# AMERICAN MATHEMATICAL SOCIETY EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES <br> NOVEMBER 19-20, 2004 <br> PROVIDENCE, RHODE ISLAND 

## MINUTES

A joint meeting of the Executive Committee of the Council (EC) and the Board of Trustees (BT) was held Friday and Saturday, November 19-20, 2004, at the AMS Headquarters in Providence, Rhode Island.

The following members of the EC were present: James G. Arthur, Walter Craig, Robert J. Daverman, David Eisenbud, David R. Morrison, and Paul J. Sally, Jr. Hugo Rossi was unable to attend.

The following members of the BT were present: John B. Conway, David Eisenbud, John M. Franks, Eric M. Friedlander, Linda Keen, Donald E. McClure, Jean E. Taylor, and Carol S. Wood.

Also present were the following AMS staff members: Gary G. Brownell (Deputy Executive Director), Kevin F. Clancey (Executive Editor, Mathematical Reviews), John H. Ewing (Executive Director and Publisher), Ellen H. Heiser (Assistant to the Executive Director [and recording secretary]), Elizabeth A. Huber (Deputy Publisher), James W. Maxwell (Associate Executive Director, Meetings and Professional Services), and Samuel M. Rankin (Associate Executive Director, Government Relations and Programs). Diane M. Saxe (Director of Meetings and Conferences) was present on Friday, November 19. Constance W. Pass (Chief Financial Officer) was present on Saturday, November 20.

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

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

## 0 CALL TO ORDER AND ANNOUNCEMENTS

### 0.1 Opening of the Meeting and Introductions.

President Eisenbud convened the meeting and everyone introduced themselves.

### 0.2 2004 AMS Election Results.

Secretary Daverman announced the following election results:

## Vice President

Haim Brezis, Universite Paris VI and Institut Universitaire de France

## Trustee

Eric M. Friedlander, Northwestern University
Members at Large of the Council
Sara C. Billey, University of Washington
Carolyn S. Gordon, Dartmouth College
Sheldon H. Katz, University of Illinois at Urbana-Champaign
Michael F. Singer, North Carolina State University
Catherine H. Yan, Texas A\&M University
Nominating Committee
Phillip A. Griffith, University of Illinois at Urbana-Champaign
David Jerison, Massachusetts Institute of Technology
Linda Keen, Lehman College and Graduate Center, City University of New York

## Editorial Boards Committee

Margaret Cheney, Rensselaer Polytechnic Institute
Abigail A. Thompson, University of California at Davis

### 0.3 Housekeeping Matters. EWING.

Executive Director Ewing informed the ECBT about several housekeeping matters related to the present meeting.

## 1 EXECUTIVE COMMITTEE <br> ACTION/DISCUSSION ITEMS

### 1.1 Draft Agenda for the January 2005 Council Meeting.

The EC recommended that the Council adopt the recently revised statement of ethical guidelines so as "to speak in the name of the Society."

The EC made recommendations about other additions and rearrangements to the draft agenda and approved the resulting plan.

## 1I EXECUTIVE COMMITTEE <br> INFORMATION ITEMS

## 1I.1 Secretariat Business by Mail. Att. \#3.

Minutes of Secretariat business by mail during the months June 2004 - September 2004 are attached (\#3).

## 2 EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES ACTION/DISCUSSION ITEMS

### 2.1 Report on Committee on Meetings and Conferences (COMC). MAXWELL

The ECBT was informed that the most recent meeting of COMC was April 24, 2004, and a report on that meeting was given at the May 2004 ECBT meeting. Since then, planning has progressed on the COMC-sponsored focus group at the Atlanta meeting. The moderator will be Jean Taylor. In addition, the COMC subcommittee appointed to advise the steering group for the focused planning effort on meetings and conferences has reviewed materials developed for the report and provided feedback to the steering committee.

### 2.2 Report on Committee on Science Policy (CSP). Att. \#4.

The ECBT received the attached report on CSP activities (\#4).

### 2.3 Report on Committee on Education (COE). Att. \#5.

The ECBT received the attached report on the October 2004 COE meeting and the Committee's report on AMS activities related to graduate education (Att. \#5).

### 2.4 Report on Committee on the Profession (CoProf). Att. \#6.

The ECBT received the attached report on the October 2004 CoProf meeting, and a report on a recent survey of member opinions regarding the establishment of a Fellows of the AMS program (Att. \#6).

### 2.5 Report on Committee on Publications (CPub). Att. \#7.

The ECBT received the attached report (\#7) on the October 2004 CPub meeting, which was preceded by a meeting of the managing editors of the four primary research journals.

### 2.6 Report on Mathematical Reviews Editorial Committee (MREC). Att. \#8.

The ECBT received the attached report $(\# 8)$ on the October 2004 MREC meeting.

### 2.7 Report on Focused Planning for Meetings. Att. \#1.

The ECBT received the final report on the focused planning effort on meetings (Att. \#1). The report is the culmination of a year-long study of the role of meetings and conferences in the Society, guided by a Steering Committee consisting of Diane Saxe, Jim Maxwell, John Ewing and Bob Daverman.

The ECBT discussed the entire report and then considered the following recommendations, to which they were asked to give preliminary reactions:

Recommendation 1: The Society may want to consider gradually expanding the number of sectional-like meetings, perhaps by holding joint meetings with other organizations or holding a meeting in conjunction with a special mathematical event or occasion. Appointing a fifth Associate Secretary "at large" to plan these meetings would avoid adding to the already heavy load of the current (four) Associate Secretaries.

The ECBT was in favor of having staff work with the Secretariat to prepare a detailed proposal based on Recommendation 1.

Recommendation 2: In the event that the renewal proposal to NSF for continuation of the Summer Research Conferences is not funded, the Society should look for alternative avenues for continued outreach to the research community traditionally served by the Society's summer conference program.

The ECBT supported the sentiment expressed in Recommendation 2.

### 2.8 Washington Office Report. Att. \#9.

The ECBT received the attached report on recent activities of the Washington Office

## (\#9).

### 2.9 Congressional Fellow. Att. \#10.

Many professional societies sponsor Congressional Fellows through the American Association for the Advancement of Science (AAAS). These Fellows spend a year in the office of a Member of Congress learning, from the inside, how the Congress operates. On the other hand, the Fellow is a resource on science and mathematics for the Member of Congress and staff colleagues.

The AAAS organizes the selection process and the orientation of Fellows. The fellowship term usually begins in September. Total cost per fellow, is estimated to be from $\$ 84,000$ to $\$ 97,000$ per year. Total cost is based on a salary of $\$ 60,000$ to $\$ 70,000$ per year (actual salary will depend on the age of individual), a AAAS fee of $\$ 3,100$, fringe benefits ( $25 \%$ of salary or $\$ 15,000$ to $\$ 17,500$ ), moving allowance of $\$ 3,000$, and travel allowance of $\$ 3,000$ which includes the Joint Meetings.

Attached (\#10) is more information on the AAAS Congressional Fellowship program, including: background information, comments on the program from Members of Congress, a House resolution recognizing the program, a listing of sponsoring societies, and a survey of participating societies with estimated costs for 2004-2005.

The ECBT agreed that the AMS should participate in this program, and voted to support one fellow per year, beginning in September 2005 (or September 2006, if it is already too late to start in 2005).

### 2.10 Report on Long Range Planning Committee (LRPC). Att. \#27.

LRPC Chair Eisenbud reported that the LRPC considered two governance matters at its November 19, 2004 meeting:

The first was a review of the composition of the Council, which arose in previous discussions about how to deal with unsuccessful presidential candidates. Some ideas that arose during the LRPC discussion were shared with the ECBT, and the EC agreed that the composition of the Council should be the topicfor the discussion session at the April 9, 2005 Council meeting.

The second concerns the Editorial Boards Committee (EBC) and its crucial importance to the Society's publishing program. The LRPC proposed that the EBC be expanded to include two additional members, the Secretary and the Publisher, both non-voting. A document describing the background and rationale for this proposal was distributed (Att. \#27). The ECBT voted to recommend approval of this proposal to the January 2005 Council.

### 2.11 Review of Dues Levels for 2006 Membership Year. Att. \#11.

The May 2004 BT approved a set of principles to serve as guidelines for setting individual member dues, and the EC voted to recommend their adoption to the January 2005 Council. The adoption of these principles requires staff and leadership to begin the process of setting dues earlier than in the past.

In anticipation of the Council's approval of the principles at its January 2005 meeting, the ECBT was asked to discuss the need for a dues increase for 2006 and make a recommendation to the Council for consideration in January. The Council's decision will then be subject to ratification by the BT at their May 2005 meeting.

The ECBT reviewed an attachment (\#11) presenting the principles for setting the dues approved by the May 2004 ECBT, a discussion of staff's recommendation for 2006 individual dues, and the economic information identified in the principles as factors to be considered.

The ECBT voted to recommend to the January 2005 Council that 2006 dues be kept the same as 2005 dues.

### 2.12 Administration of Category S Memberships. Att. \#12.

Currently, the Society has approximately 3,100 Category S members. Category S members pay dues of $\$ 16$ per year and receive the usual benefits of membership with the exception that they must choose to receive just one of the Notices or the Bulletin. Eligibility for the Category $S$ dues rate is determined by the economic status of the country in which the

## Page 6

member resides. Att. \#12 describes the current administrative process in more detail, describes two refinements to the process for classification of Category S countries which staff will implement, and presents the following recommendation, which the ECBT approved:

Members in a country that loses its Category S status will be eligible to renew as Ordinary Entry members for the usual five year period available to new (non-student) members, without regard to their previous membership history.
[It is noted for the record that, starting with the 2006 membership year, the name of the dues level "Category S" will be changed to "Affiliate."]

### 2.13 Status Report on Expansion of Life Membership. Att. \#13.

With the Bylaws change approved by the membership during the fall 2003 elections, the January 2004 Council approved expanded eligibility for life membership effective with 2005 membership renewals. The ECBT received the attached report (\#13) describing the new life membership criteria, the new procedures for recognizing the revenue from life memberships, and a profile of the 137 individuals who have become life members for 2005 (as of October 21, 2004).

### 2.14 Report on Sale-of-Service Activity. Att. \#23.

The ECBT received the attached report (\#23) on sale-of-service activity.

### 2.15 Financial Guidance: Internal Control. Att. \#14.

Chief Financial Officer Pass made a presentation on internal control. Background information is included in Att. \#14.

## $2.16 \quad 2005$ Operating Plan.

The 2005 Operating Plan was enclosed with the agenda for this meeting. The plan includes the following sections for each department:

I Mission
II Ongoing Activities and Functions
III Trends and Issues
IV Future Projects and Activities
V Financial Implications
Comments or questions on the Plan were invited, but none were offered.

It is noted for the record that after Section VI (Report on Projects and Activities) is completed in spring 2006, a complete, official copy of the 2005 Operating Plan will be attached to record copies of the May 2006 ECBT minutes.

### 2.17 Motions of the Secretary.

The following motions were approved by acclamation:
The Executive Committee and Board of Trustees of the American Mathematical Society record their thanks to David R. Morrison for his service to the Society as a member of the Executive Committee during the past three years. The ECBT expresses its gratitude to Professor Morrison for his thoughtful participation and express the hope that he will continue to be available to serve the Society in other ways.

The Executive Committee and Board of Trustees of the American Mathematical Society express their gratitude to David Eisenbud for his leadership as President of the Society and for his contribution to the management of the Society as a member of the Board of Trustees. They note with pleasure that Professor Eisenbud will continue to serve on the Executive Committee and trust that he will continue to be available to the Society as needed.

## 2C EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES CONSENT ITEMS

## 2C. 1 May 2004 ECBT Meeting.

The ECBT approved the minutes of the meeting of the Executive Committee and Board of Trustees held May 21-22, 2004, in Ann Arbor, Michigan, which had been distributed separately. These minutes include:

- ECBT open minutes prepared by the Secretary of the Society
- ECBT "open" executive session minutes prepared by the Secretary of the Society.

See also item 3C.4.

## 2C. 2 Funding for Project NExT.

The ECBT consented to a commitment of \$15,000 for Project NExT in 2006.

## 2I EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES INFORMATION ITEMS

## 2I. 1 Report on Joint Policy Board for Mathematics (JPBM).

JPBM met in Washington on October 25, 2004. JPBM now involves four societies (the American Statistical Association has been added) and meets twice yearly, in April and October. Most of the policy discussion concerned the difficult budget situation for the National Science Foundation, and there was a lengthy presentation on the "connections" (=institutes) part of the Division of Mathematical Sciences. The Board also considered some routine business, including mathematics awareness month for 2005 (Math and Cosmos) and the winner of the 2005 Communications Award.

## 2 I. 2 Journal Donations to Developing World. Att. \#17

The Society has recently considered various programs for making journals more available to mathematicians in the developing world. One of the most effective of these programs is carried out through the Abdus Salam International Centre for Theoretical Physics in Italy. The AMS will begin participating in this program during the next year. Information about the program is attached (\#17).

## 2I. 3 Update on OFAC and Legal Action Against Embargoes. Att. \#18.

The May 2004 ECBT discussed the recent legal issues surrounding rulings by the Office of Foreign Assets Control (OFAC). Because the rulings adversely affect all scholarly publishers, a lawsuit is underway by several organizations that represent large collections of publishers. Financial support for the legal action will come from many publishers, and for those wishing to contribute the support is commensurate with the size of publications revenue. The AMS has contributed \$10,000 towards the legal action. A recent article in Science about the lawsuit is attached (\#18).

## 2I. 4 AMS Member Newsletters. Att. \#19.

Member newsletters are published three times annually, with each focused on a particular aspect of the Society. The newsletters are mailed to all domestic members of the Society, and once each year are mailed to international members as well. All newsletters are posted online (http://www.ams.org/membership/member-newsletters.html). The Fall 2004 newsletter (a particularly effective one) focuses on outreach to departments. It is attached (\#19).

## 2I. 5 Actions of the Agenda and Budget Committee (ABC).

At its October 15, 2004 meeting in Providence, Rhode Island, the ABC took the following action:

The ABC set the schedule for the November 2004 ECBT meeting.

## 3 BOARD OF TRUSTEES <br> ACTION/DISCUSSION ITEMS

### 3.1 Budget Review.

The BT discussed items 3.1.1 through 3.1.5 and then voted to approve the 2005 budget as presented, except for the modification noted in 3.1.2 below.

### 3.1.1 Discussion of Fiscal Reports.

The BT received and discussed various fiscal reports, as well as a memo discussing the 2004 projected and 2005 budgeted operating results.

See 3.1.

### 3.1.2 Appropriation of Spendable Income from Unrestricted Endowment. Att \#20. PASS-EWING.

The May 2001 Board of Trustees approved the following annual procedure:
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 scholarship and outreach. Using such income should be a regular part of our operations rather than an exceptional situation.

The 2005 revenue budget includes the following uses of income on projects, which are explained in Att. \#20. The BT approved the uses of income as stated below, with two exceptions: increase Young Scholars Program to $\$ 80,000$, and decrease Congressional Fellow to $\$ 45,000$ (since the Congressional Fellow program runs on an academic year, only a portion of the total expense will be incurred in 2005).

## Previously Supported:

| MR Citations Project (ongoing) | $\$ 70,000$ |
| :--- | :--- |
| Young Scholars Program (ongoing) | $50,00080,000$ |
| What's Happening in Mathematics |  |
| (deferred from 2004) | 25,000 |
| Project NExT Support (ongoing) | 15,000 |


| AAAS Mass Media Fellowship (ongoing) | 10,000 |
| :--- | :--- |
| Mathjobs system (ongoing) | 10,000 |

## Newly Supported:

Congressional Fellow (new) \$75,000 45,000
(see item 2.9)

Total
\$255,000

### 3.1.3 Capital Expenditures - 2005 Capital Purchase Plan.

The BT reviewed the 2005 capital purchase plan, and approved it as part of the 2005 budget. See item 3.1.

### 3.1.4 Capital Expenditures - Approval of Specific Purchases.

This agenda item is reserved for requests for authorization to make specific large purchases (items costing $\$ 100,000$ or more). No such requests were made at this meeting.

### 3.1.5 2005 Salaries.

This item was discussed in closed executive session. See item 3E. 3 of the minutes prepared by the Secretary of the Board.

### 3.2 Investment Committee Report.

Investment Committee Chair John Franks reported on the October 15, 2004 Committee meeting, where the following items were discussed:

- Investment performance. Through September, the Society's year-to-date return was 2.5\%. Nearly all the accounts performed reasonably well in comparison to their benchmarks. Frontier Capital showed a $2.1 \%$ loss, which was understandable given their role as a growth manager. Growth stocks have had a poor showing this year. Representatives of Frontier were on hand to review their performance and strategy.
- Asset allocation. The current allocation is within the policy established by the Board.
- Transfer of funds from operations to long-term investments. The transfers planned in May have been completed. The Chief Financial Officer is not recommending any additional transfers at this time.
- Floating rate mutual fund investments. The Committee was interested in how this investment (approved at the May meeting) was implemented. The Chief Financial Officer reported that no investments would be made until it was clearer that the economy was on the rebound.


### 3.3 Economic Stabilization Fund Increment.

The BT received a report showing the current and projected status of the base portion of the Economic Stabilization Fund. The Chief Financial Officer informed them that, at this time, she does not contemplate making additions to the base or supplemental portions of the Economic Stabilization Fund in 2004.

### 3.4 Trustees' Officers.

The BT elected Carol Wood Chair of the Board, and re-elected Donald McClure Secretary of the Board, for the term February 1, 2005 - January 31, 2006.

### 3.5 Trustees' Committees, etc. Att. \#21.

The BT reviewed the attached list of BT committees, Trustee appointments to policy committees, and Trustee liaison assignments to divisions, and advised the Chair of the Board as follows:
reappoint Linda Keen to the Investment Committee
reappoint the Trustees serving on policy committees
don't make any changes in the Trustee liaison assignments to divisions.

## 3C BOARD OF TRUSTEES CONSENT ITEMS

## 3C. 1 Request for Support of Speakers at 2006 AAAS Annual Meeting.

The BT authorized \$10,000 to support mathematics speakers at the 2006 AAAS annual meeting.

## 3C. 2 Recognition for Length of Service.

The BT approved the following proclamations for the employees noted.
Twenty years of service:
James W. Maxwell
Mary H. Medeiros
Michelle M. Ogilvie
William P. Olson
Nancy J. Rousseau
Christine Vendettuoli
Maxine L. Wolfson

## Georgia Greene

Joan Shelly
The Board of Trustees takes great pride in recognizing $\qquad$ for twenty years 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 $\qquad$ their special thanks and their best wishes.

Twenty-five years of service:
Carol J. Couto
Beverly J. Demchuk-Burke
Arthur Greenspoon
Jane E. Kister

The Board of Trustees takes great pride in recognizing who has devoted twenty-five years of service to the Society. 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 their special thanks and their best wishes to
$\qquad$ for being such a loyal employee and wish her/him well in the future.

Thirty years of service:

## Gregory B. Sousa

Lila M. Dann
Bogdan D. Dudzik
The Board of Trustees takes great pride in recognizing for the outstanding distinction of serving the Society for thirty years. The Board expresses its profound gratitude for this long record of faithful service to the Society. 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 their special thanks and their best wishes to this loyal employee.

Thirty-five years of service:
Leslie J. DiPierro
Carol A. Hill
Muriel C. Toupin

The Board of Trustees takes great pride in recognizing _ for the outstanding distinction of serving the Society for thirty-five 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 their special thanks and their best wishes to $\qquad$ for being such a loyal employee and wish her well in the future.

## 3C. 3 Resolution for Retiree.

The BT approved the following proclamation:
Be it resolved that the Trustees accept the retirement of Nora Karsch with deep appreciation for her faithful service over a period of nineteen 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 Nora their special thanks and heartfelt good wishes for a happy and well-deserved retirement.

## 3C. 4 May 2004 BT Closed Executive Session Meeting.

The BT approved the minutes of the closed executive session meeting of the Board of Trustees held May 22, 2004, in Ann Arbor, Michigan, which had been distributed separately.

## 3I BOARD OF TRUSTEES <br> INFORMATION ITEMS

## 3I. 1 Small Change in Fringe Benefits.

Modification to Healthcare Flexible Spending Account: In September of 2003 the Treasury Department and the IRS ruled that expenses incurred for over the counter (OTC) drugs are eligible for reimbursement under a healthcare flexible spending account. Many prescription drugs have moved to the OTC market and this provision assists participants with paying for them. Although Plans are not required to adopt this provision, allowing this provision provides an increased benefit to employees by reducing their out of pocket expense for OTC drugs. The Plan has been operating under the provisions of this ruling as of October 1, 2003. The Plan Document has been rewritten to reflect this change. This provision has no real effect on the operation of the Plan or the cost of providing the benefit, but it enhances the benefit for Plan participants.

## 3I. 2 Registration Fee for 2005 Summer Institute.

On August 25, 2004, the Executive Director approved a registration fee of $\$ 45$ for the 2005 Summer Institute on Algebraic Geometry.

## 3I. 3 Focused Planning for Infrastructure. Att. \#22.

The focused planning area selected for 2005 is Data Collection and Information Delivery, which staff usually refer to as "Infrastructure." As originally envisioned, this project would focus on AMS business practices (not so much what is done, but how it is done) and a technology review. When the five focused planning areas were originally discussed with the ECBT, it was felt that this area should be done mainly by staff. Although the work will be done with the same vigor and intensity as the other focused planning areas, volunteers will not be asked to commit their time to it. Periodically, staff will report the status of the project to the BT; and any issues involving large financial commitments will come before the BT as appropriate.

Att. \#22 is the October 5, 2004 report prepared for discussion with the Staff Executive Committee.


## Report on Focused Planning for Meetings and Conferences

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## A Guide to the Report on Focused Planning for Meetings and Conferences

## Introduction

Staff first proposed that the AMS undertake special planning efforts at the meeting of the Executive Committee and Board of Trustees (ECBT) held in May, 2002. Five areas of Society operations were selected for what is termed focused planning. Focused planning has a more limited scope than the long range planning effort conducted by the Society at the start of the 1990's but an expanded scope when compared to the operational planning conducted annually in each division of the Society. The ECBT approved the outline of the planning process and charged staff to proceed with planning in four designated areas: meetings, membership, publication production, and (corporate) data collection and delivery. They selected membership and meetings as the first two areas for focused planning. A report on the focused planning effort on membership was presented to the Fall 2003 meeting of the ECBT.

