may elect to designate such resources for specific purposes. This designation may be removed at the Board’s discretion.

Temporarily restricted - Resources accumulated through donations or grants for specific operating or capital purposes. Such resources will become unrestricted when the requirements of the donor or grantee have been satisfied through expenditure for the specified purpose or program or through the passage of time.

Permanently restricted - Endowment resources accumulated through donations or grants that are subject to the restriction in perpetuity that the principal be invested. These net assets include the original value of the gift, plus any subsequent additions. Unexpended appreciation on permanently restricted net assets is included in temporarily restricted net assets until appropriated by the Board in accordance with the Act for use unless otherwise instructed by the donor.

Estimates

The preparation of the financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosures of contingent assets and liabilities, as of the dates of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates. Significant estimates included in the financial statements include fair value of certain investments, allowances on accounts receivable, recoverability of deferred publication and completed books costs, useful lives of depreciable assets, deferred revenue, postretirement benefit obligations and accrued paid personal leave.

Notes to Financial Statements

Note 1 - Description of Organization and Summary of Significant Accounting Policies (Continued)

Operations

The Society defines operating income as the net increase in unrestricted net assets derived from the activities related to the accomplishment of its mission, such as publications, programs, meetings and conferences, and member services. Investments appropriated for spending by the Board of Trustees are also presented as operating revenue. Investment returns less amounts appropriated for spending and the other one time charges that arise are presented as a non-operating item.

Contributions, Gifts and Pledges Receivable

Contributions received are recorded as unrestricted, temporarily restricted, or permanently restricted support depending on the existence and nature of any donor restrictions. Contributions may include actual gifts or promises to give. Such contributions are considered to be available for unrestricted use unless specifically restricted by the donor or grantor. Contributions and promises to give are recorded at their fair value on the date of the gift. The fair value of promises to give are considered a non-recurring fair value measure. Restricted gifts or promises to give are required to be reported as restricted support in the period received and are then reclassified to unrestricted net assets upon satisfaction of the donor restriction. Restrictions on contributions related to the acquisition of long-lived assets are considered satisfied at the time the asset is acquired.

The Society receives contributed services from its members, principally as volunteer leaders in the governance structure of the Society and as volunteer members of editorial committees for the Society's various publications. The latter category of contributed services qualifies for recognition as income and expense under GAAP, as the members of the editorial committees must possess specialized skills. However, the Society has no practical way of measuring the fair value of the services received from its volunteer editorial committee members, and accordingly, no such estimate is included as revenue or expense in the accompanying financial statements.

Cash

Cash is comprised of bank accounts and petty cash. The Society maintains its cash in bank deposit accounts which, at times, may exceed federally insured limits. The Society monitors its exposure associated with cash in bank deposits and has not experienced any losses in such accounts.

Certificates of Deposit

Certificates of deposit are carried at cost plus accrued interest and are subject to similar risks as noted in cash.

Accounts Receivable

Accounts receivable are stated net of allowances for returns and doubtful accounts in the balance sheets. The allowance for doubtful accounts has been established based on a review of the aged accounts. The factors influencing management's judgment of the adequacy of the allowance for doubtful accounts include historical losses and the status of current collection efforts. The allowance for returns has been established based on historical returns. Trade accounts receivable are written off after it is evident that the collection efforts have been exhausted.

AMERICAN MATHEMATICAL SOCIETY

Notes to Financial Statements

Note 1 - Description of Organization and Summary of Significant Accounting Policies (Continued)

Short-Term and Long-Term Investments

Both short-term and long-term investments are carried at fair value. Fair value is determined as per the fair value policies described later in this section.

Interest, dividends, and net gains or losses on all donor-restricted endowment fund investments are recorded in temporarily restricted net assets net of amounts appropriated for spending. Such amounts are reclassified from temporarily restricted net assets as used for intended purposes.

The Board of Trustees also appropriates from its other funds to support the Society's mission-driven activities. Returns from the board-designated funds, the Operating Support Fund and the Young Scholars Fund, support the operations of the Society under a spending policy.

The investments of the Society are pooled and unitized for accounting purposes. Each fund subscribes to, or disposes of, units on the basis of the fair value per unit at the end of the calendar quarter within which the transactions take place. Investment income, including interest, dividends and realized and unrealized gains and losses, is allocated quarterly based on the number of units held by each fund at the beginning of the quarter.

Fair Value Measurements

The Society reports investments at fair value on a recurring basis. The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level I measurements) and the lowest priority to unobservable inputs (Level III measurements). The three levels of the fair value hierarchy under FASB ASC 820 are described below:

Level I – Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Company has the ability to access.

Level II – Inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in inactive markets; inputs other than quoted market prices that are observable for the asset or liability; and inputs that are derived principally from or corroborated by observable market data by correlation or other means. If the asset or liability has a specified (contractual) term, the Level II input must be observable for substantially the full term of the asset or liability.

Level III – Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

Notes to Financial Statements

Note 1 - Description of Organization and Summary of Significant Accounting Policies (Continued)

Fair Value Measurements (Continued)

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

Market price is affected by a number of factors, including the type of asset or liability and the characteristics specific to the asset or liability. Assets or liabilities with readily available active quoted prices or for which fair value can be measured from actively quoted prices generally will have a higher degree of market price observability and a lesser degree of judgment used in measuring fair value. It is reasonably possible that changes in values of these assets or liabilities will occur in the near term and that such changes could materially affect amounts reported in these financial statements. For more information on the fair value of the Society's financial assets, see Note 3 - Investments.

Deferred Prepublication Costs

Prepublication costs, consisting of translation, editorial, composition and proofreading costs, are deferred until publication. Upon publication, prepublication costs related to books are transferred into completed books inventory and prepublication costs related to journals are expensed, effectively matching subscription revenue for such journals.

Completed Books

Publication costs of books, consisting of paper, printing, and prepublication costs, are accumulated and recorded as completed books. Costs are amortized and charged to expense generally over five years. The majority of costs are allocated to the first year after completion based on management's assessment of historical sales patterns. This method approximates completed books being recorded at the lower of cost or market.

Land, Buildings, Equipment and Accumulated Depreciation

Land, buildings, and equipment are recorded at cost less accumulated depreciation. Depreciation is provided over the estimated useful lives of the assets using straight-line or accelerated methods.

<i>Asset Classifications</i>	<i>Estimated Useful Life</i>
Land improvements	10 - 20 years
Buildings and improvements	10 - 35 years
Furniture, equipment and software	3 - 10 years
Transportation equipment	3 - 15 years

AMERICAN MATHEMATICAL SOCIETY

Notes to Financial Statements

Note 1 - Description of Organization and Summary of Significant Accounting Policies (Continued)

Land, Buildings, Equipment and Accumulated Depreciation (Continued)

The Society accounts for costs incurred for software developed or obtained for internal use including capitalizing costs incurred during the application development stage with amortization on a straight-line basis beginning when the computer software is ready for its intended use.

The Society incurred approximately \$144,000 and \$5,000 in costs for digitization of its backfile of books during the years ended December 31, 2013 and 2012, respectively. The “backfile” consists of books that have been published prior to the last two years. This digitization of the books that existed only in printed form prior to this project will continue through the year 2014. Although the digitization of the backfile does have value to the Society, as electronic products derived from the digitization project may be sold in the future, the value is not estimable. Therefore, the costs for digitization are expensed as incurred.

Revenue Recognition and Deferred Revenue

Advanced collections for membership dues and subscriptions are deferred and recorded as income over the related membership period or subscription period. Subscriptions include traditional printed and electronic media. Events income is reported as revenue on the date of the event. Advance sales are reported as deferred revenue.

Books and journals revenue is recorded upon shipment, less an estimate for returns.

The Society receives various grants that are subject to audit by the grantors or their representatives. Such audits could result in requests for reimbursement for expenditures disallowed under the terms of the grant; however, management believes that these disallowances, if any, would be immaterial.

Grant income from government funded arrangements is recorded as income as costs are incurred under the related arrangement. Accounting for grant income from other sources is evaluated with certain grants being recorded as revenue as related costs are incurred.

Net assets released from restrictions are classified in the respective revenue accounts on the statements of activities.

Service Fees

The Society provides various supporting services to other unaffiliated organizations for a service fee. Certain transactions flow through the Society’s financial accounts; however, revenues and expenses of such organizations are not included in the financial statements of the Society.