A component of the staff proposal for focused planning was a preliminary work plan for each of the areas to be addressed. The preliminary work plan for meetings was reviewed by the Committee on Meetings and Conferences (COMC) at its March 2003 meeting, and there was a general discussion of issues to be addressed during the planning process. Comments on the work plan along with suggestions of issues to be addressed were incorporated into the work plan. Early in 2004 a Steering Committee was formed to lead the planning effort. Members of the steering committee are Robert Daverman, John Ewing, Jim Maxwell and Diane Saxe. A copy of the updated work plan forms Appendix A at the very end of this report.

## The Report

The Steering Committee gathered input for the study from the Committee on the Meetings and Conferences (COMC) during its April 2004 meetings, from the ECBT at its May 2004 meeting, and through communications with meetings staff in other professional societies over the past eight months. In addition, members of the steering committee have been regularly involved in discussions of meetings and conferences issues at meetings of the AMS Secretariat, COMC and Society governing board meetings over the past ten or more years, and these experiences have also influenced the work of the Steering Committee.

The Steering Committee has approached the task of focused planning for meetings by first asking itself numerous questions. These questions served to frame the issues that are central to the task of thinking deeply about the current and future role of meetings in the Society's fulfillment of its mission. As a first step in addressing these questions, the staff
prepared an interim reports in the spring that either responded directly to the questions or provided background for discussions by COMC, the Secretariat, and the ECBT as they explored the issues raised by the questions. These draft reports have now been finalized and organized into the final report as follows:

What role have meetings played in the history of the AMS? Section 1 of the report provides a review of the history of national and sectional meetings since the founding of the Society. Timelines of significant historical events are also included for national, sectional and international meetings.

How do AMS meetings compare with those of other scientific and academically centered professional societies? Section 2 provides a comparison of key aspects of the Society's meetings with those of ten other professional societies.

How do current winter meetings differ from those held ten years ago? Which areas of the program have expanded and which have contracted? Section 3 provides a quantitative review of the various major components of the program and activities of the winter meetings for 1970, 1993, 1999 and 2004. A similar review is also provided for the sectional meetings.

What role does the Society's meetings activities play in the finances of the Society? Section 4 provides an overview of the financial side of the AMS meetings program over the past eight years.

What is the current state of the AMS research conference program and what form should this long-standing Society activity take going forward? Section 5 provides a review of the recent history of the Society's conference program and posed some options for the future that were considered at the May 2004 ECBT meeting.

## Final Steps

The Steering Committee used the feedback it received from COMC, the Secretariat and the ECBT as it works over the summer and early fall to prepare the final report for presentation to the November ECBT. The COMC Subcommittee appointed in March of 2003 was provided a report on the feedback received from COMC, the Secretariat and the ECBT and invited to provide additional input. The members of this Subcommittee are: Edward Barbeau, Jr., Tepper Gill, Craig Huneke, Irena Peeva and Susan Friedlander. Input from all these sources has been taken into consideration as the final report was prepared.

Jim Maxwell
October 28, 2004

## Section 0: Findings and Recommendations

## FINDINGS

Governance. There were few surprises in reviewing the AMS meetings activities, and there are no major recommendations for change. In retrospect, the reason seems apparent: The AMS has a well conceived governance structure for meetings that regularly reviews the program and makes the necessary adjustments year by year. The Committee on Meetings and Conferences provides regular oversight and periodic reviews of all the policies and principles related to the Society's meetings and conferences. In addition the structure of the AMS Secretariat is a highly effective way to ensure consistently vigorous scientific programs at the Society's meetings. The limited number of recommendations reflects this effective governance structure for meetings related activities.

Sectionals. Sectional meetings are central to the Society's outreach to its core constituency: current and future research mathematicians. The annual program of eight sectional meetings provides an accessible means of advancing their research interests and expanding the professional networks of a wide range of U.S. members. Sectional meetings are an effective way of introducing graduate students to meetings as an essential part of their professional advancement.
The National Meeting. National meetings complement the Society's program of smaller regional meetings. The national meeting is the one event that brings together individuals from all sectors of the U.S. mathematics community, and a wide range of participants consistently rate the meeting's networking opportunities as an important reason for their attendance. The program of Invited Addresses and the twenty-five or more AMS Special Sessions are central reasons that AMS members attend this meeting. There continues to be concern that leading research mathematicians attend the national meeting only if they are giving an Invited Address or speaking in a special session.

International Meetings. The Society's program of international meetings is a small but valuable addition to the Society's portfolio of meetings. An international meeting sponsored jointly with a mathematical society in the host country has proven to be a wellreceived means of outreach to mathematicians in other countries. With over one-third of its non-student membership located outside the U.S., these meetings enhance the image of the Society as a organization interested in furthering mathematical research and scholarship worldwide.
Conferences. The Committee on Meetings and Conferences, the Executive Committee and the Board of Trustees have all agreed that the Society should join with IMS and SIAM in seeking continued NSF funding of the Summer Research Conferences (SRCs). Since 1999, the SRCs have been the Society's sole means of continuing its long tradition of fostering advances in research through small, specialized, grant-supported meetings. The SRCs continue their traditional emphasis on bringing together separate research communities working on closely related problems, and they have successfully incorporated conferences that provide new PhDs with an opportunity to take a major step forward in their professional development.
Finances. The Society's program of meetings is financially sound. Furthermore, there is a clear consensus among the officers and volunteer leadership that meetings activities are
an important means of outreach to the mathematical community and that they provide amply to the Society's overall financial well being.

## RECOMMENDATIONS

1. The Society may want to consider gradually expanding the number of sectionallike meetings, perhaps by holding joint meetings with other organizations or holding a meeting in conjunction with a special mathematical event or occasion. Appointing a fifth Associate Secretary "at large" to plan these meetings would avoid adding to the already heavy load of the current (four) Associate Secretaries.
2. In the event that the renewal proposal to NSF for continuation of the Summer Research Conferences is not funded, the Society should look for alternative avenues for continued outreach to the research community traditionally served by the Society's summer conference program.

## Elaborations on the Findings and Recommendations

## Governance

The Committee on Meetings and Conferences (COMC) was one of three new Council policy committees established in 1993. The creation of COMC has provided for regular consideration of policy issues related to meetings. COMC's cycle of annual reviews of the various central components of the Society's program of meetings and conferences has provided the Secretariat and the staff with valuable guidance as they implement these activities. The interactions between COMC and the Secretariat is a synergistic one when it comes to maintaining the vitality of these programs. The review of the way other societies manage their meetings reinforces the fact that the structure for oversight of AMS meetings and conferences is a rich and stable one and an asset to the Society.

## Sectional Meetings

Sectional meetings have been a part of the Society's program of meetings from its early days, with a sectional meeting held in Chicago at the end of 1896. Table 3.4 (Section 3, pages 3-4) demonstrates that the current structure for sectional meetings has been in place since the early 1960 's. Their frequency is unchanged since the 1970 's, but the number of special sessions has grown from an average of six per sectional in 1980 to fifteen per sectional for 2003 and 2004. During 2003 and 2004, one-third or more of the special session organizers came from the mathematics department hosting the sectional meeting. Registration figures for the years 1999 through 2003 show that AMS members constitute $80-85 \%$ of those attending sectional meetings, that between one-third and one-half of sectional attendees come from the state where the meeting is being held or the contiguous states, and that graduate students account for close to one-quarter of total attendance. (See Table 3.5, Section 3, page 5.)

COMC carried out annual reviews of sectional meetings in 1997 and again in 2002. The 1997 review reporting findings that are especially germane to this focused planning review. Two key excerpts from the 1997 report are:
"It seems clear that here is a consensus among the membership of the Society that Sectional Meetings are effective. Put simply, sectional meetings afford AMS members the opportunity to gather to hear talks by and interact mathematically and socially with colleagues in their respective areas and also to keep up with what is happening outside their areas."
"....It should be Society policy to find ways to encourage interaction between the mathematicians from different areas, especially between pure and applied mathematicians and to foster cooperation among scientific societies."
A key excerpt from the 2002 report is:
"... we recommend consideration of joint Sectional Meetings with participation of other professional societies, when appropriate. We have in mind disciplines such as Computer Science, Statistics, Physics, Biology, Engineering or Finance, among others. We recognize that too much of an emphasis on related disciplines might change the nature of a Sectional Meeting and that such cooperative meetings should
probably remain unusual. Nevertheless, there are many advantages to be gained from such cooperation."

At COMC's discussion of focused planning at its April 2004 meeting, there was support for the idea of having more sectional meetings and support for continuing to discuss the best way to achieve this, including the possibility of adding a fifth "at large" Associate Secretary who could arrange for sectional-like meetings with other societies or in connection with other special occasions without being tied to a specific geographic region.

## National Meetings

COMC last reviewed the overall program for the national meetings in 2000. The report from the subcommittee conducting this review provides a succinct summary of one of the hallmarks of the national meeting for AMS members:
"Most research mathematicians feel that special sessions are the most important part of a meeting, but yet many come away from meetings feeling that the most important interaction came from the one-on-one discussions outside of the formal structure of talks."

The number of AMS scientific events at national meetings, primarily special sessions, has grown significantly since 1970, having reached a steady state over the past five years, as demonstrated in Table 3.1. The number of MAA scientific events has increased dramatically since the 1970, and that growth has continued over the past five years. In addition there has been some growth in the scientific events of other organization, in part from the inclusion of scientific events organized by SIAM. The expansion of the scientific program has been a factor in the expanded attendance at the national meetings over the past five years. Participant feedback echoes the perennial lament about "scheduling conflicts", but to an extent similar to that in times when total attendance was lower. Participants continue to report that networking opportunities are a strong motivation for their attendance at this meeting. More than any other event, the national meeting builds the most inclusive form of community among U.S. mathematicians. Table 3.Y suggests that the draw of the national meeting among U.S. mathematicians is as strong as ever.

## International Meetings

Over the twelve years since the Society's first joint international meeting with the London Mathematical Society in 1992, the AMS has settled into a routine for its international meetings that matches the interests from our sister societies in other countries, allows the hosting society freedom to organize the meeting along the lines they are most comfortable with, and keeps the AMS's costs in line with the perceived benefit of this international outreach activity.
COMC reviewed the international meetings at its spring 2001 meeting. A subcommittee presented a report based on a review of various materials on past international meetings prepared by the Secretary's office and the Meetings Department, together with a survey
they conducted of approximately 150 participants at international meetings, including a number of organizers of special sessions at these meetings. The following excerpt from the report of the subcommittee summarizes the results of the survey:
"The reactions from the survey were very positive to the concept of joint meetings with other national societies. They give ample justification for them to continue in more or less the same general format. ... There was considerable mention of the usefulness and ability of the international meetings to foster contact and collaborations with non-American mathematicians. Having the meeting in an attractive location is a big plus. The general recommendation is to certainly continue this program!"

## Research Conferences

COMC reviews of the SRCs during 1997 and 1998 were clear in their recommendation that the Society continue to pursue funding for the SRCs, which was achieved in 1999 with NSF's approval of a five-year grant. A review by COMC in April of 2004 resulted again in a recommendation to pursue continued funding for the SRCs. The May 2004 ECBT agreed that the SRCs have a track record of providing outstanding opportunities for their participants to advance their research agendas. They endorsed the submission of a proposal for renewed funding, jointly with SIAM, to the Division of Mathematical Sciences at NSF. They also endorsed continuing to incorporate some conferences focused exclusively on advancing the careers of very recently PhDs , similar to those held at the 2003 and 2004 SRCs and scheduled for the 2005 SRCs. A proposal reflecting the recommendations of the ECBT is in preparation for submission to NSF.

## Meetings Finances

Table 4.1 (Section 4, page 2) presents a financial view of the Society's combined meeting activities over the past eight years. Table 4.2 shows the income from the national (winter) meeting. This income is pivotal in maintaining the financial health of the combined meeting activities as reflected in Table 4.1. Table 4.3 shows that the annual excess of direct expenses over revenue for sectional meetings ranges between $\$ 2,500$ and $\$ 4,000$ per sectional. There is a clear consensus within the Society's leadership that sectional meetings are a key way the Society fulfills its mission and that the excess of expense over revenue represents an acceptable level of society investment in outreach.

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## Section 1: History of AMS Meetings

## National Meetings

## The Early Years: 1894-1945

By the year 1894 many changes had taken place with the New York Mathematical Society. Nationalization of the Society was accomplished by changing the name to the American Mathematical Society. It was also a signal to both the membership and to the world of the expansion taking place and of the proposed role of the Society. In addition to the name change, there were important changes in the organization and in the scientific program as well. The Council recommended "the Council be somewhat enlarged and divided into classes one of which shall be retired each year, that there shall be delivered before the Society a series of presidential addresses, and that provision be made for occasional meetings of the Society as a whole in cities other than New York."

As a result, the first Summer Meeting of the AMS was a two-day meeting that was held in one of the lecture rooms of Polytechnic Institute in Brooklyn, New York, on August 14 and 15,1894 . It was held in conjunction with the mathematics section of the American Association for the Advancement of Science (AAAS). The thought was that the influence of AAAS would bring to the New York meeting many members of the Society from remote parts of the country who would welcome the opportunity of attending a meeting of the Society. The first Winter Meeting of the AMS was held at Columbia College in New York, on December 28, 1894 and lasted one day.

## Basic Facts

The Summer Meetings were always scheduled in August while the Winter Meetings were held between Christmas and New Year, due to many institutions running two semesters from September to June, with a break of a week or two over Christmas and New Year. This put the Winter Meeting naturally between Christmas and New Year's Day. This period was rigidly fixed in the By-Laws until 1924 when the interval was changed to "between December 15 and January 15". The holiday schedule often had an important benefit: when held on a university campus, economical housing could be obtained in students' dormitory rooms and facilities were often free.

The meetings were usually held at universities, particularly in New York at Columbia College. Other colleges used were John Hopkins and MIT. The first Winter Meeting held outside New York, simply for variety, was in 1918 in Chicago.

During this time period, attendance at both meetings was small, usually less than 100, since the membership of the Society was small. The first Summer Meeting with more than 100 participants was held in 1925. The first Winter Meeting with more than 100 participants was held in 1916. This was partly due to the meeting being held jointly with AAAS and the recently formed (in December 1915) Mathematical Association of America (MAA).

Also, the meetings were originally at no cost to the participant. But in 1934 the first observed registration fee was $\$ .50$. By 1938 the registration fee was $\$ 2.00$. The first committee on the meetings was created in 1938 and it was called the "Joint Committee on Places of Meetings". Their primary purpose was to make decisions on the locations.

## Scientific Program

The scientific program at the 1894 Winter Meeting consisted of three scientific items, including the first Presidential Address by Dr. J. Emory McClintock. During the first three meetings no papers were read. Beginning with a single paper at the fourth meeting, this feature of the program developed into the chief attraction for the general membership. In 1897 the first Colloquium of the Society was held contiguous to the Summer Meeting. It was composed of two mathematicians each presenting six lectures. By 1901 it became a regular part of the Summer Meeting. By the 1930's, the winter program consisted of the Gibbs Lecture, which was established in 1923, one or two invited addresses, a retiring president's address and contributed ten-minute papers, numbering more than fifty. There were general sessions with no competing events and two or three simultaneous sessions based on broad classifications of subject matter.

In the early years, particularly the first 25 years, there were a large number of papers, in order of magnitude from one-third to one-half the attendance which meant that a high proportion of participants gave talks. It is important to note that being listed on the program was the only way of giving advance notice of work done or in progress. Moreover it was possible to offer more than one paper. In the early sixties, this changed to only one paper per person.

The nature of programs changed with time. For many years it was possible to set up a program with little or no conflict. The Winter Meeting became a two-day meeting in 1901. One could accommodate thirty or forty papers and a couple of lectures before concurrent sessions became necessary. This meant that the individual mathematicians could hear a greater diversity of papers than is now reasonable with as many as ten simultaneous sessions in narrowly defined fields. However there were complaints that programs were too crowded, with not enough time for discussion.

## 1946-1996

Over the next fifty years attendance at the winter meetings became significantly larger relative to the attendance at summer meetings. Winter Meetings moved away from university sites; there was a considerable broadening of the schedule at AMS meetings to include special sessions (1963) and joint invited talks with MAA (1987). There was a decrease in the importance of contributed papers and a decline in their scientific merit.

## Basic Facts

In 1958, an amendment to the AMS bylaws expanded the interval for Winter Meetings to be from December 15 - February 10. This change occurred partly in recognition of changing academic calendars and also in wanting to move travel to the meeting away from the glut of travel around the Christmas and New Year's holidays. In 1973, it was decided that future winter meetings should be set so that each of the three weeks in January receive equal attention.

The activities of the Joint Committee on Places of Meetings gradually increased to include governance and overseeing all phases of the conduct of the winter and summer meetings. In 1978, the name was changed to "Joint Meetings Committee (JMC)" in order to indicate the broader scope of this committee's authority.

The Summer Meetings were first scheduled in August and continued as such through the years. In 1980, the Joint Meetings Committee (the former Joint Committee on Places of Meetings) decided that there should be no summer meetings scheduled after August 15. This remained in effect until joint summer meetings were discontinued in 1996.

The winter and summer meetings were held on university campuses until 1960. Hotels then became the preference for the Winter Meetings. This shift was due to the unsuitability of university sites for large meetings and time conflicts with the regular schedules of universities. In 1976, convention centers were looked at as alternative locations since meeting space in hotels was often limited. From that point on, the location of the Winter Meeting was either in convention sized hotels or convention centers.

Climate also became a factor in choosing locations and in 1984 it was agreed that winter meetings should be held in warmer climates. In 1977, it was agreed that the meetings would alternate between sites in the east and west.

By 1953, attendance at the Winter Meeting was 600 and the Summer Meeting was 700. In 1960, the numbers increased to 1325 and 760 , respectively.

|  | Winter | Summer |
| :--- | :--- | :--- |
| $\mathbf{1 9 5 5}$ | 400 | 800 |
| $\mathbf{1 9 6 0}$ | 1325 | 760 |
| $\mathbf{1 9 6 5}$ | 2095 | 1470 |
| $\mathbf{1 9 7 0}$ | 3558 | 928 |
| $\mathbf{1 9 7 5}$ | 3415 | 903 |
| $\mathbf{1 9 8 0}$ | 2391 | 1225 |

In 1973, a decision was made to publicize the meetings outside of membership to increase attendance. That year, the attendance at the Winter Meeting was 3162 and the attendance at the Summer Meeting was 571. Thus, attendance at the winter meetings was becoming much larger relative to the attendance at summer meetings.

## Other Organizations

During 1946 to 1996, both summer and winter meetings were held jointly with MAA. Other organizations that met jointly were AAAS (first met in 1894), Association for Symbolic Logic (ASL) (first met in 1975), National Council for Teachers in Mathematics (NCTM) (first met in 1975), Association for Women in Mathematics (AWM) (first met in 1971), Society for Industrial and Applied Mathematics (SIAM) (met in 1979 and 1980), and NAM (first met in 1987). The last meeting with AAAS was held in 1986. The Winter Meeting was moved to January and this was not a convenient time for AAAS to meet. ASL decided to have its own meeting in 1988 and was deleted off of the block schedule. They were put back on the block schedule in 1997.

## Name Change

The name of the Winter Meeting was often changed to reflect which organizations were meeting jointly. For example, the name of the meeting in 1975 was "AMS-ASL-MAANCTM Annual Meeting". In 1976, the name was permanently changed to "Joint Mathematics Meetings".

Also in 1976, the Summer Meeting was renamed the "Joint Mathematics Meetings". But in 1991, it was changed to "MathFest". The concept behind the MathFest meeting was that there would not be any conflicts with the major talks.

## Scientific Program

In 1963, the scientific program of the Winter Meeting started to change. The trend was a decrease in the importance of contributed papers and a decline in their scientific merit. The JMC decided to broaden the schedule to include AMS special sessions and joint invited talks with MAA. Changes made were as follows:

1. In 1963, the style of the program was altered to include five Special Sessions, each devoted to a single topic. The special sessions started out as informal gatherings and evolved into 20 minute papers invited by an individual selected by the Program Committee. This feature grew in both size and popularity at the Winter Meeting until it sometimes became necessary to limit the number of special sessions, the number of talks within a session.
2. In 1971, the number of hour long invited addresses was increased to four (two AMS and two MAA). Over the years this number was increased again to eight Invited Addresses, four each. This became the norm until 1988 when they were reduced to six each because the program was too crowded.
3. In 1973, one set of Colloquium Lectures was added. There were four lectures in a set. In 1974 when there was no Summer Meeting, there were two Colloquium Lectures and in 1975, there was again only one Colloquium with four lectures. After 1975, the number of sets of Colloquium Lectures was reduced to one, making it four lectures again. This changed in 1990 when the fourth lecture was dropped.
4. There were MAA Poster Sessions in 1978 and 1979. After 1979 poster sessions stopped and did not occur again until 1990.
5. In 1981, the first permanent block schedule was established. This provided a generic overview of the entire meeting that could be used each year.
6. In 1984, MAA mini-courses were established.
7. In 1987, the first Joint AMS-MAA Invited Addresses were established. Initially, there were four. This number was eventually reduced to three until 1995. At that time, the number dropped to two Joint AMS-MAA Invited Addresses scheduled on the first and third days, and a Joint Policy Board for Mathematics (JPBM) Public Policy Address was added on the second day. It also became policy that no conflicting program elements could be scheduled against these three addresses.
8. The Public Policy Address was initially cosponsored by the Joint Policy Board for Mathematics, the AMS Committee on Science Policy, and the MAA Science Policy Committee. In 1997, JPBM was no longer a sponsor.
9. In 1988, it was decided that the maximum amount of special sessions allowed would be equal to the number of rooms available for special sessions and that the number of talks in special sessions would be limited to fourteen. It was agreed that the 50 -minute invited addresses could have special sessions and contributed paper sessions opposite them.
10. In 1992, Prize Awards by AMS and MAA, previously separate events, were changed to a Joint Session on Thursday and the two business meetings were put on the fourth day in successive times around noon.