Income Tax Status

The Society is recognized by the Internal Revenue Service as an organization described under Section 501(c)(3) of the Internal Revenue Code and is generally exempt from Federal and state income taxes on related income.

Notes to Financial Statements

Note 1 - Description of Organization and Summary of Significant Accounting Policies (Continued)

Uncertain Tax Positions

The Society accounts for the effect of any uncertain tax positions based on a “more likely than not” threshold to the recognition of the tax positions being sustained based on the technical merits of the position under scrutiny by the applicable taxing authority. If a tax position or positions are deemed to result in uncertainties of those positions, the unrecognized tax benefit is estimated based on a “cumulative probability assessment” that aggregates the estimated tax liability for all uncertain tax positions. The Society has identified its tax status as a tax-exempt entity and its determinations to classify income as related and unrelated as its only significant tax positions; however, the Society has determined that such tax positions do not result in an uncertainty requiring recognition. The Society is not currently under examination by any taxing jurisdiction. The Society’s Federal and state tax returns are generally open for examination for three years following the date filed.

Functional Expense Allocation

Costs have been allocated to functional classifications based on percentage of effort, usage, square footage and other criteria.

Fundraising costs for the years ended December 31, 2013 and 2012 were \$306,286 and \$194,316, respectively, and are included within membership, services and outreach in the statements of activities.

Reclassifications

Certain reclassifications have been made to the 2012 financial statements to conform with the 2013 presentation.

Note 2 - Land, Buildings and Equipment, Net

The following comprise the Society’s investments in land, buildings, and equipment as of December 31:

	<i>2013</i>	<i>2012</i>
Land and improvements	\$ 462,978	\$ 462,978
Buildings and improvements	7,516,142	7,445,532
Furniture, equipment and software	6,579,857	4,585,372
Transportation equipment	65,625	65,625
Software in progress	-	1,553,159
	<hr/>	<hr/>
	14,624,602	14,112,666
Less accumulated depreciation	<u>(9,497,324)</u>	<u>(8,744,865)</u>
	<u>\$ 5,127,278</u>	<u>\$ 5,367,801</u>

AMERICAN MATHEMATICAL SOCIETY

Notes to Financial Statements

Note 3 - Investments

The following table summarizes the Society's investments as of December 31, 2013 and 2012:

	2013	2012
Certificates of deposit	\$ <u>951,529</u>	\$ <u>1,520,000</u>
Fixed income mutual funds	5,847,096	5,669,899
Convertible securities mutual fund	2,202,033	1,634,871
Domestic corporate stock	19,561	16,335
Money market mutual funds	<u>2,363,667</u>	<u>5,934,251</u>
Total short-term investments	<u>10,432,357</u>	<u>13,255,356</u>
Certificates of deposit	-	155,921
Fixed income mutual funds	18,896,442	17,697,344
Equity mutual funds:		
Broad U.S. market stock mutual fund	77,981,169	57,986,777
Domestic real estate investment trusts	4,830,042	5,921,299
Non U.S. developed and emerging markets stock mutual fund	<u>13,488,564</u>	<u>11,986,864</u>
Total long-term investments	<u>115,196,217</u>	<u>93,748,205</u>
Total investments	<u>\$ <u>126,580,103</u></u>	<u>\$ <u>108,523,561</u></u>

Short-term and long-term investments, with the exception of certificates of deposit, are classified as Level I in the fair value hierarchy because of the Society's ability to obtain quoted prices at the reporting date and redeem its interest on a daily basis. Certificates of deposit are classified as Level II.

The Society's long-term investments are segregated into five separate portfolios (including mutual funds), each with its own investment manager and investment objective. The overall investment strategy is determined by the Investment Committee of the Board of Trustees and is approved by the Board of Trustees annually. The primary investment objective of the long-term investment portfolio is an average real total return (net of investment fees and the effects of consumer inflation) of at least 4% over the long term. To achieve this result, the investment portfolio is allocated approximately 75% to equity investments and 25% to fixed income investments. The equity investments are further diversified into domestic, international, and real estate holdings. Additionally, the entire portfolio is diversified across economic sectors, geographic locations, industries, and size of investees.