Prior to 1981, as the scientific programs grew, both meetings grew to be five days. A typical program was structured as: first and second day - all AMS, third and fourth day MAA in the morning and AMS in the evening, and fifth day - all MAA. In 1981, the need to join the programs of AMS and MAA was expressed so that something of interest to all people would be going on at all times. However, nothing was done until 1984 when a four day meeting was tried for the first time with each organization running for the entire four days. This structure worked well and the AMS and MAA programs became officially integrated in 1987. Thus, the first four-day block schedule was established.

## 1997 - Present: The Winter Meeting

Growth in the size and complexity of the JMM provided the impetus for key policy changes over the next seven years. As more organizations and events were added to the meeting, the need for meeting space increased and the scientific program developed more parallel activities and sessions. This became a concern because the JMC's intent was to put on a rich program that had a lot of options but not an overwhelming number of
conflicts, particularly conflicts such as sessions that occurred at the same time and drew the same crowd.

In choosing locations, sufficient space availability soon became an issue. So, the need for a new policy for choosing locations became apparent.

## Basic Facts

In 2001, it became evident that the strict East/West alternation policy for choosing locations was limiting the availability of sites. The number of workable sites shrank as many cities did not have the meeting and/or housing space needed to hold the JMM. Thus, this policy was relaxed to allow two meetings in a row on the same side of the Mississippi River.

By 1997, the attendance at the JMM had increased to 3563 participants. The largest meeting occurred in 2003 in Baltimore with an attendance of 4259 participants. The heavy concentration of universities in the East Coast was judged to be a major factor in the record attendance.

## Other Organizations.

By 2000, six organizations had been granted slots on the block schedule. They were ASL, AWM, MER, NAM, PME, and RMMC. SIAM became a regular part of the program in 2002.

## Scientific Program

The year 2000 brought several changes to the program such as:

1. It was observed that attendance at the AMS Colloquium Lectures had dropped dramatically after the first lecture. It was decided that the first lecture would remain conflict free and the second and third lectures could have conflicts.
2. The crowded program became more prominent in 2000. The block schedule included many events in the evening. One attempt to address this issue was to come up with a way to control the AMS events held in the evening. COMC decided that AMS Special Sessions and Contributed Papers should not be scheduled during the evening hours.

Another attempt to address this issue came about in 2001. It was decided that each Society would reduce the number of its Invited Addresses by one; i.e., from six to five.

## Nonscientific Program

The number of social events gradually increased to include networking sessions, a knitting circle, a Fun Run/Walk, and several different types of receptions and banquets. By 2004, 30 social events were held at the meeting.

## Sectional Meetings

Although the first meetings of the American Mathematical Society (AMS) were held in New York City, a separate Chicago section soon began. In response to a call issued by several members of the AMS residing in or near Chicago, a mathematical conference was held at the University of Chicago on December 31, 1896 and January 1, 1897. There were two sessions daily, at 10:00 a.m. and 2:30 p.m., respectively. This meeting was organized as the Chicago Section of the AMS.

A committee was formed in 1897 to formulate a plan of permanent organization for a local section of the Society. As a result, a resolution was adopted that said that it was desirable for the members of the Society to hold in Chicago at least two meetings a year for the reading and discussion of mathematical papers, one during Christmas vacation and one in the spring. Thus another conference was held in the spring on April 24, 1897.

Other sections followed in due course. The San Francisco Section (which later became the Far Western Section) was formed in 1902 and the Southwestern Section was formed in 1906.

Sectional Meetings were not considered meetings of the Society until 1913. In October 1913, in appreciation of the Chicago group, the Council voted "the meetings of the Chicago Section, so far as concerns the presentation of scientific papers, will become meetings of the Society". It was further determined that "the Society will hereafter enjoy the possibly unique distinction of holding almost simultaneous meetings in different cities. The Chicago Section will retain its identity unchanged as regards sectional or local matters". Thus the $32^{\text {nd }}$ meeting of the Chicago Section in December 1913 was also "the first regular Western Meeting of the Society."

In 1929, the Southwestern Section became part of the Western Section and the San Francisco Section became the Far Western Section. From 1929 to 1949, there were three sections: East, West, and Far West. This changed in 1950 when a Southeastern Section was formed. From 1951 to the fall of 1982, there were four sections and they were called: Eastern, Southeastern, Western, and Far Western. In the fall of 1982, the Western Section became the Central Section and the Far Western Section became the Western Section.

Currently, there are still four sections and they are: Eastern, Southeastern, Western, and Central holding sectional meetings that occur in the fall and in the spring. The Eastern Section includes states east and north of Pennsylvania; the Southeastern Section includes those states south of Maryland from the east coast to the Mississippi river, plus Arkansas and Louisiana; the Central Section includes those states west of Pennsylvania and east of

Colorado; and the Western Section includes those states west of Nebraska. Each Section has one Associate Secretary, appointed for renewable two-year terms.

## Associate Secretaries

In its early days the Chicago Section had a separate secretary, who was not an officer of the Society. In 1923 this position was voted to be an officer of the Society with the new title of Assistant Secretary. In 1927 the Assistant Secretary, Arnold Dresden, had to move east. At that point, the Society thought that his services could be used to help with Eastern Sectional Meetings, so the Society adopted an amendment that replaced the one Assistant Secretary position with two Associate Secretary positions, with the expectation that one would handle the West (sometimes referred to as the Middle West) and the other would handle the East.

A San Francisco Section of the Society had been organized in 1902. After 56 meetings of this Section the Council voted, in December 1928, to grant the request of the Section that meetings on the Pacific Coast should thereafter be designated as regular meetings of the Society. This led to a third Associate Secretary for the Pacific Coast, or the Far Western Section, in 1929. By 1938, the Associate Secretary of the West, M. H. Ingraham, had $^{2}$ secured many institutional members for the Society. So he was asked to devote himself largely to problems connected with the membership and financial affairs of the Society. This position became the Associate Secretary for Financial Affairs (from 1938 to 1949) and another Associate Secretary was brought in for the West Section. In 1950, an Associate Secretary was added for the Southeast Section.

Currently, arrangements for East, Southeast, West, and Central Sectional Meetings are made by the cognizant associate secretary, usually in cooperation with a local mathematics department.

## Other Organizations

From 1907 to 1954, Sectional Meetings were occasionally held jointly or in conjunction with the American Association for the Advancement of Science (AAAS) (starting in 1907 and ending in 1940) and Mathematical Association of America (MAA) (starting in 1917). During this period, the AMS occasionally held meetings jointly with other organizations as well. They were: the American Physical Society, the American Geophysical Union, the Institute of Mathematical Statistics, the Biometric Society, the Econometric Society, the Society for Industrial and Applied Mathematics (SIAM), the Optical Society of America, and the Association for Symbolic Logic.

In 2003, the MAA and AMS held two Joint Sectional Meetings.

## Attendance

Attendance at the Sectional Meetings gradually increased. There were less than 30 participants ( 17 were members of the Society) at the first Chicago Section conference. In

1906, there were 40 persons in attendance including 28 members of the Society. In 1907, the $22^{\text {nd }}$ meeting was held jointly with Sections A (Mathematics and Astronomy) and D (Mechanical Science and Engineering) of AAAS. Over 150 participants (including 50 engineers) attended this meeting. In April 1922, a Sectional Meeting was held in honor of the $25^{\text {th }}$ anniversary of the Chicago Section. The attendance at this meeting was approximately 150 people of whom 104 were members of the Society. Currently, attendance at the Sectional Meetings generally ranges from 150 to 400 participants, with more than $75 \%$ who are members of the AMS.

In 1978, the AMS started charging a registration fee for the sectional meetings.

## Scientific Program

The first Sectional Meetings were formed so that members could get together to read and discuss mathematical papers that were supposed to represent the various lines of mathematical activity of those in attendance. There were 14 papers presented at this meeting. By the end of the seventh meeting in 1900, 106 papers had been presented by 41 different persons. In the 1930's and early 1940's, these discussions were referred to as "sessions of the society" or "sessions for the reading of short papers". They were first referred to as "sessions for contributed papers" in 1942 (October New York Meeting).

The first invited address was given by Pierre Boutroux from Princeton University in 1920. He spoke on "On multiform functions defined by differential equations of the first order". For most of the meetings in the 1920's and 1930's, there was one invited address. This started to change in the 1940's when the norm became two. The number increased to three or four in the early 1970's.

Starting in 1917 and lasting until the early 1960's, a "Symposium" on a particular mathematical topic (often applied mathematics) was an occasional element of the Sectional Meeting. The principal papers of the first Symposium were "Integrals of Lebesgue and their applications" by G. A. Bliss, and "Integrals, extensions of and related to Lebesgue" by T. H. Hildebrandt. The last symposium was held in the early 1990's.

The first special session at a Sectional Meeting took place in November 1964 at the $618^{\text {th }}$ meeting in Evanston, Illinois (one year after the first special session at the Joint Mathematics Meetings). It was entitled "Recent developments in ring theory". In the beginning, there were very few special sessions. They did not become popular until the late 1970's.

Sectional Meetings began evolving into their present format in 1972. The March 1972 Sectional Meeting in St. Louis included four Invited Addresses, five Special Sessions, and seven Contributed Paper Sessions. Special Sessions were not the norm in 1972, but by the late 1970's, they had largely eclipsed Contributed Paper Sessions at Sectional Meetings. During most of the past 25 years, the Society has sponsored six to eight Sectional Meetings per year. At the beginning of this period, the typical meeting offered
fewer than 100 talks. That number has more than doubled: the four Spring 1997 Sectional Meetings contained an average of 217 talks each.

Currently, the primary activities at Sectional Meetings are Invited Addresses and Special Sessions. Each meeting includes four invited addresses (usually 50 minutes long), and 8 18 Special Sessions (most falling between 11 and 15) with an average of six 20 minutes long talks per half day. Meetings span from two to three days. Unlike the Winter meeting, the Invited Addresses at sectional meetings are plenary talks.

The incorporation in Sectional Meetings of activities other than Special Sessions has been the exception rather than the rule, due to the lack of available time. Usually these meetings run on a two-day or three-day cycle, and between Invited Addresses and Special Sessions, there is very little time left. Several initiatives have been tried in the past, including a meeting of area department chairs in 1995.

## Time Line of AMS Meetings

## JOINT MATHEMATICS MEETINGS

1889 The first Winter meeting was held for New York Mathematical Society (the predecessor to AMS)

1893 The World's Columbian Exposition held in conjunction with International Congress of Mathematicians was the location of the first Colloquium on Mathematics in Chicago. This was organized by the mathematicians of the newly formed University of Chicago and showcased some of the best of American mathematics alongside some of the best of European mathematics.

1894 The first Summer Meeting of the AMS took place at the Polytechnic Institute in Brooklyn NY in August in conjunction with Section A of the American Association for the Advancement of Science.

1894 The first Winter Meeting of the American Mathematic Society was Dec. 28, 1894, in New York at Columbia College. (Prior to this the New York Mathematical Society was established in 1888; the name was changed by an amendment to the constitution in July 1894 shortly before the first Summer Meeting.)

1896 First Colloquium of the Society held in September with two mathematicians each giving six lectures and was separate from but contiguous to the Summer Meetings.

1901 Winter Meeting became a two day meeting.
1901 The Colloquium became a regular part of the summer sessions.
1923 Establishment of the J. W. Gibbs Lecture.
1923 Assistant Secretary position became an elected officer of the Society.
1927 Assistant Secretary position changed to 2 Associate Secretaries, one Eastern and one Midwestern.

1930 In the 1930's the Winter Meeting was scheduled between Christmas and New Year's Day and was held on a university campus. Some of the meetings were in conjunction with the meetings of the AAAS.

1934 First observed registration fee at a Society meeting was $\$ .50$ in September 1934 at Williams College.

1938 Semi-Centiennial Celebration took place in September at the $44^{\text {th }}$ Summer Meeting with an attendance of about 700 including 419 registered members of the Society. The registration fee was $\$ 2.00$.

1953 Employment Register: Council approved register consisting only of a file of academic institutions, industrial firms, and government agencies. In 1958 it became a staff function of the Providence office.

1958 Winter Meeting time was changed to a period from December 15 to February 10.
1963 First Winter meeting to have Special Sessions.
1964 First Sectional meeting to have Special Sessions
1971 Four one hour long addresses at Winter Meeting. In 1972 the number was eight, which was the norm for many years and the addresses were no longer free from competition with other events.

1973 Short Course initiated prior to Summer and Winter Meetings at the behest of the Committee on Employment and Educational Policy.

1974 Commencement of one set of Colloquium Lectures at the Winter Meeting and one set at the Summer Meeting.

Name of meeting changed to read "Joint Mathematics Meetings"
1978 Consider possibility of setting standard time slots for Colloquium and Gibbs Begin consideration of reformatting summer meetings due to low attendancedesign program around one central subject area.

1977 Joint SIAM/AMS/MAA meeting discussed "equitable time slots for the programs of the three organizations." R.L. Graham (Bell Labs) offered to develop computer program to schedule events at Winter and summer meetings. Discuss possibility of permanent block schedules for Winter and summer meetings.

1984 Winter and Summer Meeting had been five day meetings with six half days assigned to AMS and four to MAA, two days in the middle being interlaced. In 1984, four day meetings were tried with each organization running for the entire four days.

1985 Discussion on merging AMS and MAA programs for the New Orleans (1986) meeting. Significant changes in scheduling and programming will be necessary to accomplish this in time for a four day meeting in 1987 in San Antonio.

1986 All future meetings are non smoking. Signers for the deaf will be handled on an as requested basis.

1988 Number of talks in special sessions limited to 14. JMC recommended that rather than setting a cap of twelve sessions to be the rule, the cap will be on the number of rooms available to SS. Colloquium Lectures reduced to three from four.

1988 The Centennial meeting held in August 1988 celebrated the founding of the AMS. There were three talks by senior researchers on the history and development of mathematics. However, the focus was to cover the most important directions of contemporary mathematical research, and the rapid development of the interactions of sophisticated mathematics with physics, fluid dynamics, computational science, biology, statistics, and computer science. The speakers were selected on the basis of their stature in these areas, along with the expectation that they would be major contributors in their areas into the 21st century. The talks were expository in nature for a broader audience understanding.

1989 Agreed not to pursue parallel or joint meetings with AAAS
1990 Reinstitution of Poster Session was successful and will be tried again.
Electronic preregistration offered. 84 preregistrants chose this method.
Joint Program Committee- AMS will appoint the committee, invite the speakers and locate introducers for the winter meetings and MAA will do so for the summer.

1991 Cut back on number of AMS-MAA Invited Addresses at Winter meetings from four to three.

Change in name from Joint Mathematics Meetings for summer meetings to the MATHFEST concept for summer meetings (all major talks in am, no conflicting sessions or committee meetings;)

1992 MAA abstracts included in the abstracts booklet hand out at the meeting for the first time.

There will be a MathFest in the summer unless there is an International Congress on the North American continent.

1993 Governing bodies of AMS and MAA passed a joint resolution to change of venue for 1995 from Denver CO due to vote regarding discrimination against homosexuals.

1993 Establish AMS-MAA Exhibits Advisory Subcommittee of the JMC-address the concerns of current exhibitors, increase the number of exhibits, generate creative new ideas which will benefit both exhibitors and us.

Establish AMS National Meetings Coordinating Committees -to deal with items on the programs at the January and August meetings not presently addressed by the existing structure

1994 AMS and MAA to resolve the issue to discontinue summer meetings.
1996 Electronic abstract system up and running by end of January
1997 New- Networking Center
Site rotation: Use core group of cities that have higher attendance and/or are good sites - San Diego, San Antonio, San Francisco, New Orleans-idea rejected-but part of policy is to go east to west

1998 Short course before Jan meeting.
1999 New services: Email acknowledgment of registration, web registration form, availability of abstracts on the web, timetable on the web.

2000 Special theme for 2000 World Mathematical Year as designated by International Mathematical Union and UNESCO

SIAM will join 2000 as part of joint sponsorship of the JMM
2001 Change the number of Invited Addresses at JMM from six each to five each.

## SECTIONAL MEETINGS

1896 A mathematical conference was held at the University of Chicago to "support sectional meetings by attendance and by the contribution of papers." This was officially organized as the Chicago Section of the American Mathematical Society in 1897.

1902 Formation of San Francisco Section.
1906 Formation of Southwestern Section.
1913 The Council voted "the meetings of the Chicago Section, so far as concerns the presentation of scientific papers, will become meetings of the Society."

The first regular Western Meeting was held.
1920 The first invited address was given by Pierre Boutroux from Princeton University.
1923 Assistant Secretary position became an elected officer of the Society. This position was asked to arrange Winter meetings as well as respective sectional meeting.

1927 The one Assistant Secretary position was changed to two Associate Secretary positions.

1928 The third Associate Secretary position was created.
1929 The Southwestern Section became part of the Western Section and the San Francisco Section became the Far Western Section

1950 Southeastern Section was formed and the fourth Associate Secretary position was created.

1951 From 1951 until the fall of 1982, there were four sections and they were called: Eastern, Southeastern, Western, and Far Western

1964 First special session at a Sectional Meeting took place in November.
1972 Present form was initiated with invited address, special sessions and contributed paper. Usually just the AMS sponsored Sectional Meetings ( $6-8$ per year) but some were joint with MAA and SIAM.

1978 Charge registration for sectional meetings.
1982 The Western Section became the Central Section and the Far Western Section became the Western Section

## JOINT INTERNATIONAL MEETINGS

1992 First Joint meeting of AMS and LMS (London Mathematical Society) held at Cambridge University in England. Registration was 477 of which 220 were from United States.

1993 First Joint Meeting with AMS and DMV (Deutsche Mathematiker-Vereinigung) in Heidelberg, Germany.

1993 First Joint Meeting with AMS and the Sociedad Matematica Mexicana (SMM) in Merida Mexico. In addition to Invited Addresses and Special Sessions there was a workshop on Technology in the Classroom and two forums.

1995 First Joint Meeting of AMS and IMU (Israel Mathematical Union) in Jerusalem, Israel. Organizers wished that a Senior AMD officer had been present and that there had been a book display.

1995 Second Joint Meeting of AMS and the Sociedad Matematica Mexicana (SMM) in Guanajuato Mexico. AMS demonstrated and discussed newest electronic products and AMS books available. AMS handled abstracts and program production.

1996 First Joint Meeting of AMS and BeNeLux (Belgium, Netherlands, and Luxemburg) mathematical societies in Antwerp Belgium.

1996 COMC report on international meetings made recommendations concerning guidelines and procedures to facilitate international meetings.

1997 First Joint Meeting of AMS, LMS and South African Mathematical Society in Pretoria, South Africa. Security concerns because of unrest in the country were allayed by information on the web and in NOTICES. There was joint cooperation between the SAMS (based in South Africa) and SAMSA (South African Mathematical Sciences Association (the mathematical society of the neighbouring countries in southern Africa). The meeting introduced a new era of cooperation by participants from traditionally black universities and traditionally white universities.

1997 Third Joint Meeting of AMS and the Sociedad Matematica Mexicana (SMM) in Oaxaca, Mexico.

1999 Fourth International Joint Meeting of the AMS and the Sociedad Matematica Mexicana (SMM), at University of North Texas in Denton Dexas. The first Winter Erdös memorial lecture was held.

1999 First Joint Meeting of AMS and Australian Mathematical Society I Melbourne, Australia.

2000 First AMS and Scandinavivan International Mathematics Meeting in Odense, Denmark. Meeting included a special presentation sponsored by the European Union.

1998 First Joint International meeting between the AMS and the Hong Kong Mathematical Society, in Hong Kong, People's Republic of China.

2001 Fifth International Joint Meeting of the AMS and the Sociedad Matematica Mexicana (SMM), Morelia, Mexico.

2001 First International Joint Meeting with AMS and Société Mathématique de France in École Normale Supérieure de Lyon, Lyon, France

2002 First International Joint Meeting with AMS and Unione Matematica Italiana in Pisa, Italy.

2003 First International Joint Meeting with AMS and Real Sociedad Matemática Española in Seville, Spain.

2003 First International Joint AMS-India Mathematics Meeting in Bangalore, India.

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## Section 2: Comparisons with Other Societies

This past year, a survey effort was conducted to gather meeting information and ideas from other professional societies chosen from the scientific and academic arena.

It was decided not to include societies such as the Association of Women in Mathematics and Mathematical Association of America, since these two societies hold their annual meeting with the American Mathematical Society as part of the Joint Mathematics Meetings.

A report was presented this past spring to COMC and to the ECBT. That report discussed the preliminary survey findings. The survey asked the societies about their meetings. Asked were questions about what type of meetings they offered, how many, the registration fees and exhibit costs. We also attempted to find out what percent of the society's total income is received from meetings. We also asked what the annual revenue was from their national meeting.

At the COMC meeting and the ECBT meeting, upon review of the survey of other societies, the discussion raised additional comments:

- Compare the AMS to additional Societies that have similar meeting attendance to membership ratio.

We deleted the following Societies:
FASEB (An umbrella society)
International Studies Assn ( membership ratio was too small)

- Why is the attendance at meetings greater as a percentage of total membership with the other societies?

Principle Factor: one-third of AMS non-student membership is foreign.

- Do the other societies listed have other meetings like our sectionals? Is there a reason their attendance at annual meetings is larger?
- How many of these societies or meetings have separate divisions within their society or meets with other groups?

We added four additional societies to the review. Those societies were INFORMS, American Geophysical Union, Materials Research Society and, at the request of the ECBT, the American Physical Society.

The organizations surveyed and used in the final report were:

American Anthropological Assn.<br>American Astronomical Society<br>American Physical Society

American Political Science Assn<br>American Sociological Assn<br>American Statistical Assn<br>Society for Industrial and Applied Mathematics<br>INFORMS<br>Materials Research Society<br>American Geophysical Union

Table 2.1 provides a quick look at how the societies compare on the main aspects of meetings.