AMERICAN MATHEMATICAL SOCIETY

Notes to Financial Statements

Note 3 - Investments (Continued)

The following schedule summarizes the long-term investment return and its classification in the accompanying statements of activities for the years ended December 31:

	2013	2012
Dividends and interest, net of management fees	\$ 1,747,404	\$ 2,881,623
Net realized and unrealized gains	<u>19,313,874</u>	<u>9,680,510</u>
Investment returns	<u>21,061,278</u>	<u>12,562,133</u>
Less investment returns classified as temporarily restricted	<u>(2,632,530)</u>	<u>(1,562,538)</u>
Less investment appropriated for spending:		
Spendable income from Operations Support Fund	(1,438,000)	(1,744,100)
Spendable income from Young Scholars Fund	<u>(21,970)</u>	<u>(28,300)</u>
Sub-total	<u>(1,459,970)</u>	<u>(1,772,400)</u>
Investment returns less investment returns appropriated for spending	\$ <u>16,968,778</u>	\$ <u>9,227,195</u>

Management fees are incurred directly by mutual funds which the Society has holdings; such returns reported by the funds are net of such costs and, accordingly, such fees are embedded within the investment returns.

Under certain unusual circumstances, mutual funds may alter redemption provisions of their investment vehicles which could impact the liquidity of funds. No such changes to redemption provisions have occurred in 2013 or 2012.

Management has assessed that fair value approximates carrying value for cash and cash equivalents, certificates of deposit, accounts receivable and accounts payable and accrued expenses given the short-term nature of these instruments.

Note 4 - Accrued Study Leave Pay

Certain employees of the Society receive vested rights to study leave pay based upon salary and years of service. The Society provides for this obligation over the related years of the employees' service. The provision for the study leave pay charged to expense totaled \$12,316 and \$127,734 in 2013 and 2012, respectively.

AMERICAN MATHEMATICAL SOCIETY

Notes to Financial Statements

Note 5 - Pension and Postretirement Benefits

The Society has contributory retirement plans (the “Plans”) covering substantially all full-time employees. The Plans are administered by, and related assets are maintained with, Teachers Insurance and Annuity Association and College Retirement Equities Fund. Under the Plans, the Society contributes 9.5% of eligible compensation (with higher amounts for employees earning in excess of the social security second bend point). The Society’s retirement expenses for the Plans totaled approximately \$1,265,368 and \$1,247,537 in 2013 and 2012, respectively. In addition, the Society offers an employee only plan which allows for additional contributions upon election of said employee.

The Society sponsors a defined benefit postretirement medical plan that covers substantially all full-time employees. Under the plan provisions, employees who retire from the Society at age 62 or older with at least 12 years of service are eligible for benefits under the plan upon the attainment of age 65. Plan benefits consist of health insurance coverage under a Medicare Supplement Plan and reimbursement of Medicare Part B premiums. Employees who retire before age 62 may qualify for coverage under the plan according to a longer service requirement schedule established by the Society. Spouses of eligible retirees are not covered. The plan is noncontributory and is unfunded.

The plan limits the annual benefit per retiree to \$4,000 for reimbursement of actual premiums paid for Medicare Supplement insurance and any Medicare coverage premiums. The plan was frozen effective June 30, 2006 whereby employees hired after that date are not eligible to participate in the plan. There is no provision for this maximum benefit amount to increase over time.

Net postretirement benefit cost for the years ended December 31, 2013 and 2012 consisted of the following components:

	<i>2013</i>	<i>2012</i>
Service cost	\$ 166,415	\$ 148,782
Interest cost	254,134	260,784
Amortization of prior service cost, pre-2007 amendment	1,722	1,722
Amortization of prior service credit, post-2007 amendment	(247,980)	(247,980)
Amortization of net experience losses	<u>198,300</u>	<u>163,900</u>
Net postretirement benefit cost	<u>\$ 372,591</u>	<u>\$ 327,208</u>

The prior service cost (credit) and net loss (gain) expected to be recognized as components of net periodic postretirement benefit cost for the year ending December 31, 2014 are approximately \$(246,258) and \$111,300, respectively.