The narrative report on the societies discusses their meeting programmatic structure, the type of program committee for each society, their meeting governance structure and what type of other meetings the societies hold. It also mentions if there are sponsors for their events. Some of this information was obtained by going into the web sites of the organizations and looking at the meeting and programmatic structure and looking at their governance structure.
Table 2.1 Society Comparisons

|  | AMS | American Astronomical Society | American Sociological Assn | SIAM | American Political Science Association | American Anthropological Assn | INFORMS | American Statistical Assn | Materials Research Society | American Geophysical Union | American Physical Society |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GENERAL: |  |  |  |  |  |  |  |  |  |  |  |
| 1. Total Membership: | 28,400 | 6,500 | 13,000 | 8,000 | 15,000 | 11,000 | 12,000 | 18,000 | 13,000 | 42,000 | 40,000 |
| Number of meetings per year in each |  |  |  |  |  |  |  |  |  |  |  |
| of the following categories: |  |  |  |  |  |  |  |  |  |  |  |
| 1. National | 1 | 2 | 1 | 1 | 1 | 1 | 3 | 1 | 2 (internat') | 2 (international) | 2 annual |
| 2. Regional/Sectional Meetings | 8 |  | 7 | 4 | 6 to 8 | 4 to 6 | 3 to 5 |  |  | 1 biennial | 8 |
| 3. Specialized Workshops |  |  |  | 4 | 1 | 35-55 annual | 1 | 2 |  | 5 to 7 |  |
| 4. Short Courses | 1 |  |  | 3 | 20-25 during annual mtg |  |  | 20 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Average attendance at the meetings per year: |  |  |  |  |  |  |  |  |  |  |  |
| 1. National | 4,500 | $\begin{aligned} & 600-1,000 \text { spring } \\ & 600-2,000 \text { winter } \end{aligned}$ | 5,500 | 500-1,000 | 6,000-7,000 | 5,000 | 3,000 | 5,000 | 4000 each | May: 3,000/ Dec: 10,000 | $\begin{aligned} & \text { Mar: } \\ & \text { May: } \end{aligned}$ |
| 2. Regional/Sectional Meetings | 300 |  | 100 |  | 8-35 | 150 |  |  |  |  |  |
| 3. Short Courses | 100 |  |  |  | 10-50 |  |  | 100 each |  |  |  |
| 4. Other |  |  |  |  |  |  |  |  |  |  |  |
| 3. How many days is your annual meeting? | 4 | 3 | 5 | 5 | $31 / 2$ | $41 / 2$ | 31/2-4 | 5 | $41 / 2$ | 5 | 5 |
|  |  |  |  |  | 1 day SC/Ws |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| the annual meeting? |  |  |  |  |  |  |  |  |  |  |  |
| Invited addresses | yes | yes | yes | yes |  |  | yes |  |  |  |  |
| Workshops |  |  | yes | yes | 1 | yes | yes | yes | yes (rarely) | yes |  |
| Single track sessions |  |  |  | yes |  |  | yes |  | yes | no |  |
| Concurrent sessions | 40 | 12 | yes | yes | 55 | $\begin{aligned} & 55 \text { winter/ } \\ & 8-10 \text { spring } \end{aligned}$ | 47 | yes | 48 | yes | 15 |
| Technical field trips |  |  |  |  |  |  | yes |  | yes (rarely) | occasionally |  |
| Short Courses | yes |  |  | yes | 25 |  |  | yes | yes | no |  |
| Pre/post Conference |  |  | yes |  |  | yes | yes |  | no | no |  |
| Other (posters, job center) | panels | posters, job center | yes: panels, posters | SIAG (SIAM <br> Activity Group) Conference runs concurrently | posters, gov comm, panels, job placement service | posters |  | posters, <br> panels | posters | board mtgs, committee mtgs, gen sessions, town hall, agency mtgs |  |

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Table 2.1 Society Comparisons

|  | AMS | American Astronomical Society | American Sociological Assn | SIAM | American Political Science Association | American Anthropological Assn | INFORMS | American Statistical Assn | Materials Research Society | American Geophysical Union | American Physical Society |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REGISTRATION: |  |  |  |  |  |  |  |  |  |  |  |
| 1. Average member preregistration and on-site |  |  |  |  |  |  |  |  |  |  |  |
| registration fees for annual meetings? | \$193/\$251 | \$260/\$350 | \$130/\$165 | \$275/\$355 | \$120/\$151 | \$165/\$195 | \$320 | \$225/\$295 | \$400/\$500 | \$270/\$300 | \$400 onsite |
| 2. Average nonmember preregistration and |  |  |  |  |  |  |  |  |  |  |  |
| onsite registration fees? | \$299/\$389 | \$350/\$425 | \$240/\$295 | \$385/\$465 | \$225/\$280 | \$240/\$295 | \$435 | \$330/\$385 | \$480/580 | \$320/\$350 | \$550 onsite |
| 3. What is included in the registration fee? |  |  |  |  |  |  |  |  |  |  |  |
| Meeting publication | yes |  | yes | yes | yes | yes | yes |  | yes | yes |  |
| Luncheon |  |  |  | yes |  |  |  |  |  |  |  |
| Reception/banquet | yes, 2 | yes sponsored |  | yes | some recep |  | yes, 2 |  | yes | yes |  |
| Other (please explain) | entrance to exhibits | reception, coffee breaks |  | coffee breaks |  |  | coffee break, exhibits | 2 mixers and entrance into exhibits | membership to Society (inc. monthly mag \& discounted pubs) | opening reception, mid-week social function (subsidized), honors banquet ticke (subsidized), am coffee breaks, pm coffee \& beer breaks, wireless \& regular internet café, child care (subsidized), networked computer facilities in session rooms, free internet in poster sessions | receptions/ lunch |
| 4. If you offer sectionals or short courses, what is the preregistration member fee? | \$40 |  |  | varies | \$15-25 (done by chapters) |  | \$75 | \$200 | no fee | sectional rates similar to national rates |  |
| What is the preregistration nonmember fee? | \$60 |  |  |  |  |  | \$75 | \$400 | no fee |  |  |
| REVENUE: |  |  |  |  |  |  |  |  |  |  |  |
| 1. For National Meetings, the total annual revenue is: | \$800,000 | \$600,000 | \$986,000 |  | \$900,000 | \$900,000 |  | \$1,500,000 | \$1.5K each | $\begin{gathered} \text { Dec: } \$ 3,000,000 \\ \text { May } \$ 850,000 \end{gathered}$ | $\begin{gathered} \text { Mar: } \$ 593,000 \\ \text { (gross) } \\ \text { Apr. } \$ 107,000 \\ \text { (net) } \end{gathered}$ |
| What percentage of this revenue |  |  |  |  |  |  |  |  |  |  |  |
| comes from each of the following? |  |  |  |  |  |  |  |  |  |  |  |
| Registration fees | 75\% |  | 75\% |  | 57\% | 90\% | 91\% |  | 87.5\% | 86.5\% |  |
| Sponsorship | 1\% | $\begin{gathered} \text { (locals raise money) } \\ \$ 20,000 \end{gathered}$ | 0 |  | 5\% |  | 2\% |  | 1.5\% |  |  |
| Program advertising | 3\% |  | 12\% |  | 11\% | 2\% | 1\% |  | 2\% | 0.5\% |  |
| Exhibits | 20\% |  | 12\% |  | 21\% | 8\% | 5\% |  | separate- \$ 375 K | 9.0\% |  |
| Other components |  |  |  |  | 6\% |  | 1\% |  | 9\% | 4.0\% |  |

Table 2.1 Society Comparisons

|  | AMS | American Astronomical Society | American Sociological Assn | SIAM | American Political Science Association | $\begin{array}{\|c\|} \hline \text { American } \\ \text { Anthropological } \\ \text { Assn } \\ \hline \end{array}$ | INFORMS | American Statistical Assn | Materials Research Society | American Geophysical Union | American Physical Society |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EXHIBIT FEES: |  |  |  |  |  |  |  |  |  |  |  |
| 1. The cost of a 10' $\times 10$ ' booth: | \$580-\$1,596 | Members: \$1100, 2nd booth: \$550 Nonmembers: \$1425, 2nd booth: $\$ 715$ Gov't: \$1250, 2nd booth: \$615 | \$1,650 | \$850 | \$1,110-\$1,390 | \$1,650 | \$1,300 | \$1,600 | \$2,100 | December: <br> Premium: \$1,850 <br> Standard: \$1,700 <br> Govt: \$850 <br> $\$ 425$ nonprofit May: <br> Premium: $\$ 1,100$ <br> Standard: \$1350 <br> Govt: \$550 <br> Nonprofit: \$275 |  |

## American Mathematical Society

The American Mathematical Society (AMS) fulfills its mission of furthering mathematical research and scholarship through programs and services that promote mathematical research and its uses strengthen mathematical education, and foster awareness and appreciation of mathematics and its connections to other disciplines and to everyday life.

It has over 29,000 members. Their annual meeting member preregistration fee is $\$ 193$ and the nonmember preregistration fee is $\$ 299$. This includes a graduate student reception, a first timer's reception and a prize reception as well as a reception for the undergraduate student poster session. The revenue for their annual meeting varies between $\$ 850,000$ and $\$ 950,000$.

## Scientific content

AMS has one annual meeting a year, held jointly with the MAA, 8 sectional meetings a year, one International meeting a year, a summer conference program and could also have several other types of meetings. The annual meeting has up to 5,000 or more in attendance. The meeting is 4 days long and has around 40 concurrent sessions made up of special sessions and contributed paper sessions with 20-minute and 10-minute talks respectively.

The Associate Secretary does a call for special sessions from organizers and decides on the program content of the individual meetings. The Committee on Meetings and Conferences, which is made up of volunteer members and includes the Secretariat, the ED and the President, has a policy role with meetings and a long range view towards matters affecting meetings and conferences.

The Secretariat, made up of the Secretary and four Associate Secretaries, oversees the scientific program of all meetings of the society. There is a volunteer program committee for each meeting who selects Invited Addresses.

Members may communicate ideas for possible invited speakers directly to the Secretary by submitting a suggested name via the Secretary or meetings web page.

## American Astronomical Society

The American Astronomical Society (AAS) is the major organization of professional astronomers in North America. The basic objective of the AAS is to promote the advancement of astronomy and closely related branches of science. Its membership also includes physicists, mathematicians, geologists, engineers and others whose research interests lie within the broad spectrum of subjects now comprising contemporary astronomy.

It has 6,500 members. The semi-annual meeting member preregistration fee is $\$ 260$ and nonmember preregistration fee is $\$ 350$. This includes coffee breaks and an open reception. Local organizations raise up to $\$ 20,000$ to help offset the cost of the meeting. They hold two meetings a year with revenue around $\$ 600,000$.

## Scientific Content

The two semi-annual meetings have attendance of about 600-1,000 in one meeting and 1200-2000 in the other. There are four basic types of presentation sessions during the meetings, three of which are planned one meeting in advance by the AAS Committee on Meetings and one that is composed of Member contributions. They are called Topical sessions and are only held at their summer meeting.

Their meetings are 3 days with 12 concurrent sessions with mini symposia composed of talks running 25 minutes with an additional 5 minutes of discussion. Contributed Presentations are composed of 15 minute talks with an additional 5 minutes of discussion. Special Sessions have a length of 1.5 hours and have no required format, i.e. they may be a series of talks, a panel discussion or other presentation formats. Invited speakers are chosen by their Committee on Meetings.

Their Committee on Meetings is composed of the three Vice-Presidents, the Executive Officer (or designee) and the President (ex-officio). The chair of the Committee on Meetings is always the senior Vice-President.

Members may communicate ideas for possible invited speakers directly to the Committee on Meetings. This committee advises the Council on the scientific content of all Society meetings and selects the invited speakers, any special speakers and special sessions.

## American Sociological Assn

The American Sociological Association (ASA) is a non-profit membership association dedicated to advancing sociology as a scientific discipline and profession serving the public good. ASA encompasses sociologists who are faculty members at colleges and universities, researchers, practitioners, and students. About 20 percent of the members work in government, business, or non-profit organizations.

It has approximately 13,000 members. Their annual meeting member preregistration fee is $\$ 130$ and nonmember registration fee is $\$ 240$. The revenue for their annual meeting is close to a million dollars.

## Scientific content

They hold one annual meeting and 7 regional meetings. They have approximately 5,500 people attending their annual meeting. It is 5 days long and has workshops as well as concurrent sessions.

Individuals may be listed on no more than two sessions on the Program. This includes all types of participation except being listed as organizer of a session. A participant is anyone listed as an author, co-author, presider, discussant, panelist, critic, roundtable presenter, discussion leader, or any similar substantive role on the program.

The Program committee is made up of the President, who is the committee chair, the Vice President Elect, the Secretary and several others. Each meeting follows a theme.

## Society of Industrial and Applied Mathematics

The Society of Industrial and Applied Mathematics (SIAM) helps to advance the application of mathematics and computational science to engineering, industry, science, and society; promotes research that will lead to effective new mathematical and computational methods and techniques for science, engineering, industry, and society; and provides media for the exchange of information and ideas among mathematicians, engineers, and scientists. SIAM fosters the development of the methodologies needed in these application areas.

SIAM has 8,000 members. The Annual meeting member preregistration fee is $\$ 275$ and the nonmember preregistration fee is $\$ 355$. It includes a luncheon, banquet and coffee breaks, as well as several receptions. The revenue for their annual meeting is unknown.

## Scientific content

They hold one annual meeting plus regional meetings, workshops and short courses. Their annual meeting has about 1,000 participants. It is 4 days long and holds short courses, workshops, concurrent sessions and single track sessions and Invited Addresses.

SIAM also has sectional meetings consisting of organized lectures, meetings, and other activities that serve members in their region.

There is a theme for each meeting with a different program committee for each meeting.

## American Political Science Assn

The purpose of the American Political Science Association (APSA) is to study political science and politics. With a range of programs and services for individuals, departments and institutions, APSA brings together political scientists from all fields of inquiry, regions, and occupational endeavors within and outside academe in order to expand awareness and understanding of politics.

It has more than 15,000 members. They have one annual meeting. Their annual meeting member preregistration fee is $\$ 120$ and the nonmember preregistration fee is $\$ 225$. This includes a reception of some type every night. Their annual meeting revenue is $\$ 900,000$.

## Scientific Content

They hold 8 sectional meetings and during their annual meeting have up to 25 short courses. Their annual meeting has around 6000 or more in attendance. Their meeting is $31 / 2$ days long and has 55 concurrent sessions including 25 short courses and 1 specialized workshop.

They have an Annual Meeting Program Committee whose members are appointed by the Council after it hears the recommendations of the Program Chair-Designate. Members organize all panels, plenary sessions, and other aspects of the official program for the annual meeting. The Program Committee encourages panels and papers on a range of
topics that shed light on key questions related to a specific theme as well as those specifically raised by each of 46 Divisions' (similar to the AMS special sessions) call for papers.

There are 37 different sections. Each section is organized by members around common scholarly and professional interests. These organized sections have become a vital part of the annual meeting by sponsoring topics.

Each presenter submits up to two papers or two organized panel proposals. Additional proposals from the same author or organizer are not accepted. Also, they cannot submit a proposal to more than two Divisions.

## American Anthropological Assn

The purpose of the American Anthropological Association (AAA) is to advance anthropology as the science that studies humankind in all its aspects, through archeological, biological, ethnological, and linguistic research; and to further the professional interests of American anthropologists; including the dissemination of anthropological knowledge and its use to solve human problems.

It has over 11,000 members. Their annual meeting member preregistration fee is $\$ 165$ and the nonmember preregistration fee is $\$ 240$. The revenue for the meeting is about $\$ 900,000$.

## Scientific content

They hold one annual meeting per year with 5,000 in attendance. The meeting is $41 / 2$ days long and includes Technical Sessions, Speaker Luncheons, Roundtable Luncheons, Continuing Education Courses, Computer Technology Workshops, and Poster Sessions. They hold about 55 workshops that have an individual registration fee. They also hold 4 regional meetings per year.

The AAA has a program committee made up of one representative from each region (35). Their role is to actively develop the program, solicit proposals, develop special sessions (e.g. invited sessions), maximize participation without compromising quality, evaluate time reserved for invited sessions, evaluate papers and sessions referred to them, assign reviewers to assist with evaluations, select chairs for sessions, and recommend schedules for section paper sessions.

## INFORMS

The Institute for Research and the Management Sciences (INFORMS) is a society representing professionals in the fields of Operations Research and the Management Sciences (including disciplines ranging from finance to bioengineering) who take an interdisciplinary approach to problem solving, providing a quantitative foundation for a broad spectrum, from economics to medicine, from environmental control to sports, from e-commerce to computational geometry.

It has 12,000 members. The semi-annual meeting member preregistration fee is $\$ 320$ and the nonmember preregistration fee is $\$ 435$. It includes a Welcome Reception, General

Reception and coffee breaks. The nonmember registration fee, also includes automatic membership for the remainder of the year. They average 3000 at their larger national meeting.

## Scientific content

They hold 2 national meetings and one international meeting. The meeting runs 3.5-4 days. Their meetings include $3-5$ subdivision conferences and 1 workshop. Their larger meeting has invited addresses, 47 concurrent technical sessions, workshops and tutorials as well as plant tours. Their spring meeting has 8-10 concurrent tracks.

They have an overall Program Committee plus program committees for each meeting.

## American Statistical Assn

The American Statistical Association (ASA) is a scientific and educational society whose mission is to promote excellence in the application of statistical science across the wealth of human endeavor, promoting statistical practice, applications, and research; publishing statistical journals; improving statistical education; and advancing the statistics profession.

It has 18,000 members. The annual meeting member preregistration fee is $\$ 225$ and the nonmember preregistration fee is $\$ 330$. It includes 2 receptions. The average attendance at the meeting is 5,000 . The annual revenue from this meeting is $\$ 1.5$ million dollars.

## Scientific Content

They hold a Joint Statistical Meeting jointly with the American Statistical Association, the International Biometric Society (ENAR and WNAR), the Institute of Mathematical Statistics, and the Statistical Society of Canada. The joint meeting runs $31 / 2-4$ days and is attended by over 5000 people. They hold oral presentations, panel sessions, poster presentations and continuing education courses. They also hold 2 workshops and 20 short courses.

The Program Committee is responsible for recommending general policy for all meetings, including Annual Meetings, subject to approval by the Board of Directors. The committee also plans for the Annual Meetings and provide for continuity in practices and programs of the Annual Meetings, encourages regional meetings, including those of chapters and sections, (which may be cosponsored with organizations) and nominate candidates for the Chair of the Program Committee.

The Program committee is made up of the Chairs of the program committee for the current year, the prior year, and the coming year, and three other full members appointed by the President-Elect. The Chair is chosen from among the appointed members.

## Materials Research Society

The Materials Research Society (MRS) is an organization of materials researchers from academia, industry and government that promotes communications for the advancement of interdisciplinary materials research to improve the quality of life.

It has 13,000 members. Their semi-annual meeting member preregistration rate is $\$ 375$ and nonmember preregistration rate is $\$ 450$. They hold a spring and fall meeting each year with revenue of around $\$ 1.5$ million each. The meeting nonmember registration includes an option of membership for the rest of that year. The revenue is reduced by the money given to membership for dues.

## Scientific Content

The attendance at each meeting is approximately 4,000 . They have about 48 concurrent sessions and also hold single track and short courses. Their meetings are each $4 \frac{1}{2}$ days long.

MRS also has a Workshop Series with highly focused and compelling subjects. They actively recruit for their workshop. Each workshop is limited in size to about 125 participants and offers attendees a more in-depth review of important topics than is typically allowed in a "snapshot" symposium

The Program Committee (which includes the Meeting Chairs for upcoming MRS meetings) formulates the technical programs for MRS meetings and workshops. The Committee solicits and develops suggestions for new symposia, evaluates current symposia for timeliness and relevance, recommends candidates for future Meeting Chair and Workshop Organizers, oversees co-sponsorships and approves endorsements of nonMRS meetings.

There is also a chair for each meeting. The Vice President/President Elect is a member of the program subcommittees

## American Geophysical Union

The American Geophysical Union (AGU) is a society that advances, through unselfish cooperation in research, the understanding of earth and space for the benefit of humanity.

It has 42,000 members. Their semi-annual meeting member preregistration fee is $\$ 270$ and the nonmember preregistration fee is $\$ 320$. This includes several socials, subsidized banquets, coffee breaks and an email lab. The revenue for their meetings is $\$ 850,000$ for the spring and $\$ 3$ million for the winter meeting.

## Scientific content

They hold a spring and winter meeting. Attendance in the spring is 3,000 and 10,000 in the winter. They also have 7 specialized workshops. They have 19 sections/disciplines to their Union and each section holds concurrent sessions during their meetings as well as workshops. Their meetings are for 5 days. Their spring meeting is held jointly with the Canadian Geophysical Union, the Society of Exploration Geophysicists and the Environmental and Engineering Geophysical Society.

They also hold a series of conferences called the Chapman Conferences. These are small, highly focused meetings that provide significant time for discussion and interaction among the participants.

The program committee for the winter meeting is composed of representatives from each of their 19 sections that they call disciplines.

## American Physical Society

The American Physical Society (APS) is a society that advances and diffuses the knowledge of physics in the arena of national, international, and governmental affairs.

It has 40,000 members. They hold two annual meetings per year in the spring. Their member onsite rate is $\$ 400$ and the nonmember onsite rate is $\$ 550$. The revenue for their last March meeting was gross $\$ 593,000$. They offered several receptions and a subsidized lunch at this meeting. The net revenue for their last April/May meeting was $\$ 107,000$.

## Scientific content

They hold two large annual meetings, one in March and one in May. They also have 8 sections that hold meetings and 37 units (divisions, forums, topical groups and sections) that represent the wide range of interests of the physics community that hold sessions in their annual meetings. They have about 15 concurrent sessions and their meeting is 5 days. They have been discussing only allowing members to submit abstracts. That is the rule, but there are issues with this procedure.

The membership of the Committee on Meetings (COM) consists of the Executive Officer, the Treasurer, and six members appointed by the President-Elect. The Committee proposes guidelines and rules for the organization and operation of all meetings of the Society and its units and provides oversight for meetings-related publications, including the Bulletin of the American Physical Society. The Committee recommends procedures for Society sponsorship of other meetings. They also recommend the registration fees for their meetings.

After reading their minutes, the role of this COM is similar to the role of the JMC for the Winter AMS meeting as well as some aspects of the CoMC and Secretariat.

Section 3: Review of Meeting Program Componèntenber 2004 AMS ECBT

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Table 3.1 A Review of the Various Components of the JMM Program and Activities |  |  |  |  |
|  | 1970 | 1993 | 1999 | 2004 |
| American Mathematical Society |  |  |  |  |
| Scientific Sessions |  |  |  |  |
| Invited Addresses+A53 | 2 | 7 | 6 | 5 |
| Special Session Topics |  | 22 | 18 | 26 |
| Contributed Paper Topics | 10 | 37 | 27 | 19 |
| Panel Discussions | 0 | 5 | 0 | 2 |
| Colloquium Lectures** | 0 | 3 | 3 | 3 |
| Gibbs Lecture | 1 | 1 | 1 | 1 |
| Other: | 1 | 2 | 2 | 1 |
| Total AMS Scientific Events: | 14 | 77 | 57 | 57 |
| Social Events | 0 | 2 | 2 | 2 |
| Total All AMS Events: | 14 | 79 | 59 | 59 |
|  |  |  |  |  |
| Mathematical Association of America |  |  |  |  |
| Scientific Sessions |  |  |  |  |
| Invited Addresses | 6 | 4 | 7 | 6 |
| Contributed Paper Sessions |  | 12 | 13 | 26 |
| Panel Discussions | 2 | 10 | 17 | 32 |
| Minicourses |  | 17 | 16 | 16 |
| MAA Invited Paper Sessions |  |  |  | 4 |
| Poster Sessions |  | 1 | 7 | 4 |
| Other-Misc. Scientific Events | 2 | 16 | 17 | 15 |
| Total MAA Scientific Events: | 10 | 60 | 77 | 103 |
| Social Events | 1 | 4 | 5 | 5 |
| Total All MAA Events: | 11 | 64 | 82 | 108 |
|  |  |  |  |  |
| Joint Sessions |  |  |  |  |
| Scientific Sessions |  |  |  |  |
| Invited Addresses | 0 | 4 | 3 | 3 |
| Special Sessions | 0 | 2 | 5 | 8 |
| Prize Session | 0 | 1 | 1 | 1 |
| Panels | 0 | 1 | 2 | 1 |
| Poster Session | 0 | 1 | 0 | 0 |
| Total Joint Scientific Events: | 0 | 9 | 11 | 13 |
| Joint Social Events | 0 | 4 | 3 | 3 |
| Total All Joint Events: | 0 | 13 | 14 | 16 |
|  |  |  |  |  |
| Other Societies, etc. |  |  |  |  |
| Scientific Sessions |  |  |  |  |
| Invited Addresses | 0 | 10 | 11 | 15 |
| Contributed Paper Session | 0 | 1 | 4 | 3 |
| Workshop | 0 | 1 | 1 | 1 |
| Panels | 1 | 4 | 4 | 4 |
| Sessions | 0 | 5 | 1 | 4 |
| Poster Sessions | 0 | 0 | 2 | 1 |
| Minisymposia | 0 | 0 | 0 | 4 |
| Business Meeting etc. | 1 | 4 | 4 | 4 |
|  |  |  |  |  |
| Total Other Scientific Events: | 2 | 25 | 27 | 36 |
| Total other Social Events | 2 | 5 | 12 | 20 |
|  |  |  |  |  |
| Total all Social Events | 3 | 15 | 22 | 30 |
| ** Colloquium Lectures started at the winter meeting in 1973. |  |  |  |  |


| Table 3.2 Scientific Programs <br> Held in the Evening* |  |  |  |
| ---: | :---: | :---: | :---: |
| 1993 Night Session Totals | 3 | 14 | 4 |
| 1999 Night Session Totals | 1 | 10 | 2 |
| 2004 Night Session Totals | 1 | 8 | 3 |
|  |  |  |  |
| *Starting on or after 5 pm and listed in the program |  |  |  |

Question: What fraction of the mathematics faculty actually attend national meetings? Is that fraction larger or smaller than in the past?

While we lack the data to produce a precise answer to this, we can obtain some insight using the estimates of full-time faculty provided by the series of CBMS surveys and figures from the history of attendance at the Joint Mathematics Meetings. Table 3.3 shows that the estimated proportion of the faculty attending the JMM in the period from 1993 through 2002 is higher than in any period except 1968-1975, the period during and immediately following the rapid expansion in the size of the mathematics faculty. Yet it also demonstrates that only 1 out of 5 of the pool of likely participants attends in any one year.

Table 3.3

| Year | FT Faculty Estimates | Scientific Registrations <br> Joint Math Meetings <br> (Avg prior 3 yrs) | Attendance at JMM compared <br> to the Academic Math <br> Community |
| :---: | :---: | :---: | :---: |
| 1965 | 10,753 | 1,758 | $16 \%$ |
| 1970 | 15,655 | 3,734 | $24 \%$ |
| 1975 | 15,144 | 3,297 | $22 \%$ |
| 1980 | 16,022 | 2,412 | $15 \%$ |
| 1985 | 17,849 | 2,272 | $13 \%$ |
| 1990 | 19,411 | 3,101 | $16 \%$ |
| 1995 | 18,248 | 3,638 | $20 \%$ |
| 2000 | 19,007 | 3,898 | $21 \%$ |
| 2002 | 20,007 | 4,048 | $20 \%$ |

Table 3.4 Sectional Statistics

| Year | Sectional Location | Invited Addresses | Special Sessions | Contributed papers |
| :---: | :---: | :---: | :---: | :---: |
| 2003 |  |  |  |  |
| March 14-16, 2003 | Baton Rouge, Louisiana | 4 | 13 | 1 |
| April 4-6, 2003 | Bloomington, Indiana | 4 | 21 | 1 |
| April 12-13, 2003 | New York, New York | 4 | 11 | 1 |
| May 3-4, 2003 | San Francisco, California | 4 | 12 | 1 |
| October 2-4, 2003 | Boulder, Colorado | 7 | 16 | 1 |
| October 11-12, 2003 | Binghamton, New York | 4 | 16 | 1 |
| October 24-25, 2003 | Chapel Hill, North Carolina | 4 | 16 | 1 |
|  |  |  |  |  |
| 1999 |  |  |  |  |
| March 12-13, 1999 | Gainesville, Florida | 4 | 16 | 1 |
| March 18-21, 1999 | Urbana, Illinois | 5 | 17 | 1 |
| April 10-11, 1999 | Las Vegas, Nevada | 4 | 12 | 1 |
| April 24-25, 1999 | Buffalo, New York | 5 | 9 | 1 |
| September 25-26, 1999 | Salt Lake City, Utah | 4 | 7 | 1 |
| October 2-3, 1999 | Providence, Rhode Island | 4 | 10 | 1 |
| October 8-10, 1999 | Austin, Texas | 4 | 16 | 1 |
| October 15-17, 1999 | Charlotte, North Carolina | 4 | 13 | 1 |
|  |  |  |  |  |
| 1994 |  |  |  |  |
| March 18-19, 1994 | Lexington, Kentucky | 4 | 10 | 1 |
| March 25-26, 1994 | Manhattan, Kansas | 4 | 12 | 1 |
| April 8-10, 1994 | Brooklyn, New York | 4 | 13 | 1 |
| June 16-18, 1994 | Eugene, Oregon | 3 | 5 | 1 |
| October 27-28, 1994 | Stillwater, Oklahoma | 4 | 12 | 2 |
| November 11-13, 1994 | Richmond, Virginia | 3 | 9 | 1 |
|  |  |  |  |  |
| 1990 |  |  |  |  |
| March 16-17, 1990 | Manhattan, Kansas | 4 | 11 | 2 |
| March 23-24, 1990 | Fayetteville, Arkansas | 4 | 9 | 1 |
| April 7-8, 1990 | University Park, Pennsylvania | 4 | 3 | 2 |
| April 19-22, 1990 | Albuquerque, New Mexico | 6 | 7 | 1 |
| October 20-21, 1990 | Amherst, Massachusetts | 4 | 9 | 3 |
| November 2-3, 1990 | Denton, Texas | 4 | 11 | 2 |
| November 10-11, 1990 | Irvine, California | 3 | 8 | 1 |


| Table 3.4 Sectional Statistics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | Sectional Location | Invited Addresses | Special Sessions | Contributed papers |
| 1980 |  |  |  |  |
| March 27-29, 1980 | University of Colorado, Boulder | 2 | 3 | 2 |
| April 11-12, 1980 | Indiana University, Bloomington | 4 | 8 | 3 |
| April 17-18, 1980 | Benjamin Franklin Hotel, Philadelphia | 4 | 11 | 4 |
| April 25-26, 1980 | University of California, Davis | 2 | 6 | 2 |
| June 20-21, 1980 | Ellensburg, Washington | 1 AMS | 0 | 1 |
| October 18-19, 1980 | Providence, Rhode Island | 4 | 8 | 4 |
| October 31-Nov. 1, 1980 | University of Wisconsin, Parkside | 4 | 5 | 3 |
| November 14, 1980 | Knoxville, Tennessee | 3 | 3 | 3 |
|  |  |  |  |  |
| 1970 |  |  |  |  |
| March 25-28, 1970 | The Waldorf-Astoria, NY | 4 | 0 | 11 |
| April 14-18, 1970 | Univ. of Wisconsin, Madison | 4 | 3 | 10 |
| April 25, 1970 | University of California, Davis | 2 | 0 | 4 |
| June 20, 1970 | Pacific Lutheran U, Tacoma WA | 2 | 0 | 3 |
| October 31, 1970 | George Washington U, Wash. DC | 2 | 0 | 4 |
| November 20-21, 1970 | University of Georgia, Athens | 3 | 0 | 4 |
| November 21, 1970 | Caltech, Pasadena | 2 | 0 | 4 |
| November 28, 1970 | University of Illinois, Urbana | 2 | 2 | 3 |
|  |  |  |  |  |
| 1960 |  |  |  |  |
| February 18-20, 1960 | University of Arizona, Tucson | 1 | 0 | 3 |
| February 27, 1960 | New York University, NY | 1 | 0 | 3 |
| April 14-16, 1960 | Hotel New Yorker, NY | 1 | 0 | 5 |
| April 22-23, 1960 | Shoreland Hotel, Chicago, IL | 2 | 0 | 4 |
| April 21-23, 1960 | University of California, Berkeley | 1 | 0 | 4 |
| June 18, 1960 | Montana State Univ, Missoula | 1 | 0 | 1 |
| October 22, 1960 | Coll. Of the Holy Cross, Worc. MA | 1 | 0 | 2 |
| November 18-19, 1960 | Vanderbilt Univ, Nashville, TN | 1 | 0 | 3 |
| November 19, 1960 | Caltech, Pasadena | 1 | 0 | 5 |
| November 25-26, 1960 | Northwestern Univ, Evanston IL | 1 | 0 | 3 |

## Additional Sectional Statistics

Special sessions and organizers - The special session program information on the 2003 and 2004 sectional meetings, 7 in 2003 (with one joint sectional between the Central and Western sections) and eight in 2004, provides the following overview of the program of special sessions at a sectional meeting:

1. The average number of special sessions was 15 .
2. The average number of special session organizers was 33 , just over two organizers per session.
3. The average number of organizers from the hosting department was 11 .

In terms of point 3 above, it is interesting to note that the number of organizers from the fifteen hosting department varied widely. For instance, there were three hosting departments whose faculty comprised over $60 \%$ of all the SS organizers at the meeting, and there were four hosting departments whose faculty comprised less than $12 \%$ of all the SS organizers at the meeting (Rider University, Lawrenceville, NJ; San Francisco State University; Northwestern University; and the Courant Institute

Attendance Statistics - Table 3.5 provides an overview of the membership view of attendance at sectionals held from 2000 through 2003. Almost all of those registering in the Student/Unempl/Emeritus category will be members, hence over $80 \%$ of the total attendance are AMS members.

## Table 3.5

Attendance at Sectional Meetings

|  | 1999 | 2000 | 2001 | 2002 | 2003 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number Sectionals Held <br> $\quad$ Yearly Averages (\% Total) | 8 | 8 | 8 | 8 | 7 |
| Total Attendance | 282 | 264 | 231 | 317 | 316 |
| Member attendees | $180(64 \%)$ | $166(63 \%)$ | $149(65 \%)$ | $186(59 \%)$ | $180(57 \%)$ |
| Non-members attendees | $45(16 \%)$ | $40(15 \%)$ | $35(15 \%)$ | $41(13 \%)$ | $55(17 \%)$ |
| Student/Unempl/Emeritus | $53(19 \%)$ | $51(19 \%)$ | $41(18 \%)$ | $85(27 \%)$ | $75(24 \%)$ |
| Others | $4(1 \%)$ | $3(1 \%)$ | $2(1 \%)$ | $1(0 \%)$ | $1(0 \%)$ |

Notes:

1. Most student and Emeritus registrants are members of AMS.
2. There were two joint sectionals with MAA in 2002 and membership counts include MAA members.

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Geographic proximity of attendees - Table 3.6 demonstrates the degree to which sectional meeting attendees come from the geographic region around the hosting institution.

Table 3.6

|  | Total participants from the state in <br> which the meeting was held, and all <br> contiguous states. | Percent of <br> Total <br> Attendance | Total <br> Attendance |
| :--- | :---: | :---: | :---: |
| Spring 2003 SE: Baton Rouge, LA | 121 | $38 \%$ | 316 |
| Fall 2003 NE: Binghamton, NY | 192 | $53 \%$ | 363 |
| Fall 2003 SE: Chapel Hill, NC | 124 | $35 \%$ | 353 |
| Spring 2004 SE: Tallahassee, FL | 95 | $37 \%$ | 260 |
| Spring 2004 CE: Athens, OH | 122 | $45 \%$ | 269 |
| Spring 2004 NE: Lawrenceville, NJ | 136 | $42 \%$ | 322 |

## Section 4: Meetings from a Financial Perspective

## Introduction

The tables presented in pages 2 through 5 provide high level financial views of the meetings activities of the Society. In most cases the information in the tables is a straightforward display of revenue and expenses for each of the major areas of meeting's activities. Page 2, "Overall Meetings Activities," includes two lines for indirect costs which do not appear in the remaining tables: Divisional indirect and General and administrative overhead.

The Divisional indirect line reflects the assignment to Meetings activities of a portion of the costs of the Meetings and Professional Services Division Department (MPS). This department holds the personnel and operating costs of the AED for this division and his direct support staff, together with other costs allocated to the MPS department, e.g. physical plant costs and computer facilities and services costs. The cost for the MPS department is then distributed across all the other departments and projects within the Division according to the total expenses for each. Since the AED for the division spends a significant portion of his time working with the Meetings and Conferences Department (MCD) on its activities, an allocation of the costs for his department is natural.

The General and Administrative overhead line reflects a similar assignment to the Meetings activities of a portion of the pool of costs for the Fiscal Department, the Executive Director Department and Society governance, the primary components of the Society's General and Administrative overhead. The activities within the MCD require a significant amount of support from the Fiscal Department, the ED spends a portion of his time in oversight of the activities of the department (especially the national meeting), and the Secretary and Associate Secretaries (part of governance costs) spend very significant amounts of their time on meetings activities. The General and Administrative overhead is distributed across all the other AMS departments and projects according to the total expenses for each.

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| 2003 |
| ---: |
| 944 |
| 838 |
| 106 |
|  |
| 33 |
| 137 |
| 164$)$ |




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SRC's. Since these break-even or show a smal
appropriate for the purpose of this analysis.





Table 4.1 Overall Meetings Activities
Financial Analysis
In 1000 's

$$
\begin{aligned}
& \text { Total meetings-related revenues } \\
& \text { Total meetings-related expenses (1) } \\
& \text { Net } \\
& \text { Indirect costs: } \\
& \text { Divisional indirect } \\
& \text { General and administrative overhead } \\
& \text { Net after indirect costs }
\end{aligned}
$$

Meetings-related activities in this analysis do not include any
loss each year, and a large \% of the costs is participant tr
(1) Identifiable direct costs of these projects, which include allocated cost

Table 4.2 Joint Winter Meeting Financial History


Total Registered Attendance
Table 4.3 Sectional Meetings Financial History

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N$\begin{array}{r}36,065 \\ \hline 19,299 \\ 40,759 \\ \hline \mathbf{( 2 3 , 9 9 3 )} \\ \hline\end{array}$



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Table 4.4 International Meetings Fnancial History

$$
\begin{aligned}
& 1206 \text { - Jt Int'I Mtg } \\
& \text { Revenues } \\
& \text { Operating Expenses } \\
& \text { Allocated Expenses } \\
& \text { Net }
\end{aligned}
$$

3253 - Jt Mtg - SMM

$\stackrel{\rightharpoonup}{\mathbf{Q}}$

## Factors affecting sectional meetings expenses.

Expenses for sectional meetings include supplies, printing, space charges (occasionally), a stipend for the host institution, travel, and staff labor. Travel is paid for staff, the associate secretaries, and invited speakers. Often, travel includes site visits in advance of the meeting itself. On a few occasions, more than one trip to the site must be made. Expense for speaker travel can vary significantly from meeting to meeting.

The largest expense is usually staff labor, charged at our standard hourly rate and typically accounting for about $70 \%$ of the expenses. These costs can vary significantly from meeting to meeting for a number of reasons. A three-day meeting requires at least five days of staff time for the meeting, including travel and preparation. When the number of speakers increases, extra time is required to process abstracts and to make arrangements and deal with organizers. When large numbers of special session abstracts are rejected, these must be moved to contributed paper sessions. When attendance is large, extra time is required for accounting after the meeting (especially in processing hundreds of credit card transactions).

Some meetings require AMS staff to handle scheduling of sessions. Others require staff time for trouble shooting local arrangements (for example, when hotel accommodations are in short supply). Almost all meetings require special handling for speakers and organizers, who want extra time for sessions or help with abstracts or reassurance about equipment.

When local organizers provide the appropriate information about hotels, transportation, and local dining, the Meetings Department staff must help them organize it - a relatively simple job. When local organizers do not provide the information (or provide only part of it), the staff must step in to produce it for them.

Some of the drop in recorded expenses between 1997 and 1998 to 1999 through 2001 is due to the implementation of online submission of abstracts between 1998 and 1999. This resulted in reduced staff time to process abstracts submitted by paper and in email.

The increase in expenses for 2002 is, in part, the results of two sectional meetings held jointly with MAA, one much larger than usual and both more complex. Registration fees for these joint meetings were negotiated with MAA and were lower than AMS's standard fees. In addition, 2002 failed to have the good fortune of having a couple of break-even sectionals as had occurred in the each of the previous three years.

Jim Maxwell
Associate Executive Director
April 1, 2004

## Section 5: Background for a discussion of the AMS-IMS-SIAM Summer Research Conferences

The AMS's Summer Conference Series. Through 1997 the AMS managed three distinct, longstanding, annual summer conference series: The AMS Summer Research Institutes (Institutes), the AMS-SIAM Summer Seminars in Applied Mathematics (Seminars), and the AMS-IMS-SIAM Summer Research Conferences (SRCs). The Institutes began in 1953, were three weeks long, and attendance usually ranged between 125 and 200, with occasional institutes that exceed 350. The programs of the Institutes offered an overview of current state of research in a major areas of mathematics. The most recent Institute was held in 1999. Recently a proposal was submitted to NSF to support an institute in Algebraic Geometry in the summer of 2005.

The Summer Seminars began in 1957, were two weeks long, and attendance ranged between 75 and 150 . The programs of the Seminars usually included a first week whose focus was on bringing young mathematicians and established mathematicians that were non-specialist to the forefront of an area of applications. The second week was devoted to presentations at the frontier of current research. The last Seminar was held in 1996.

The Summer Research Conferences (SRCs) are a series of small one-week conferences held each summer on varying topics in mathematics, applied mathematics and statistics. The AMS initiated the series in 1982 and SIAM and the Institute of Mathematical Statistics (IMS) joined as co-sponsors soon afterwards. The AMS has managed the series since its start, supporting the conference selection process, arranging for sites for the conferences, and managing all the logistical arrangements for each conference. The conferences have been funded primarily by grants from NSF with occasional supplementary funding for a specific conference from other federal agencies. Proposals are submitted to the AMS and conference topics are selected by a committee whose members are appointed by the three societies (the Selection Committee). Conferences to be held in the summer of year N are selected from among proposals submitted in February of year N-1.

From their start until the early 1990's, ten conferences were held each summer, reduced to just six conferences in a year with an International Congress. Until 2000, the conference site rotated yearly between locations in the eastern, midwestern, and western US. During the 1990's the number of proposals submitted for consideration for the SRCs declined and the number of conferences held declined accordingly. (See Table 1.)

Table 5.1: Number of SRC Proposals Submitted, Approved, and Proceedings Published

|  | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Submitted | 17 | 10 | 7 | 7 | 7 | 7 | 5 | 9 | 7 | 14 | 5 | 7 | 6 | 10 |
| Approved | 9 | 7 | 6 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 5 | 6 | 5 | 6 |
| Proceedings | 4 | 4 | 1 | 5 | 4 | 4 | 4 | 5 | 5 | 6 | 2 | 3 | - | - |

Current Version of the SRCs. During 1998 the AMS and SIAM submitted a proposal for a modified version of the traditional SRCs, modified to include not only small one-week conferences but occasional, longer and larger conferences. This allowed for the possibility that proposals along the lines of the AMS Institutes and the AMS-SIAM Seminars could be included within the "new" SRCs. The proposal provided for the addition of a six-member Scientific Advisory Panel to provide oversight for the series, but the conference proposal review and selection process continued in the hands of the Selection Committee, a committee of twelve mathematicians, six appointed by AMS and three by each of IMS and SIAM. The proposal was funded in 1999 for five years, supporting conferences for the summers of 2000 through 2004. Since the number of conferences held each year has been less than was budgeted, the grant has been extended for a sixth year and will support six conferences for the summer of 2005.

The inclusion of an Advisory Panel within the framework of the SRCs was done in response to "suggestions" from staff within DMS who had required that the SRC proposal be submitted to the research institutes competition underway during 1997-98. Even though the SRCs were finally funded outside the institutes setting, it seemed wise to keep this aspect in the proposal. But the Advisory Panel concept is more natural to a fixed-site institute than to the SRCs: designating specific mathematical theme areas two or three years in advance with proposals solicited almost exclusively in the selected area. With the SRC Selection Committee continuing in its traditional role, the Advisory Panel has not had a major role to play. It did strongly endorse moving the site to a more inviting location, and several of the members have been instrumental in generating some high quality proposals over the past two years.

The conferences were held at Mt. Holyoke College in Hadley, Massachusetts during the summers of 2000, 2001 and 2002. They were moved to the Snowbird Resort outside Salt Lake City for the summer of 2003 and will continue there for the remainder of the current funding cycle.