AMERICAN MATHEMATICAL SOCIETY

Notes to Financial Statements

Note 5 - Pension and Postretirement Benefits (Continued)

The following table reconciles the plan's funded status with the amounts presented in the Society's financial statements at December 31, 2013 and 2012:

	<i>2013</i>	<i>2012</i>
Projected postretirement benefit obligation, beginning of the year (and funded status)	\$ 6,656,993	\$ 5,994,557
Service and interest cost for the year	420,549	409,566
Benefits paid	(131,829)	(157,185)
Actuarial (gain) loss recognized in the year incurred	<u>(837,383)</u>	<u>410,055</u>
Projected postretirement benefit obligation, end of year	\$ <u>6,108,330</u>	\$ <u>6,656,993</u>
Net liability recognized in the balance sheet	\$ 6,108,330	\$ 6,656,993

The following table presents additional information relating to the plan for the years ended December 31, 2013 and 2012:

Discount rate	4.7% (2013)	3.8% (2012)
Healthcare cost trend rate assumed for next year	Not applicable	
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	Not applicable	
Year that the rate reaches the ultimate trend rate	Not applicable	

The expected future benefit payments under plan provisions for the next ten years are as follows:

Years ending December 31:

2014	\$ 212,000
2015	299,000
2016	322,000
2017	324,000
2018	338,000
2019 - 2023	1,955,000

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Notes to Financial Statements

Note 6 - Designated Unrestricted Net Assets

The Board of Trustees of the Society has designated components of unrestricted net assets to support certain purposes. All such designated funds within unrestricted net assets are supported by the unrestricted portion of the long-term investment portfolio. The Economic Stabilization Fund is designated to provide support for the Society in future years should an unexpected need arise. The Operations Support Fund is designated to provide current operating support to the Society via use of a 4% spending rate (5% in 2012) applied to the average of the prior four-year ending values of the fund. The Journal Archive Fund is designated to accumulate funds to support changes that may be necessary for electronic files to be available for future use due to as-yet-unforeseen technological changes. The Young Scholars Fund was created by the Board of Trustees in 2000 to augment the funds in Epsilon Fund for Young Scholars, a true endowment fund that supports programs for high school mathematics students. At year end in 2012, the Board of Trustees created the Backfile Digitization Fund, expected to be used in 2013 for the digitization of the Society’s backfile collection of more than 3,000 published books. In addition, the Endowment Income Stabilization Fund was established to supplement the endowment spendable income when the income does not meet a fund’s established goals. In 2013, the spending rate and expected real rate of return were adjusted to 4% due to long-term market conditions, creating a need for the Stabilization Fund.

The following comprises the balances in these designated funds within unrestricted net assets as of December 31:

	<i>2013</i>	<i>2012</i>
Economic Stabilization Fund	\$ 25,840,754	\$ 25,888,951
Operations Support Fund	72,202,552	53,806,003
Backfile Digitization Fund	270,519	400,000
Endowment Income Stabilization Fund	466,598	500,000
Journal Archive Fund	1,414,581	1,113,204
Young Scholars Fund	<u>812,252</u>	<u>680,247</u>
Total	\$ <u>101,007,256</u>	\$ <u>82,388,405</u>

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Notes to Financial Statements

Note 7 - Temporarily Restricted Net Assets

Temporarily restricted net assets consist of amounts restricted by donors for the following purposes as of December 31:

	<i>2013</i>	<i>2012</i>
Restricted purpose:		
Prizes and scholarships	\$ 1,151,639	\$ 273,529
Lectures and symposia	185,959	67,043
Fellowships	-	13,815
Epsilon awards	94,369	111,626
Book/Journal donation project	-	5,011
Graduate student travel program	34,498	35,281
Translation Projects	24,765	2,297
National Mathematical Reviews subscriptions	5,654	5,657
Other miscellaneous	75,430	26,703
Unspent spendable income from unrestricted use true endowment funds	129,555	133,976
Accumulated gains on true endowment gifts	<u>8,266,776</u>	<u>6,107,887</u>
Total	\$ <u>9,968,645</u>	\$ <u>6,782,825</u>

Net Assets Released from Restrictions

Net assets released from temporary donor restrictions by incurring expenses satisfying the restricted purposes or by occurrence of events specified by the donors were as follows for the years ended December 31:

	<i>2013</i>	<i>2012</i>
Prizes and scholarships	\$ 100,605	\$ 92,870
Lectures and symposia	9,526	6,800
Fellowships	62,561	83,109
Epsilon awards	78,030	71,700
Book/Journal donation project	5,011	5,482
Graduate student travel	100,783	97,400
National Mathematics Game	23,785	21,000
National Mathematical Reviews subscriptions	8,300	-
Other miscellaneous	14,075	10,801
Releases from unrestricted use true endowment funds	<u>205,421</u>	<u>223,696</u>
Total	\$ <u>608,097</u>	\$ <u>612,858</u>

AMERICAN MATHEMATICAL SOCIETY

Notes to Financial Statements

Note 8 - Permanently Restricted Net Assets

The Society has two types of donor-restricted endowments: gifts with no donor designations as to the use of income derived there from and gifts whose donors have designated a specific purpose in the gift instrument.

These endowments consisted of the following at December 31:

	2013	2012
Endowment without donor designation on use of income	\$ 1,572,430	\$ 1,565,211
Endowment with donor designation on use of income:		
Prizes	926,524	888,157
Scholarships and fellowships	257,213	252,130
Symposia and lectures	270,000	270,000
China collaboration	366,757	366,757
Epsilon Fund for Young Scholars	<u>1,873,067</u>	<u>1,753,736</u>
	\$ <u>5,265,991</u>	\$ <u>5,095,991</u>

Note 9 - Endowment

The Society's endowment consists of approximately 30 individual funds established for a variety of purposes, including both donor-restricted endowment funds (true endowment) and funds designated by the Board of Trustees to function as endowments. Net assets associated with endowment funds, including funds designated by the Board of Trustees to function as endowments, are classified and reported based on the existence or absence of donor-imposed restrictions.

AMERICAN MATHEMATICAL SOCIETY

Notes to Financial Statements

Note 9 - Endowment (Continued)

Net assets comprising true endowment funds and funds designated by the Board of Trustees to function as endowments were as follows at December 31:

	<i>Unrestricted</i>	<i>Temporarily Restricted</i>	<i>Permanently Restricted</i>	<i>Total</i>
2013				
Donor-restricted endowment funds	\$ -	\$ 8,266,776	\$ 5,265,991	\$ 13,532,767
Board-designated endowment funds	<u>101,007,256</u>	<u>-</u>	<u>-</u>	<u>101,007,256</u>
Total endowment net assets	<u>\$ 101,007,256</u>	<u>\$ 8,266,776</u>	<u>\$ 5,265,991</u>	<u>\$ 114,540,023</u>
2012				
Donor-restricted endowment funds	\$ -	\$ 6,107,887	\$ 5,095,991	\$ 11,203,878
Board-designated endowment funds	<u>82,388,405</u>	<u>-</u>	<u>-</u>	<u>82,388,405</u>
Total endowment net assets	<u>\$ 82,388,405</u>	<u>\$ 6,107,887</u>	<u>\$ 5,095,991</u>	<u>\$ 93,592,283</u>

The following table summarizes the changes in endowment net assets for the year ended December 31, 2013:

	<i>Unrestricted</i>	<i>Temporarily Restricted</i>	<i>Permanently Restricted</i>	<i>Total</i>
Endowment net assets, January 1, 2013	\$ 82,388,405	\$ 6,107,887	\$ 5,095,991	\$ 93,592,283
Donor-restricted contributions	-	-	170,000	170,000
Investment income	18,428,748	2,516,889	-	20,945,637
Release of endowment net asset restrictions	(1,620,563)	(358,000)	-	(1,978,563)
Additions from operations	<u>1,810,666</u>	<u>-</u>	<u>-</u>	<u>1,810,666</u>
Endowment net assets, December 31, 2013	<u>\$ 101,007,256</u>	<u>\$ 8,266,776</u>	<u>\$ 5,265,991</u>	<u>\$ 114,540,023</u>

AMERICAN MATHEMATICAL SOCIETY

Notes to Financial Statements

Note 9 - Endowment (Continued)

The following table summarizes the changes in endowment net assets for the year ended December 31, 2012:

	<i>Unrestricted</i>	<i>Temporarily Restricted</i>	<i>Permanently Restricted</i>	<i>Total</i>
Endowment net assets, January 1, 2012	\$ 71,004,958	\$ 5,016,083	\$ 4,984,514	\$ 81,005,555
Donor-restricted contributions	-	-	111,477	111,477
Investment income	11,013,499	1,547,004	-	12,560,503
Release of endowment net asset restrictions	(1,772,400)	(455,200)	-	(2,227,600)
Additions from operations	<u>2,142,348</u>	<u>-</u>	<u>-</u>	<u>2,142,348</u>
Endowment net assets, December 31, 2012	<u>\$ 82,388,405</u>	<u>\$ 6,107,887</u>	<u>\$ 5,095,991</u>	<u>\$ 93,592,283</u>