Lists of the members of the current Selection Committee and Advisory Panel are included in Appendix 1, followed by a list of all the conferences from 2000 through those scheduled for 2005.

Previous COMC Reviews of the SRCs. The SRCs have been a subject of regular review by the Committee on Meetings and Conferences (COMC). In his report to the January 1999 Council, COMC Chair Joel Spencer wrote:
"The mathematical content of these conferences is not an issue. All who have attended and/or organized such meetings report enthusiastically. Further, the efforts of our Providence office have made organizing relatively easy. Essentially an organizer needs only to determine two things: the scientific program and the amount of support for participants. The AMS Conference Coordinator handles all other aspects concerning logistics and administration of a conference."

And in his report to the January 1998 Council, Spencer, having expressed positive comments on the scientific quality of the conferences, added:
"The problem is the lack of applications. Over the past three years no proposals were rejected and the committee itself went to considerable effort to get good people to submit proposals.
We are somewhat at a loss to explain the lack of applications. Our general feeling was that it was connected to the great abundance of meetings and workshops that now exist. Both MSRI and IMA run many workshops, as do more specialized centers like DIMACS. Further, there is more opportunity for meetings in other countries. The feeling, though we were not at all certain, was that the AMS program was being crowded out. Then again, perhaps the program has simply run out of steam."

COMC again reviewed the SRCs in 2002. This review reported findings similar to those expressed above. The report of the subcommittee that conducted the review, the CCRS, stated:
"The CCRS concurs with the 1994 Task Force ${ }^{1}$ that the AMS conference program is useful and should be continued, and finds that the SRCs have been quite successful in spite of a steadily low number of proposals submitted. CCRS further finds that while, to a large extent, the conclusions of the 1994 Task Force have been addressed with the reorganization of the SRCs, generating proposals for SRCs is still a problem and diversity in participation is still weak..."

The subcommittee had reviewed demographic data collected on the participants in the 1999, 2000 and 2001 SRCs. The reference to concerns about the "diversity in participation" related to the small number of underrepresented minorities whose attendance was documented. While the numbers were low, in large part it reflects their low numbers within the research community overall. The wide participation of mathematicians in the early stages of their careers was well documented, and the participation of women in the conferences was in line with their proportions within the research community overall. Following this report steps were taken to gather racial information on participants in a more systematic way.

A review of evaluations materials collected from conference organizers and participants provided ample evidence of the very positive impact the conferences had on the research activities of the participants. A selection of the comments received from conference participants over the past three years appears in Appendix 2.

Addressing the Lack of Proposals. As the record of previous reviews of the SRCs show, the lack of proposals has been a constant concern. By the mid-1990's, the members of the Selection Committee were encouraged to recruit proposals, along with members of the Advisory Panel when this group was created in 2000. Without the efforts of some members of these committees, the number of proposals would have been even smaller.

[^0]Another possible factor that could contribute indirectly to the lack of SRC proposals is the large number of conferences being held each year. Indeed, there has been a significant number of new outlets for conferences in the past few years. A profile of the average numbers of conferences held annually at the various institutes is provided in Appendix 3, along with an indication of the number of conferences funded directly by the Division of Mathematical Sciences at NSF in recent years.

Efforts to raise the visibility of the SRCs, and thereby increase the number of proposals, have intensified over the past three years. Invitations to submit proposals appear in the member publications of all three sponsoring societies. Added to this traditional means of soliciting proposals, a brochure describing the SRCs and how to submit a proposal are mailed to the AMS leadership and displayed at AMS sectional and national meetings. The brochures, together with a poster featuring the upcoming conferences are mailed each fall to math departments. These same materials are supplied to SIAM and IMS for their use in promoting the conferences. The Meetings page on the AMS web site provides links to information on the straightforward process for submitting a proposal, including several examples of recently successful proposals.

The switch of sites from Mt. Holyoke to Snowbird reflected the conviction of the Scientific Advisory Panel, the Selection Committee, and the AMS staff that problems with Mt. Holyoke were a hindrance to attracting more proposals. While the Mt. Holyoke campus was a very attractive setting and the lecture rooms were excellent, the quality of the housing - 1970's era dorms without air conditioning - was a problem. The shift to Snowbird has finally paid off: the number of proposals submitted for consideration for the summer 2005 conferences was ten, an significant increase over the past three years.

An Experimental SRC Held in 2003. A new type of conference was incorporated into the lineup for 2003. Modeled on the successful GAEL (Geometrie Algebrique en Liberte) meetings held in Luminy, the conference participants included approximately 55 "young researchers" (individuals no more than three years beyond the Ph.D.) and five established researchers, all from the field of commutative algebra. The program consisted of halfhour talks by 32 of the recent PhD's, supplemented by five 50 -minute lectures delivered by the established researchers. Feedback from the participants was very positive, and a brief summary is provided in Appendix 4, followed by a report from the conference organizers.Another conference of this same type is scheduled for 2004 in the area of algebraic geometry.

The lineup of conferences for 2005 has just been determined, and it includes yet another type of conference new to the SRCs. There will be a two-week long "Summer School" whose participants will be 30 to 40 advanced graduate students. The workshop program will center on "local cohomology and its interactions with algebra, analysis, and geometry".

## Some Possible Options Going Forward.

1. Submit a renewal proposal that makes refinements to the way the SRCs are currently working. One could write into the proposal that there would be one or two sessions each summer devoted to advancing the careers of emerging researchers. These conferences could take the form of the 2003 conference for postdocs in commutative algebra or the planned 2005 summer school for advanced graduate students. Particular care would need to be given to recruiting quality proposals for these type of conference. One possible approach would be to have the Advisory Panel and the Selection Committee choose mathematical areas to target for such a conference along with potential organizers that could be approached about submitting a proposal. The targeted areas would need to be selected at least two years in advance of the conferences to ensure sufficient time to recruit organziers. Under this option, room for three or four communitygenerated one-week conferences would continue to be available.
2. Shift the focus of the SRCs exclusively to workshops devoted to jump starting the careers of emerging researchers. As described in Option 1, recruitment of quality proposals for these workshops would be essential. The role of a merged version of the Advisory Panel and the Selection Committee would become one of soliciting workshop proposals rather than selecting from a pool of unsolicited proposals.
3. "Fold the tent" on summer research conferences. Taking this option would mean the end to one of the long established ways that AMS has served the research community as it worked "to further the interests of mathematical research and scholarship..."

Jim Maxwell
Associate Executive Director
April 8, 2004

## Navigating the Appendices

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# Appendix 1: Members of the Selection Committee and Advisory Panel; List of Conferences 2000 to 2005 

## 1. Members of the current SRC Selection Committee

Bjorn Birnir<br>(2006) SIAM Representative<br>Department of Mathematics<br>University of California at Santa Barbara<br>Ron Donagi<br>(2004) AMS Representative<br>Department of Mathematics<br>University of Pennsylvania

William Mark Goldman
(2005) AMS Representative

Department of Mathematics
University of Maryland
Tasso Kaper
(2006) SIAM Representative

Department of Mathematics
Boston University
Charles Kooperberg
(2006) IMS Representative

Fred Hutchinson Cancer Research Center
Seattle, Washington

## Hema Srinivasan

(2004) AMS Representative

Department of Mathematics
University of Missouri

Tom DiCiccio<br>(2004) IMS Representative<br>Department of Social Statistics<br>Cornell University<br>Michael D. Fried<br>(2006) AMS Representative<br>Department of Mathematics<br>University of California Irvine

## Ilse Ipsen

(2006) SIAM Representative Department of Mathematics
North Carolina State University

## Ludmil V Katzarkov

(2007) AMS Representative

Department of Mathematics
University of California Irvine

## Steven Lalley

(2005) IMS Representative

Department of Statistics
University of Chicago

## J. T. Stafford

(2004) AMS Representative

Department of Mathematics
University of Michigan

## Kenneth Stephenson

(2004) AMS Representative and Chair

Department of Mathematics
University of Tennessee
2. Members of the current SRC Scientific Advisory Panel

Sun-Yung Alice Chang<br>(2005) AMS Representative<br>Department of Mathematics<br>Princeton University

Percy Alec Deift
(2004) SIAM Representative

Department of Mathematics
Courant Institute
Persi Diaconis
(2005) IMS Representative
Department of Statistics
Stanford University
Bart Ng
(2006) SIAM Representative
Department of Mathematics
Indiana University - Purdue University at
Indianapolis

Persi Diaconis
(2005) IMS Representative

Department of Statistics
Stanford University
Bart Ng
(2006) SIAM Representative

Department of Mathematics
Indianapolis

Prem K. Goel<br>(2004) IMS Representative<br>Department of Statistics<br>Ohio State University<br>James Carlson<br>(2006) AMS Representative<br>Clay Mathematics Institute

## 3. List of conference titles and organizing committees of 2000-2005 conference

 Conferences run five days unless noted otherwise.
## 2005:

Quantum Topology - Contemporary Issues and Perspectives
Louis H. Kauffman (co-chair), University of Illinois at Chicago
Jozef H. Przytycki (co-chair), George Washington University
Fernando J. O. Souza (co-chair), University of Iowa
Mathematical Modeling of Novel Optical Materials and Devices
Peter Kuchment, Texas A\&M University
Leonid Kunyansky, University of Arizona
Shari Moskow, University of Florida
Fadil Santosa, University of Minnesota
Quantum Graphs and Their Applications
Gregory Berkolaiko, Texas A\&M University
Robert Carlson, University of Colorado, Colorado Springs
Stephen Fulling, Texas A\&M University
Peter Kuchment (Chair), Texas A\&M University
Summer School in Commutative Algebra: Local Cohomology and Its Applications (two weeks)

Anurag K. Singh, Georgia Institute of Technology
Uli Walther, Purdue University
Control Methods in PDE-Dynamical Systems
Fabio Ancona, University of Bologna
Irena Lasiecka, University of Virginia
Walter Littman, University of Minnesota
Roberto Triggiani, University of Virginia

Competitive Mathematical Models of Disease Dynamics: Emerging Paradigms and Challenges

Carlos Castillo-Chavez, Arizona State University
Dominic P. Clemence (co-chair), North Carolina A\&T State University
Abba B. Gumel (co-chair), University of Manitoba
Trachette Jackson (co-chair), University of Michigan
Ronald E. Mickens, Clark-Atlanta University

## 2004:

String Geometry
Katrin Becker, University of Utah
Melanie Becker, University of Maryland
Aaron Bertram, University of Utah
Paul Green, University of Maryland
Benjamin McKay, University of Utah
Complex Dynamics: Twenty-Five Years after the Appearance of the Mandelbrot Set
Eric Bedford, Indiana University
Brodil Branner, Technical University of Denmark
Robert L. Devaney (Co-chair), Boston University
Linda Keen (Co-chair), CUNY, Herbert H. Lehman College
Mikhail Lyubick, SUNY, Stony Brook

## Algebraic Geometry: Presentations by Young Researchers

Herb Clemens, Ohio State University
Rob Lazarsfeld, University of Michigan
Ravi Vakil, Stanford University

## Representations of Algebraic Groups, Quantum Groups, and Lie Algebras

Brian J. Parshall (chair), University of Virginia
Georgia Benkart, University of Wisconsin, Madison
Jens C. Jantzen, Aarhus University, Denmark
Zongzhu Lin, Kansas State University
Daniel K. Nakano, University of Georgia

## Gaussian Measure and Geometric Convexity (six days)

Keith Ball, University College London
Vitali Milman, Tel Aviv University
Alain Pajor, University of Marne-la-Vallee
Rolf Schneider, University of Freiburg
Rick Vitale (chair), University of Connecticut
Wolfgang Weil, University of Karlsruhe

## 2003:

Spectral Theory and Inverse Spectral Theory for Jacobi Operators
Kenneth T.-R. McLaughlin, University of North Carolina, Chapel Hill
Xin Zhou, Duke University

# Machine Learning, Statistics and Discoveries 

John D. Lafferty, Carnegie-Mellon University
Xiaotong Shen, Ohio State University
Joseph S. Verducci, Ohio State University
Mathematics of Finance
Wendell H. Fleming, Brown University
Jean-Pierre Fouque, North Carolina State University
Bozenna Pasik-Duncan, University of Kansas
Stan R. Pliska, University of Illinois at Chicago
K. Ronnie Sircar, Princeton University

George Yin (Chair), Wayne State University
Qing Zhang (Co-chair), University of Georgia
Hydrodynamic Stability and Flow Control
Peter J. Schmid, University of Washington
James J. Riley, University of Washington
Integer Points in Polyhedra, Geometry, Number Theory, Algebra, Optimization
Alexander Barvinok, University of Michigan
Matthias Beck (Co-chair), SUNY Binghamton
Christian Haase (Co-chair), Duke University
Bruce Reznick, University of Illinois, Urbana-Champaign
Michele Vergne, Ecole Polytechnique Paris
Volkmar Welker, Philipps-Universitat Marburg
Commutative Algebra: Presentations by Young Researchers
Jurgen Herzog, Universitat Essen
Craig Huneke, University of Kansas
Roger L. Wiegand, University of Nebraska
2002:
Groups, Representations and Cohomolgy (Seven days)
Alejandro Adem (Co-chair), University of Wisconsin, Madison
Jon Carlson (Co-chair), University of Georgia
Geoff Mason, University of California, Santa Cruz
Brian Parshall, University of Virginia
Stephen Smith, University of Illinois at Chicago
Sarah Witherspoon, University of Massachusetts
Advances in Quantum Dynamics
B. Mitchell Baker, US Naval Academy

Palle E.T. Jorgensen, University of Iowa
Paul S. Muhly, University of Iowa
Geoffrey L. Price, US Naval Academy

Waves in Periodic and Random Media<br>David Dobson, Texas A\&M University<br>Alex Figotin, University of California, Irvine<br>Peter Kuchment (Co-chair), Texas A\&M University<br>Stephanos Venakides (Co-chair), Duke University<br>\section*{Graph Coloring and Symmetry}<br>Karen Collins, Wesleyan University<br>Danny Krizanc, Wesleyan University<br>Alexander C. Russell, University of Connecticut<br>Emerging Issues in Longitudinal Data Analysis<br>Jane-Ling Wang, University of California, Davis<br>Marie Davidian, North Carolina State University<br>Xihong Lin, University of Michigan

## 2001:

Statistics in Functional Genomics
Francoise Sillier-Moiseiwitsch (Chair), University of North Carolina, Chapel Hill
Richard Simon, National Cancer Institute, NIH
Kay Tatsuoka, GlaxoSmithKline Pharmaceuticals
Fluid Flow and Transport in Porous Media: Mathematical and Numerical Treatment
Zhangxin (John) Chen (Co-chair), Southern Methodist University
Richard Ewing (Co-chair), Texas A\&M University
Jose Lage, Southern Methodist University
Raytcho Lazarov, Texas A\&M University

The Legacy of Inverse Scattering Transform in Nonlinear Wave Propagation
Jerry Bona, University of Texas at Austin
D.J. Kaup, Clarkson University
S. Roy Choudhury, University of Central Florida

Harmonic Analysis (two weeks)
William Beckner, University of Texas at Austin
Alexander Nagel, University of Wisconsin, Madison
Andreas Seeger, University of Wisconsin, Madison
Hart Smith, University of Washington
Lusternik-Schnirelmann Category in the New Millennium
Octav Cornea, Universite de Lille
Gregory Lupton, Cleveland State University
John Oprea, Cleveland State University
Daniel Tanre, Universite de Lille

Fast Algorithms in Mathematics, Computer Science and Engineering<br>Franklin Luk, Rensselaer Polytechnic Institute<br>Volker Mehrmann, TU Chemnitz<br>Vadim Olshevesky (Chair) Georgia State University<br>Robert Plemmons, North Carolina State University<br>\section*{2000:}<br>Symbolic Computation: Solving Equations in Algebra, Geometry and Engineering<br>Edward Green, Virginia Tech<br>Serkan Hosten, Georgia Mason University<br>Reinhard Laubenbacher, New Mexico State University<br>Victoria Powers, Emory University<br>Dispersive Wave Turbulence<br>Paul Milewski, University of Wisconsin<br>Leslie Smith, University of Wisconsin<br>Esteban Tabak, New York University<br>Fabian Waleffe, University of Wisconsin<br>Radon Transforms and Tomography<br>Leon Ehrenpreis. Temple University<br>Adel Faridani, Oregon State University<br>Fulton B. Gonzalez, Tufts University<br>Eric L. Grinberg, Temple University<br>Eric Todd Quinto (Chair), Tufts University<br>Noncommutative Geometry (two weeks)<br>Alain Connes (Chair), IHES<br>Nigel Higson, Penn State University<br>John Roe, Penn State University<br>Guoliang Yu, University of Colorado<br>Bayes Frequentist and Likelihood Inference: A Synthesis<br>Gauri Sankar Datta (Co-chair), University of Georgia<br>Nancy Reid (Co-chair), University of Toranto<br>Dongchu Sun (Co-chair), University of Missouri<br>James Berger, Duke University<br>Malay Ghosh, University of Florida<br>Elizabeth Slate, Cornell University

Algorithms, Computational Complexity and Models of Computation for Nonlinear and Multivariate Problems<br>Eugene Allgower, Colorado State University<br>Kurt Georg, Colorado State University<br>Christopher Sikorski (Chair), University of Utah<br>Frank Stenger, University of Utah

## Appendix 2: SRC Participants Surveys

Participants at each of the 2000, 2001, 2002 and 2003 SRCs were asked to complete an email survey approximately a year following their conference. Response rates improved each year, from $26 \%$ for 2000 to $46 \%$ for 2003. Highlights of these surveys are provided below.

Question 1: On a scale from 1 (weak) to 5 (very strong), what was the level of influence of the conference on your career and research?

Frequency of responses: $(1,2,3,4,5)=(4 \%, 9 \%, 28 \%, 37 \%, 23 \%)$

## Comments:

2000 conferences
This conference was innovative and ahead of its time, in that it attempted to bring two very different branches of statistics together to promote better cross-area research. I got a lot of ideas about what should be changed or eliminated in future activities of this type.

The answer here is definitely 5 . The main reason for this is that I had studied NCG in more or less isolation, and the conference showed me a) a broader perspective into which my studies fit and b) confirmed that I had understood what was going on and was not crazy.

2001 conferences
I am new in the area of this conference; I am impressed by the caliber of researchers that were represented at this conference; and I am continuing work in the area motivated at least in part by the quality of the people and the quality of the research problems in the area.

Hard to say, since I'm still a graduate student and I was only in my third year when attending the conference. However, I was exposed to a wealth of interesting ideas, and if the question can be interpreted as how useful this could be in the future, I would definitely enthusiastically assign 5 .

2002 conferences
The main purpose of this conference seemed to promote research on the irreversible quantum dynamics in the framework of $\mathrm{C}^{*}$-algebras. The subject is physically important and mathematically interesting, though it has not been widely studied, when compared with the reversible dynamics. Therefore the conference is timely and well organized. I think, it will stimulate a substantial progress on the subject.

2003 conferences
My participation in this conference had a very strong influence on my mathematical career. I received a job offer from an institution one of whose professors was present at my presentation.

Question 2: Was the direction of your research changed, broadened or clarified by participation in conference? If so, describe briefly.

Frequency of responses: $($ Yes, No $)=(44 \%, 56 \%)$

## Comments:

## 2000 conferences

Direction of research broadened, to understand noncommutative geometry better and its possible relevance to number theory.

I had started to work on problems that were new to me (numerical methods for pathfollowing and bifurcation of large-scale problems) and the conference gave me a valuable opportunity to meet researchers in this area. I received valuable input for my continued work in the area.

The workshop had the effect of improving my research in a very direct was: I was challenged during my lecture by the claim by some participants that the algorithm I was proposing could not be guaranteed to complete in a finite time, because in principle it required a search over an interval of real numbers. I was able at the meeting to modify the algorithm to completely overcome that objection.

It was broadened and I was happy to meet many young PhD's and learn about their research.
I had to opportunity to discuss with leading-edge researchers in Computer Algebra during the conference and also meet some of the current PhD students that do very interesting work. I got an idea of new important developments too.

Somewhat. We at GE had been hoping to use the Helgason-Ludwig range conditions to improve image quality, and now better understand that is not directly possible. However, we still hope to use them to flag inconsistent data.

Yes. The conference introduced me to ideas on the frontier between number theory and noncommutative geometry. Having a reasonable background in both areas, I was able to profit from this and am now doing work in this direction. Without the conference, I probably would not have taken up these problems.

This was a good chance for advertisement of my research and to come into contact with American algebraists. Since I am working interdisciplinary giving a talk to an algebraic oriented audience forced me to see things more abstract, precise and dense. My research profited a lot from that. I got several motivations for new or different research directions from the talks.

2001 conferences
Yes, I learned of Jack polynomials and that the challenges that the researchers face with them are the same as the challenges that we had faced with the Schur functions. As a result I received a postdoctoral research appointment at MIT to develop things further.

As a researcher I am quite isolated in my University. At the conference I met several people who could understand and appreciate the work I do. They provided a great deal of encouragement in the pursuit of what I thought were very risky venues of research.

As a senior participant and one who has worked on LS category from time to time over the last 25 years, I must say that my interest in the subject was very much renewed by this excellent conference.

2002 conferences
As the principle organizer of the conference my goal was to help to assemble for the first time a growing group of experts and graduate students who are working in this relatively new area of operator algebras. Because of this conference and the proceedings volume to follow, this area now has a firm foundation upon which to build.

2003 conferences
It made me more committed to explore Riemann-Hilbert Problems in more details. I am currently writing a book on orthogonal polynomials and after the conference I decided to add a chapter on applications of Riemann-Hilbert Problems to orthogonal polynomials.

I would say that it changed my perspective on Combinatorics and it also enriched my panorama on Mathematics in general.

The direction of my research was broadened by interacting with a wide range of other young people in my field. I'm still easing into the process of working with others on various projects, but I expect it to lead to future collaborations.

Question 3: Have there been papers published (submitted or in preparation) fostered by your participation?

Frequency of responses: $($ Yes, No $)=(67 \%, 33 \%)$

Question 4: Have you undertaken other collaborations as a result of the conference?
Frequency of responses: $($ Yes, No $)=(37 \%, 63 \%)$

## Additional Comments

## 2000 conferences

Had it not been for this conference, it would have been practically impossible for me to present my ideas to such an audience of experts and to receive the kind of feedback I got there.

At some point wine and beer was being served in the dorm (for a fee of course.) I think this was a great idea and others agreed, particularly because the conference was out in the middle of nowhere. The nowhere aspect I think helps everyone to stick around and talk about mathematics, but then having the wine also helps with the social aspect.

I am particularly heartened that there are many young participants interested in symbolic computation and the contribution of differential algebra to that area.

The conference organization was excellent, starting with accommodation arrangements, web page, emailing information, book exhibition and so on. The AMS personnel was extremely helpful. The scientific level of the talks was very high. Thank you very much.

The conference was very well organized, both by the scientific organizers and the AMS people. Having everyone at the dorms facilitated communication, as did the evening snacks and drinks.

The conference was well organized with many interesting talks. It paid to attend. The AMS-staff at the conference site was very kind and helpful. The accommodation at the dorms of Mt. Holyoke College was very poor!

This kind of event is very important. I knew no one in this field, and had the opportunity to meet them there. Also, I have made many friendly and profitable connections with postgrad students from many institutions as a result of this conference. These contacts may not have led to significant
collaborations or papers, but then we are still students and I am a long way from the people I met.
[...] Thanks for running this very special conference.

## 2001 conferences

This request is foolish bureaucracy.
I thought this was the most useful conference I have participated in for many years! Reasons: i) The participants were dedicated and top notch. I met a number of contacts with whom I keep in touch. Ii)The chance to discuss at meals, breaks, etc added greatly to my appreciation and understanding of the material presented.

Other comments: excellent atmosphere; very well run; a great reflection of the liveliness and active interchange within the harmonic analysis community; a great chance for someone on the periphery to experience work at the center.

Because almost everyone was actively working in the same area, I had many long and fruitful discussions that would not have been possible at a larger conference. I would recommend others to attend the same conference in the future.

These types of conferences are very valuable to both junior and senior researchers. The junior ones have the chance to meet more established mathematicians, let their research known and more importantly start a collaboration which is crucial during the first year after PhD . The senior ones have the chance to interact with their peers, learn new directions opened in other fields and keep their research up to date. I strongly support these "summer schools"!

## 2002 conferences

My impression is that it went extremely well-lots of talented young people along with the "old hands", and the scientific level was very high.

I am currently an undergraduate senior (planning on attending graduate school in combinatorics next year), and this conference has greatly influenced my mathematical career. I really enjoyed the wide variety of topics presented at an introductory level, and since the conference I have done a great deal of further reading. Working with others on conjectures presented during talks and the problem sessions was also a great experience. Overall I had an absolutely wonderful, inspiring time and hope the AMS will sponsor more conferences of this sort in the future.

Dormitory accommodations at Mt Holyoke compare poorly to accommodations at other conferences.
The conference was well organized and the academic facilities were excellent. The surroundings: leafy campus, superb sports facilities, also helped create a relaxed atmosphere conductive to the exchange of ideas. My only quibble is that the computing facilities were not up to date and it was difficult to use the public telephones to make international calls.

I had the occasion to see the most recent and important directions in the field. Almost all the best specialist in the field attended the Conference. I had the opportunity to discuss to them and to see a direction for my PhD . It was very important for me to be there.

The conference (and funds from AMS-NSF) are very generous in allowing new PhD 's and interested participants from non-research (Teaching) environments to attend. This furthers the (albeit somewhat slower) research possibilities for these groups and enlarges the academic community. In addition, communications between diverse groups of active mathematicians becomes possible.

## 2003 conferences

I attended not to give a talk but rather to give input (a "report from the front") on the process of searching for jobs after a postdoc, and to provide feedback for the participants on other early-career issues. At Snowbird we had a little evening "bull session" where some folks who had recently gone through the tenure-track job hunt answered questions on early-career issues; what was supposed to be a little half-hour thing ended up lasting about an hour and a half, with almost all the participants attending.

The conference really changed how I think about my potential to do research. This followed in large part from my realization that my peers at large research institutions are also, for the most part, making slow progress. It encouraged me that steady work is worthwhile, even if the results are slow in coming. I hope that my lack of immediate output does not discourage you from funding future participants from teaching schools.

I think the idea of having joint conferences between the pure and applied community is wonderful. I strongly recommend such meetings in the future. I think in the long-term such meetings will benefit both sides a great deal.

I thought it was very beneficial. It was motivating to see the younger mathematicians in my area give talks and interact so much. It showed me first hand how collaboration gets more math accomplished. It was also to here the young mathematicians talk informally about how their careers were progressing. It gave me an idea of what I'd be going through in a few years. I also learned a lot of math.

Among the many conferences which I have attended, I rate this one as among the best. A rather broad range of interests were represented. The lectures were generally quite good and the discussions unusually lively.

## Appendix 3: Conference Activity Outlets for U.S. Mathematicians

## NSF-Funded Institutes

| Institute Name | Startup Year | Estimated Average <br> Nbr. Of One-week <br> Conferences per year |
| :--- | :---: | :---: |
| Mathematical Science Research Institute | 1982 | 12 |
| Institute for Mathematics and Applications | 1982 | 11 |
| Center for Discrete Mathematics and <br> Theoretical Computer Science | 1989 | 9 |
| Institute for Pure and Applied Mathematics | 2000 | 12 |
| Banff International Research Station | 2003 | 40 |
| American Institute of Mathemtaics Research <br> Conference Center | 2002 | 10 |
| Statistical and Applied Mathematical Sciences <br> Institute | 2002 | 3 |
| Mathematical Biosciences Institute | 2002 | 5 |

With the exception of MSRI, the number of one-week conferences reported above is an estimate based on a review of the information on current and past programs taken from the web sites of these institute. The estimate for MSRI was provided by Hugo Rossi based on a review he was already conducting. Most of the institutes also hold some additional workshops that run from one to three days, and a few hold one or two conferences running two weeks. The short workshops do not appear to be not comparable with a one-week SRC.

## Other Conferences

The Division of Mathematical Sciences (DMS) at NSF funds a substantial number of conferences each year through grants it makes directly to one or more organizers for each conference. As a means of finding a reliable estimate of the number of these conferences held each year, I analyzed the number of DMS conferences grants that expired during each of the four yearly periods from September 2000 through August 2004. As a general rule, each of these grants supported a single conference held within a year of the grant's expiration date, so the count of grants expiring each yearly period provides an estimate of the number of such conferences held during the period from 2000 through 2003

| Period of Grant Expiration | Number of Grants |
| :---: | :---: |
| September 2000 through August 2001 | 71 |
| September 2001 through August 2002 | 40 |
| September 2002 through August 2003 | 91 |
| September 2003 through August 2004 | 106 |

## Appendix 4: Reactions to the 2003 Young Researchers SRC

1. Excerpt from email from Diane Saxe, AMS Director of Meetings, to David Eisenbud, 21 October 2003:

David,
The comments on the evaluations of the conference, with about a $50 \%$ return ratio thanks to Irena Peeva, were excellent.

The facility and location received mostly excellent on the overall comments. Snowbird definitely is a plus. The one criticism was not being able to see all of the screen from the back of the room, but we are working on this.
When asked what aspects of the conference distinguished it from other conference and workshops they had participated in, most responded about the "young participants" or the "focus on young researchers" or "the fact that talks are mainly given by young people. This is a great opportunity" or the "emphasis on young researchers".
These comments were repeated over and over again.
Some other responses were:

- "high quality of talks"
- "the number of young people"
- "the blend of one expository talk by a senior expert combined with shorter talks by young folks was a great format"
- "This was the best conference I have ever attended"
- "Lots of young scientists. That's a really good idea".
- "the people who gave the talks are very young and this is a positive thing"
- "It is very helpful to the junior researchers like us having such an opportunity to get together.."
- "very motivating to keep working hard."
- "rich in information, time well spent, best opportunity for information exchange. Younger people definitely need it."

And one final comment: "I was not looking forward to coming but am so glad I did. I was ready to give up on research but this has made me feel like it's worth continuing to try. It was also rejuvenating in terms of ideas."
Well, that is a good overview of the comments on the program itself. There is definitely an interest in this type of conference.
Any questions, let me know.
Diane
2. Email to Bob Daverman, 27 October 2003:

Date: Mon, 27 Oct 2003 13:18:31-0600
From: Roger Wiegand [rwiegand@math.unl.edu](mailto:rwiegand@math.unl.edu)
To: Robert Daverman [daverman@math.utk.edu](mailto:daverman@math.utk.edu)

CC: Roger Wiegand [rwiegand@math.unl.edu](mailto:rwiegand@math.unl.edu), Craig Huneke [huneke@math.ukans.edu](mailto:huneke@math.ukans.edu), Juergen Herzog [mat300@uni-essen.de](mailto:mat300@uni-essen.de), Donna Salter < dls@ams.org>, "Wayne S. Drady" [wsd@ams.org](mailto:wsd@ams.org), Jim Maxwell [jwm@ams.org](mailto:jwm@ams.org), David Eisenbud [de@msri.org](mailto:de@msri.org)

Subject: JSRC
Dear Bob,
We know the time is approaching when AMS will decide whether or not to apply for continued funding for the Joint Summer Research Conferences. Having recently organized and participated in such a conference, we want to urge AMS to work aggressively to continue these wonderful events.

The focus of our conference "Commutative Algebra: Presentations by Young Researchers" was on people no more than two or three years beyond the Ph.D. There were 32 half-hour research talks by these "youngsters", as well as five 50 -minute expository talks (by L. Avramov, J. Herzog, C. Huneke, I. Peeva and R. Wiegand). The original plan was to have all talks given by young researchers, but the review panel felt strongly that a few expository talks on central themes in commutative algebra would improve the conference. In retrospect, this seems to have been a good idea, and there was absolutely no indication that the younger mathematicians were inhibited by the presence of a few senior mathematicians.

In addition to the 32 research speakers, there were 27 non-speaking participants. We had an overwhelming response to the conference announcements, and it was difficult to keep the number of talks down and the total number of participants below the maximum of 65 negotiated by AMS and Snowbird.

The response from the young participants who contacted us during and after the conference was extremely positive. Confidential evaluation forms were collected from the participants and sent to AMS. While we have not seen the evaluations, we have gotten some feedback from AMS, all of it positive.
Snowbird provided an excellent venue. Lodging was comfortable, the meals were good, the surroundings were beautiful, and AMS representative Lori Melucci did an excellent job working with Snowbird to ensure that everything ran smoothly. About the only negative thing was that the boards and screen were a bit hard to see from the back of the room. It should be possible to correct this in the future.

In short, the conference was a success, and we expect that the interaction among participants will result in many productive collaborations. We believe that conferences like this, with the focus on young mathematicians, are particularly important to the future vitality of the discipline. If AMS decides that it cannot sponsor a full range of JSRCs in the future, we suggest that they sponsor just a few of these "conferences for youngsters" each summer.

One possible model would have one such conference in a given area of mathematics every two years (or perhaps every three years) for 6 years. This would make a great difference in the long run for that area and would also allow flexibility to rotate through the various areas over time. Perhaps a staggered beginning would be appropriate--so that every year there would a couple of "old" ones and the start of some new ones.

Not every area of mathematics would be appropriate for this sort of conference, since one needs a lot of students and postdocs in the area.

We hope these comments are helpful to AMS in its deliberations. Please contact us if you would like further information or suggestions.
Yours sincerely,
Juergen Herzog
Craig Huneke
Roger Wiegand

# Appendix 5: Status of Proceedings from AMS-IMS-SIAM Summer Research Conferences, 1990-2004 

## 1990

Probability models and statistical analysis for ranking data
Michael A. Fligne and Joseph A. Verducci, Organizers
Did not publish with AMS
Inverse scattering and applications
David Sattinger, Organizer
CONM/122 - published in 1991
Deformation theory of algebras and quantization with applications to physics
Murray Gerstenhaber and James D. Stasheff, Organizers
CONM/134 - published in 1992
Strategies for sequential search and selection in real time
Thomas S. Ferguson and Stephen M. Samuels, Organizers
CONM/125-published in 1992
Schottky problems
Leon Ehrenpreis and Robert C. Gunning, Organizers
CONM/136 - published in 1992
Logic, local fields, and subanalytic sets
Lou van Den Dries, Organizer
Did not publish with AMS

## 1991

Motives
Steven Kleiman and Kari Vilonen, Organizers
PSPUM/55-published in 1994
Inequalities in statistics
Yung L. Tong and Moshe Shaked, Organizers
Published with IMS - Vol. 22 - LNMS
Mathematical aspects of classical field theory
Mark J. Gotay, Jerrold E. Marsden, and Vincent Moncrief, Organizers
CONM/132 - published in 1992
Graph minors
Neil Robertson and Paul Seymour, Organizers
CONM/147 - published in 1993
Theory and applications of multivariate time series analysis
Ruey S. Tsay and Robert H. Shumway, Organizers
Did not publish with AMS

Biofluiddynamics
Angela Y. Cheer and C.P. van Dam, Orgnizers
CONM/141 - published in 1993
Systems of coupled oscillators
Donald G. Aronson, Organizer
Did not publish with AMS
Stochastic modeling and statistical inference for selected problems in Biology
Grace L. Yang and Charles F. Smith, Organizers
Did not publish with AMS

## 1992

Conformal field theory, topological field theory, and quantum groups
Moshe Flato, James Lepowsky, and Paul Sally, Organizers
CONM/175-published in 1994
Cohomology, representations and actions of finite groups
Jon F. Carlson, Organizer
Did not publish with AMS
Nielsen theory and dynamical systems
Christopher McCord, Organizer
CONM/152 - published in 1993
The Penrose transform and analytic cohomology in representation theory
Robert J. Baston and Michael G. Eastwood, Organizers
CONM/154 - published in 1993
Wavelets and applications
Charles K. Chui and Stephen Mallat, Organizers
Did not publish with the AMS
Commutative algebra; syzygies, multiplicities and birational algebra
William Heinzer, Craig Huneke, and Judith D. Sally, Organizers
CONM/159 - published in 1994

Change-point problems
Edward Carlstein, Hans-Georg Muller, and David Siegmund, Organizers
Published with IMS - Vol. 23 - LNMS
Control and identification of partial differential equations
H.T. Banks and K. Ito, Organizers

Published with SIAM - PR68
Adaptive designs
Steve Durham and Nancy Flournoy, Organizers
Did not publish with AMS

## 1993

Multivariable operator theory
Raul E. Curto, Ronald G. Douglas, Joel Pincas, and Norberto Salinas, Organizers CONM/185 - published in 1995

Distribution with fixed marginals, doubly stochastic measures and Markov ..
Howard Sherwood and Michael D. Taylor, Organizers
Did not publish with AMS
Curvature equations in conformal geometry
Richard Schoen and Sun-Yung A. Chang, Organizers
Did not publish with AMS
Applications of hypergroups and related measure algebra
William Connett, Olivier Gebuhrer, and Alan Schwartz, Organizers
CONM/183 - published in 1995
Spectral geometry
Robert Brooks, Carolyn Gordon, and Peter Perry, Organizers
CONM/173 - published in 1994
Recent developments in the inverse Galois problem
Walter Feit and Mike Fried, Organizers
CONM/186 - published in 1995
Mathematics of superconductivity
Max Gunzburger and John Ockendon, Organizers
Did not publish with AMS

## 1994

Periodicity and structured homology theories in homotopy theory
Paul Goerss, Hal Sadofsky, and Paul Shick, Organizers
Did not publish with AMS
Bergman spaces and the operators that act on them
Stephen D. Fisher, Sheldon Axler, and Peter Duren, Organizers
Did not publish with AMS
Multidimensional complex dynamics
Eric Beford and John-Erik Fornaess, Organizers
Did not publish with AMS
Moonshine, the monster and related topics
Geoffrey Mason, Chongying Dong, and John McKay, Organizers
CONM/193 - published in 1995
Continuous algorithms and complexity
James Renegar and J.F. Traub, Organizers
Did not publish with AMS

Markov chain Monte Carlo methods
Alan Gelfand, Organizer
Did not publish with AMS

## 1995

Smooth dynamical systems and dimension theory
Yakov B. Pesin, R. De La Llave, and Howard Weiss, Organizers
Did not publish with AMS
Hamiltonian dynamics and celestial mechanics
R. Devaney, R. McGehee, K. Meyer, D. Saari, C. Williams, and Z. Xia, Organizers

CONM/198 - published in 1996
Matroid theory
Joseph E. Bonin and Brigitte Servatius, Organizers
CONM/197 - published in 1996
Linear and nonlinar CG-related methods
Loyce Adams and John L. Nazareth, Organizers
Did not publish with AMS
Finsler geometry
Shiing-Shen Chern, David Bao, and Zongmin Shen, Organizers
CONM/196 - published 1996
Analysis of multi-fluid flows and interfacial instabilties
Y. Y. Renardy, D. Papageorgiou, S. Sun, and D. Joseph, Organizers

Did not publish with AMS
Electrical impedance tomography
John Sylvester, Gunther Uhlmann, and Michael Vogelius, Organizers
Did not publish with AMS

## 1996

Optimization methods in partial differential equations
Steve Cox and Irena Lasiecka, Organizers
CONM/209 - Published in 1997
Adaptive selection of models and statistical procedures
Andrew Barron, Peter Bickel, Iain Johnston, and David Donoho, Organizers
Did not publish with AMS
Random matrices, statistical mechanics, and Painleve transcedents
Pavel Bleher and Alexander Its, Organizers
Did not publish with AMS
Classification problems in C*-algebras and dynamics
Marius Dadarlat, Will Geller, and Terry Loring, Organizers
Did not publish with AMS

Stochastic inference, Monte Carlo and empirical methods
A. Gelfand et al, Organizers

Did not publish with AMS
Quantization
L. Coburn, A. Jaffe, M. Rieffel, and L. Takhtajan, Organizers CONM/214 - published in 1997

Discrete and computational geometry: ten years later
B. Chazelle, J. Goodman, J. O'Rourke, J. Pach, and R. Pollack, Organizers CONM/223 - published 1998

## 1997

Applications of curves over finite fields
M. Fried, R. Guralnick, D. Wan, G. Mullen, and M. Zieve, Organizers

CONM/245-published 1999
Representation theory of real and p -adic reductive groups
J. Adams, D. Barbasch, and A. Moy, Organizers

Did not publish with AMS
Graphical markov models, influence diagrams, bayesian belief networks... S. Lauritzen, D. Madigan, J. Pearl, M. Perlman, and N. Wermuth Did not publish with AMS

New developments and applications in experimental design
K. Chaloner, T. O'Brien, W. Rosenberger, and W. Wong, Organizers

Published with IMS - Vol. 34 - LNMS
Statistics in molecular biology
F. Seillier-Moiseiwitsch, P. Donnelly, and M. Waterman, Organizers

Co-publication between AMS/IMS - Vol. 33 - LNMS
Algebraic K-theory
W. Raskind, C. Weibel, H. Gillet, and D. Grayson, Organizers

PSPUM/67-published 1999

Trends in the representation theory of finite dimensional algebras
B. Huisgen-Zimmermann and E. Green, Organizers

CONM/229 - published 1998

## 1998

q-Series, Combinatorics and Computer Algebra
M. Ismail and D. Stanton, Organizers

CONM/254 - published 2000
Quantum Cohomology
A. Bertram and Y. Ruan, Organizers

Not publishing

Geometric Group Theory and Computer Science
R. Gilman, Organizer

CONM/250 - published 1999
Mathematical Methods in Invers Problems for Partial Differential Equations
W. Rundell, Organizer

Did not publish with AMS
Nonlinear PDEs, Dynamics and Continuum Physics
J. Bona, K. Saxton, and R. Saxton, Organizers

CONM/255 - published 2000

## 1999

From Manifolds to Singular Varieties
S. Cappell, R. Lee, and W. Luck, Organizers

Did not publish with AMS
Computability Theory and Applications
P. Cholak, S. Lempp, M. Lerman, and R. Shore, Organizers

CONM/257-published 2000

## Wave Phenomena in Complex Media

A. Klein, M. Aizenman, A. Figotin, S. Jitomirskaya, and S. Venakides, Organizers

Did not publish with AMS

New Directions in Algebraic Topology
N. Kuhn, R. Bruner, A. Elmendorf, J. Greenlees, and J. McClure, Organizers

CONM/271-published 2001
Structured Matrices in Operator Theory, Numeric Analysis, Control, Signal and Image Processing
R. Brualdi, G. Golub, F. Luk, and V. Olshevsky, Organizers

CONM/280 - published 2001
CONM/281 - published 2001
Differential Geometry Methods in the Control of Partial Differential Equations
R. Gulliver, W. Littman, and R. Triggiani, Organizers

CONM/268 - published 2000
Groupoids in Physics, Analysis and Geometry
A. Ramsay, J. Kaminker, J. Renault, and Alan Weinstein, Organizers

CONM/282- published 2001

## 2000

Symbolic Computation: Solving Equations in Algebra, Geometry, and Engineering
E. Green, S. Hosten, R. Laubenbacher, V. Powers

CONM/286 - published 2001
Dispersive Wave Turbulence
P. Milewski, L. Smith, E. Tabak, F. Waleffe

CONM/283 - published 2001

Radon Transforms and Tomography
L. Ehrenpreis, A. Faridani, F. Gonzalez, E. Grinberg, E. Quinto

CONM/278 - published 2001
Noncommutative Geometry
A. Connes, N. Higson, J. Roe, G. Yu

Publishing in Clay Mathematics series
Byes Frequentist and Likelihood Inference: A Synthesis
G. Datta, N. Reid, D. Sun, J. Berger, M. Ghosh, E. Slate

Not publishing.
Algorithms and Their Complexity for Nonlinear Problems
E. Allgower, K. Georg, C. Sikorski, F. Stenger

Publishing with Academic Press (approved by SIAM and AMS)

## 2001

Statistics in Functional Genomics
F. Seillier-Moiseiwitsch, R. Simon, and K. Tatsuoka

Co-pub with IMS. IMS will produce volume.
Fluid Flow and Transport in Porous Media: Mathematical and Numerical Treatment
Z. Chen, R. Ewing, J. Lage, and R. Lazarov

CONM/295 - published 2002.
The Legacy of Inverse Scattering Transform in Nonlinear Wave Propogation
J. Bona, D. Kaup, and S.R. Choudhury

CONM/301-published 2002.
Harmonic Analysis
W. Beckner, A. Nagel, A. Seeger, and H. Smith

CONM/320 - published 2003.