Interpretation of Relevant Law

The portion of the donor-restricted endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure by the Society in a manner consistent with the standards of prudence prescribed by the Act. In accordance with the Act, the Society considers the following factors in making a determination to appropriate or accumulate donor-restricted endowment funds:

1. The duration and preservation of the fund
2. The purposes of the Society and the donor-restricted endowment fund
3. General economic conditions
4. The possible effect of inflation and deflation
5. The expected total return from income and the appreciation of investments
6. Other resources of the Society
7. The investment policies of the Society

Funds with Deficiencies

From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the level that the donor or the Act requires the Society to retain as a fund of perpetual duration. There were no deficiencies of this nature in 2013. In 2012, gains due to the recovery in the financial markets restored \$13,113 of the fair value of the assets of affected endowment funds to their required level and were classified as an increase in unrestricted net assets.

Notes to Financial Statements

Note 9 - Endowment (Continued)

Return Objectives and Risk Parameters

The Society has adopted investment and spending policies for endowment assets that attempt to provide a predictable stream of funding to programs supported by its endowment while seeking to maintain the purchasing power of the endowment assets. Endowment assets include those assets of donor-restricted funds that the Society must hold in perpetuity or for a donor-specified period as well as board-designated funds. Under this policy, as approved by the Board of Trustees, the endowment assets are invested in a manner that is intended to produce an average annual real rate of return of approximately 4% over the long term. Actual returns in any given year may vary from this amount.

Strategies Employed for Achieving Objectives

To satisfy its long-term rate-of-return objectives, the Society relies on a total return strategy in which investment returns are achieved through both capital appreciation (realized and unrealized) and current yield (interest and dividends). The Society targets a diversified asset allocation that places emphasis on investments in equities (allocation in the portfolio between 65% to 85%, with foreign equities comprising no more than 25% of the equity total), fixed income securities (allocation in the portfolio between 15% to 25%) and alternatives (currently real estate investment trusts and emerging markets investments with an allocation in the portfolio of no more than 10%) to achieve its long-term return objectives within prudent risk constraints.

Spending Policy and How the Investment Objectives Relate to Spending Policy

The Society has a policy of appropriating for distribution each year 4% (5% in 2012) of its true endowment funds' average fair value using an average determined prior to the beginning of the fiscal year of which the spending policy relates based on the prior four fiscal year end balances. The Board-Designated Operations Support Fund's spending is calculated the same way. In establishing these policies, the Society considered the expected return on its endowment. Accordingly, the Society expects the current spending policy to allow its endowment to maintain its purchasing power by growing at a rate, on average over time, equal to planned payouts. Additional real growth will be provided through new gifts and any excess investment return.

Note 10 - Leases

The Society leases certain facilities under short-term arrangements that are renewable annually based on notice.

Note 11 - Customer Concentrations

For the years ended December 31, 2013 and 2012, two customers comprised approximately 29% and 35% of the Society's accounts receivable, respectively.

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Notes to Financial Statements

Note 12 - Loss on Change in Leave Policy

In 2013, the Board of Trustees adopted changes to the Society's Paid Personal Leave (PPL) policy. Under the changed policy, employees may be eligible to receive payment for up to 50 days of accrued PPL upon termination of their employment at any time of the year. Prior to the change in policy, employees could receive a payout of accrued leave of up to 50 days less any PPL taken during the calendar year. Thus, at year end, a much smaller liability for accrued leave was owed to employees under the old policy at December 31, 2012. The Society recorded a liability for accrued PPL of \$1,496,839 and \$546,984 for December 31, 2013 and 2012, respectively, which is included in accounts payable and accrued expenses. A loss of \$935,360 was recorded in 2013 on the statements of activities representing the effect of the change in policy.

Note 13 - Subsequent Events

The Society has evaluated subsequent events through May 16, 2014, the date on which the financial statements were available to be issued. There were no subsequent events to be disclosed based on this evaluation.