Lusternik-Schnirelmann Category in the New Millennium
O. Cornea, G. Lupton, J. Oprea, and D. Tanre

CONM/316 - published 2002
Fast Algorithms in Mathematics, Computer Science and Engineering
G. Heinig, F. Luk, V. Mehrmann, V. Olshevsky, and R. Plemmons CONM/323 - published in 2003. Co-published with SIAM

## 2002

Groups, Representatives, and Cohomology
A. Adem, J. Carlson, G. Mason, B. Parshall, S. Smith, and S. Witherspoon

Not publishing
Advances in Quantum Dyanmics
B.M. Baker, P. Jorgensen, P. Muhly, and G. Price

CONM/335 - published in 2003

## Waves in Periodic and Random Media

D. Dobson, A. Figotin, P. Kuchment, and S. Venakides

CONM/339 - published in 2003.
Graph Coloring and Symmetry
K. Collins, D. Drizanc, and A. Russell

No response to AMS inquiries to publish
Emerging Issues in Longitudinal Data Analysis
J-L. Wang, M. Davidian, and X. Lin
Will publish in a journal

## 2003

Spectral Theory and Inverse Spectral Theory for Jacobi Operators
K. McLaughlin and X. Zhou

Not publishing
Machine Learning, Statistics, and Discovery
J. Lafferty, X. Shen, and J. Verducci

They have a website instead of a proceedings volume: http://www-2.cs.cmu.edu/~lafferty/ml-stat/
Mathematical of Finance
W. Fleming, J.P. Fouque, B. Pasik-Duncan, S. Pliska, R. Sircar, G. Yin, Q. Zhang CONM/351 - will be published in 2004

Hydrodynamic Stability and Flow Control
P. Schmid and J. Riley

Publishing with SIAM
Interger Points in Polyhedra, Geometry, Number Theory, Algebra, and Optimization
A. Barvinok, M. Beck, C. Haase, B. Reznick, M. Vergne, and V. Welker

Plan to publish - likely to appear in 2005
Commutative Algebra: Presentations by Young Researchers
J. Herzog, C. Huneke, and R. Wiegand

Not publishing

## 2004

## String Geometry

K. Becker. M. Becker, A. Bertram, P. Green, and B. McKay

Will Publish - likely to appear in 2005
Complex Dynamics: Twenty-Five Years after the Appearance of the Mandelbrot Set
E. Bedford, B. Branner, R. Devaney, L. Keen, and M. Lyubich

Will publish - likely to appear in 2005
Algebraic Geometry: Presentations by Young Researchers
H. Clemens, R. Lazarsfeld, and R. Vakil

Does not plan to publish

Representations of Algebraic Groups, Quantum Groups, and Lie Algebras
G. Benkart, J. Jantzen, Z. Lin, D. Nakano, and B. Parshall

No response yet
Gaussian Measure and Geometric Convexity
K. Ball, V. Milman, A. Pajor, R. Schneider, R. Vitale, and W. Weil No response yet

| Appendix 6: AMS Summer Research Institutes, 1953 - 1999 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dates | Location | Title | Attendance | Organlzers |
| (discontinued) |  |  |  |  |
| $\begin{gathered} \hline \text { July 26-August } 13, \\ 1999 \end{gathered}$ | University of Washington, Seattle | Smooth Ergodic Theory and Applications | 141 | Anatole Katok, Rafael de la Llave, Yakov Pesin, Howard Weiss* |
| 1998 | None held |  |  |  |
| $\begin{gathered} \hline \text { June 30-July 18, } \\ 1997 \end{gathered}$ | University of Colorado at Boulder | Differential Geometry and Control | 86 | Guillermo Ferreya, Robert B. Gardner, Henry Hermes, Hector J. Sussman* |
| $\begin{gathered} \hline \text { July } 7 \text { - July } 27, \\ 1996 \end{gathered}$ | University of Washington, Seattle | Cohomology, Representations, and Actions of Finite Groups | 177 | Alejandro Adem, Jonathan Alperin, Jon Carlson*, R. James Milgram, Stewart Priddy, Peter Webb |
| July 9-29, 1995 | Santa Cruz, California | Algebraic Geometry | 430 | Robert Lazarsfeld*, Henri Gillet, Janos Kollar, Robert MacPherson, David Morrison, Y.-T. Su |
| 1994 | None held |  |  |  |
| 1993 | Cornell University | Stochastic Analysis | 139 | Mike Cranston, Rick Durrett*, Mark Pinsky |
| July 6-24, 1992 | UC at Santa Barbara | Quadratic Forms and Division Algebras: Connections with Algebraic K-Theory | 126 | Richard Elman, Burton I. Fein, William Jacob*, Y-T. Lau, Wayne Raskind, Alex Rosenberg*, David Saltman |
| July 8-26, 1991 | Pennsylvania State University at University | Algebraic Groups and their Generalizations | 166 | Igo Frenkel, Eric Friedlander, William Haboush*, Jens Jantzen, Brian Parshall |
| July 9-27, 1990 | UCLA | Differential Geometry | 426 | Robert Bryant, Eugenio Calabi, S. Y. Cheng, Robert E. Greene*, H. Blaine Lawson, H. Wu, S.-T. Yau* |
| July 10-28, 1989 | UC Santa Cruz | Several Complex Variables and Complex Geometry | 266 | Eric Bedford, John D'Angelo, Robert E. Greene, Steven G. Krantz* |
| July 3-23, 1988 | University of New Hampshire | Operator Theory/Operator Algebras and Applications | 228 | William B. Arveson*, Ronald G. Douglas*, Ciprian I. Foias, I. C. Gohberg, Peter D. Lax, Donald Sarason, Barry Simon |
| July 6-24, 1987 | Bowdoin College | Theta Functions | 175 | Enrico Arbarello, David Chudnovsky, Gregory Chudnovsky, Leon Ehrenpreis*, Robert Gunning*, Takahiro Kawai, Henry McKean |
| July 7-25, 1986 | Humbolt State University | Representations of Finite Groups and Related Topics | 175 | Jonathan L. Alperin*, Charles W. Curtis, Walter Feit, Paul Fong |
| July 8-26, 1985 | Bowdoin College | Algebraic Geometry | 310 | Spencer Bloch, David Eisenbud*, William Fulton, David Gieseker, Joe Harris, Robin Hartshorne, Shigefumi Mori |
| $\begin{gathered} \text { July } 16 \text { - August } 3, \\ 1984 \end{gathered}$ | Humbolt State University | Geometric Measure Theory and the Calculus of Variations | 61 | William K. Allard*, Frederick J. Almgren Jr.*, Enrico Bombieri, Robert M. Hardt, H. Blaine Lawson Jr., Jon T. Pitts, Richard Schoen, William P. Ziemer |

* Chairs or Co-chairs of organizing committee if listed.

| Appendix 6: AMS Summer Research Institutes, 1953-1999 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dates | Location | Title | Attendance | Organizers |
| July 11 - July 29, 1983 | UC at Berkeley | Nonlinear Functional Analysis and Applications | 203 | Haim Brezis, Felix Browder*, Tosio Kato, J. L. Lions, Louis Nirenberg, Paul Rabinowitz |
| $\begin{gathered} \hline \text { June } 28 \text { - July } 16, \\ 1982 \end{gathered}$ | Cornell University | Recursion Theory | 144 | Solomon Feferman, Yiannis Moschovakis, Anil Nerode*, Hilary Putnam, Gerald Sacks, Joseph Schoenfeld, Richard A. Shore*, Robert I. Soare |
| July 20 - August 7, 1981 | Humbolt State University | Singularities | 165 | Philip Church, Alan Durfee, Martin Golubitsky, Peter Orlik*, Le Dung Trang, Philip Wagreich |
| July 14 - August 2, 1980 | Queen's University | Operator Algebras and Applications | 217 | Ronald G. Douglas, Edward G. Effros, Richard V. Kadison*, Robert T. Powers, Lajos Pukansky, E. James Woods |
| 1979 | Cornell University | Finite Group Theory | 179 |  |
| July 10-28, 1978 | Williams College | Harmonic Analysis in Euclidean Spaces and Related Topics | 215 |  |
| July 11 - August 5, 1977 | Oregon State University at Corvallis | Automorphic Forms, Representations, and L-Functions | 172 |  |
| $\begin{gathered} \hline \text { August } 2-20, \\ 1976 \end{gathered}$ | Stanford University | Algebraic and Geometric Topology | 294 |  |
| $\begin{gathered} \hline \text { July } 28 \text { - August } \\ 15,1975 \end{gathered}$ | Williams College | Several Complex Variables | 222 |  |
| July 29 - August | Humbolt State University | Algebraic Geometry | 270 |  |
| $\begin{gathered} \text { July } 30 \text { - August } \\ 17,1973 \end{gathered}$ | Stanford University | Differential Geometry | 331 |  |
| $\begin{gathered} \hline \text { July } 31 \text { - August } \\ 18,1972 \\ \hline \end{gathered}$ | Williams College | Harmonic Analysis on Homogeneous Spaces | 154 |  |
| $\begin{gathered} \hline \text { August 9-27, } \\ 1971 \end{gathered}$ | UC at Berkeley | Partial Differential Equations | 256 |  |
| $\begin{gathered} \hline \text { June } 29 \text { - July } 17, \\ 1970 \end{gathered}$ | University of Wisconsin at Madison | Algebraic Topology | 204 |  |
| $\begin{gathered} \hline \text { July } 7 \text { - August } 1, \\ 1969 \end{gathered}$ | SUNY at Stony Brook in Long Island | Number Theory: Analytic Number | 139 |  |
| July 1-26, 1968 | UC at Berkeley | Global Analysis | 202 |  |
| July 10 - August 5, 1967 | UC at Los Angeles | Axiomatic Set Theory | 121 |  |


| Appendix 6: AMS Summer Research Institutes, 1953 - 1999 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dates | Location | Title | Attendance | Organlzers |
| $\begin{gathered} \hline \text { June } 27 \text { - July } 22, \\ 1966 \end{gathered}$ | UC at San Diego | Entire Functions and Related Parts of Analysis | 73 |  |
| $\begin{gathered} \text { July } 5 \text { - August } 6, \\ 1965 \end{gathered}$ | University of Colorado at Boulder | Subgroups <br> Algebraic Groups and Discontinuous | 62 |  |
| July 6-31, 1964 | Woods Hole, Massachusetts | Algebraic Geometry | 83 |  |
| $\begin{gathered} \text { July } 15 \text { - August } \\ 16,1963 \end{gathered}$ | University of Washington | Differential and Algebraic Topology | 63 |  |
| 1962 | UC at Santa Barbara | Relativity and Differential Geometry | 90 |  |
| $\begin{gathered} \hline \text { July } 10 \text { - August 4, } \\ 1961 \end{gathered}$ | University of Arizona | Dynamical Astronomy | 81 |  |
| 1960 <br> June 27 - August 7, | Yale University | Dynamical Astronomy | 75 |  |
| 1959 | Yale University | Dynamical Astronomy | 103 |  |
| 1958 | Bowdoin College | Surface Area and Related Topics |  |  |
| 1957 | Cornell University | Mathematical Logic |  |  |
| 1956 | University of Washington | Differential Geometry in the Large |  |  |
| 1955 | University of Wisconsin | Set Theoretic Topology |  |  |
| $\begin{gathered} \hline \text { June } 21 \text { - July } 31, \\ 1954 \end{gathered}$ | University of Colorado at Boulder | Several Complex Variables | 28 |  |
| June 20 - July 31, 1953 | Colby College | Lie Algebras | 29 |  |

Attachment 1
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## Appendix A: Revised work plan for Focused Planning on Meetings \&

## Conferences

The work plan which follows is derived from that presented to the May 2002 ECBT. All the elements of that work plan have been incorporated into this version except for an item related to the abstract server, an issue which has already been adequately addressed.

Task 1: Compare AMS meetings activities with a set of other professional societies:
A. Select eight to ten societies that will form a set of "peer societies" from which to gather information. Include in this set both other scientific societies and professional societies with large proportions of their members in academia.
B. Identify the key components of meeting activities on which to gather information. An initial list includes:

- types of meetings and the numbers of each per year, including regional and sectional meetings, specialized workshops and short courses.
- Size of meetings
- exhibits size and fees
- registration fees for member and nonmember prereg., including what the fee includes, like meals and/or receptions.
- Percentage of society revenues from meetings, with national meetings broken out separately
- breakdown of the components of meetings revenue into registrations fees, sponsorships, program advertising, exhibits, other components
- coarse level of contribution of meetings to the society's bottom line. (does it contribute at all to overhead? To the society's net income?)
- any use of forms of teleconferencing?
- components of the meetings arrangements that are handled by staff versus components handled by outside service bureaus?
- societies use of the web in connection with their meetings: For online registration? Housing? Program presentation?
C. Contact the peer societies for the necessary information, after first collecting as much of the info as is possible from CESSE surveys and other sources.
D. Prepare a report based on the information collected. Include both a high level display in table format and a narrative summary of the major lessons learned from the exercise.


## Staff involved: DMS, POP, GMA, LXM, Temp

Work schedule: Preliminary report due by April 1 for inclusion in Secretariat and COMC agenda. Incorporate any COMC and Secretariat feedback into a preliminary report for ECBT agenda. Revise by June 1 to reflect feedback from ECBT meeting.

Task 2: Prepare a review of the financial aspects of meetings over the past 10 years
A. Prepare an overview of the role of AMS meetings in Society finances over the past ten years.
B. Highlight the sources of revenue from meetings and exhibits (but separately!) and the components of expenses.
C. Show the possible impact of changes in the way we currently handle allocations of fixed costs, e.g . divisional overhead and G\&A costs.
D. Characterize the underlying philosophy of meetings relative to the Society's finances given implicitly by the financial picture in $\mathrm{A}, \mathrm{B}$ and C .
E. Pose the key questions raised by A through D and have a discussion of them by the Secretariat, COMC, and ECBT.

Staff involved: on A, B, C: CWP, with input from JWM, DMS; on D: CWP and JWM draft, with input from JHE, RJD, DMS; on E: JWM and DMS, with input from JHE and RJD

Work schedule: Report on A due by April 1, and preliminary draft on B due by April 1 for inclusion in Secretariat and COMC agenda. Incorporate COMC and Secretariat feedback into a preliminary report for ECBT agenda. Revise by June 1 to reflect feedback from ECBT meeting.

Task 3: Prepare a report that puts the current meetings activity into a historical context.
A. Prepare a timeline showing the major steps in the development of meetings and conferences since the founding of the AMS.
B. Prepare a quantitative comparison of the program components of a current national meeting with one 10 years ago.
C. Review JMC minutes for info on major changes in structure of JMM.
D. Do a version of $B$ for sectionals.
E. Prepare a essay which describes the major changes in the character of the joint national meetings since the early 1960 's. Do the same for sectionals.

Staff involved: A through D: Temp, with guidance from DMS, DLS, RJD and Assoc.
Sec.; E: JWM with input from RJD, DMS, POP, DLS.
Work schedule: Preliminary drafts of A through D due by April 1 for inclusion in Secretariat and COMC agenda. Incorporate COMC and Secretariat feedback into a preliminary report for ECBT agenda. With feedback from Secretariat, COMC and ECBT, draft E by July 1 and circulate to Secretariat for review during July and August. Prepare final draft by September 1 for report to fall ECBT.

Task 4: Prepare a report on what is know about how the meeting attendees value the various components of the national and sectional meetings.
A. Review the existing body of information from meeting attendees, including previous surveys, to identify information that bears on this issue.
B. Identify what issues, if any, warrant new information, or updating of previous information.
C. Determine how best to gather the information from the appropriate segments of the membership.
D. Prepare a final report outlining future plans for monitoring member satisfaction with meetings for presentation to November ECBT

Staff involved: Meetings staff with guidance from JWM, DMS for A; DMS, JWM, JHE and RJD for B and C; DMS and JWM for D.

Work schedule: Complete A by May 1; prepare preliminary report on B by June 15. Complete C by August 1. Complete initial draft of final report by September 15 for review by Staff Steering Committee. Complete final draft of report by October 15.

Task 5: Gather information on the type and frequency of conferences now and ten years ago.
A. Gather the relevant information from the current NSF-funded institutes, with historical data ten years ago, where available.
B. Gather relevant information on conference funding from the Division of Mathematical Sciences of the National Science Foundation for the past ten years
C. Evaluate the information to determine the growth in the number of conferences annually by conference type.
D. Identify areas of conference activity that may be under served by current environment.
E. Update the November 2003 ECBT report on the SRCs with the information from steps A through D. Present the updated report to Secretariat, Committee on Meetings and Conferences, and ECBT.

Staff involved: JWM with help from DMS, WSD, DLS, LXM
Work schedule: Complete A and B by March 8 ; Complete C by March 15; prepare draft report on D by April 1 for inclusion in Secretariat and COMC agenda. Incorporate COMC and Secretariat feedback into a preliminary report for ECBT agenda by April 23. Complete E by April 23.

Robert J. Daverman, Secretary
Email: daverman@math.utk.edu

# SECRETARIAT 

Business by Mail
June 1, 2004

MINUTES
from the Ballot dated May 3, 2004

There were five votes cast by John Bryant, Robert Daverman, Susan Friedlander, Michel L. Lapidus and Lesley Sibner.

1. Approved electing to membership the individuals named on the list dated April 20, 2004.
2. Approved the Tel Aviv University in Tel Aviv, Israel, as an International Institutional Member for 2004.
3. Approved the minutes of the Secretariat Business by Mail from the ballot dated April 1, 2004.

Robert J. Daverman

Robert J. Daverman, Secretary
Email: daverman@math.utk.edu

## SECRETARIAT <br> Business by Mail <br> July 1, 2004 <br> MINUTES <br> from the Ballot dated June 1, 2004

There were five votes cast by John Bryant, Robert Daverman, Susan Friedlander, Michel L. Lapidus and Lesley Sibner.

1. Approved electing to membership the individuals named on the list dated May 20, 2004.
2. Approved holding an AMS Council Meeting in Washington, DC, on 23 April 2005.
3. Approved the minutes of the Secretariat Business by Mail from the ballot dated May 1, 2004.

Robert J. Daverman

Robert J. Daverman, Secretary
Email: daverman@math.utk.edu

## SECRETARIAT

Business by Mail
August 1, 2004
MINUTES
from the Ballot dated July 1, 2004

There were five votes cast by John Bryant, Robert Daverman, Susan Friedlander, Michel L. Lapidus and Lesley Sibner.

1. Approved electing to membership the individuals named on the list dated June 20, 2004.
2. Approved holding an Eastern Sectional Meeting in Durham, New Hampshire, at the University of New Hampshire on April 22-23, 2006.
3. Approved the minutes of the Secretariat Business by Mail from the ballot dated June 1, 2004.

Robert J. Daverman

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Knoxville, TN 37996-1330 USA

Robert J. Daverman, Secretary Email: daverman@math.utk.edu

## SECRETARIAT <br> Business by Mail <br> September 1, 2004 <br> MINUTES <br> from the Ballot dated August 1, 2004

There were five votes cast by John Bryant, Robert Daverman, Susan Friedlander, Michel L. Lapidus and Lesley Sibner.

1. Approved electing to membership the individuals named on the list dated August 20, 2004.
2. Approved changing the date of the Spring 2005 Council Meeting to 09 April 2005 (from 23 April 2005). Location of the meeting is to remain Washington, D.C., as originally approved.
3. Approved holding a Southeastern Sectional Meeting on November 3-4, 2006, at the University of Arkansas in Fayetteville, AK.
4. Approved co-sponsorship of the $5^{\text {th }}$ Conference on Poisson Geometry to be held in Tokyo, Japan, in early June 2006.
5. Approved the Secretarial Minutes dated Friday, 23 April, 2004.
6. Approve the minutes of the Secretariat Business by Mail from the ballot dated July 1, 2004.

Robert J. Daverman

# American Mathematical Society Committee on Science Policy Activities Report to ECBT November 19-20, 2004 

In 2004, the format for the annual meeting of the CSP was changed. This meeting is now structured as a forum on science policy, addressing current issues of interest to mathematics and science. The next CSP Forum will be held April 7-9, 2005 in Washington, DC.

For 2005 we will continue with the meeting format held in 2004, with the meeting beginning on Thursday evening with a reception and a dinner, followed by a directed discussion. On Friday and Saturday we will have our usual presentations from congressional, administration, and agency staff along with discussions among the participants.

Also for 2005 we will consider encouraging CSP members and department participants to plan on being available during the day on Thursday for making visits to congressional offices. The Washington Office will develop a presentation strategy for participants to use during these visits.

We will continue to evaluate the structure of the CSP meetings as well as COE meetings for 2006. For each of these meetings, mathematics department representatives are encouraged to attend and the number of participants is increasing. One idea being considered is moving the Department Chairs Workshop, now held the day before the Joint Mathematics Meetings, to either the Thursday before the CSP meeting or to the Thursday before the COE meeting.

CSP will host a discussion on mathematical sciences' contributions to biomedical research at the Joint Mathematics Meetings in Atlanta in January 2005. Dr. Jeremy Berg, Director of the National Institute of General Medical Sciences, one of the institutes of the National Institutes of Health, will talk about the National Institutes of Health's interest in supporting mathematical sciences research that leads to solutions of biomedical problems. The Committee also will have Dr. Adam Arkin, Department of Bioengineering, University of California, Berkeley, a biomedical researcher, who will talk about the mathematical challenges in the analysis of cellular systems.

CSP has also initiated a Special Session at the 2005 Joint Meetings entitled "Mathematical Sciences’ Contributions to the Biomedical Sciences." Peter March (Ohio State University), De Witt Sumners (Florida State University), and John Whitmarsh (National Institutes of Health) are the organizers of the session. Mathematicians and biomedical scientists will speak in the session.

Samuel M. Rankin, III
Associate Executive Director
October 26, 2004

# American Mathematical Society Committee on Education Meeting 

October 22-23, 2004<br>Washington DC

Summary Report

The Committee discussed a number of issues related to mathematics education including: professional development for teachers; assessing exit exams; evaluating curricular effectiveness; implementing mathematics standards; improving the quality of mathematics education; programs and funding at the National Science Foundation; and issues in undergraduate and graduate education. Guests of the Committee included representatives from the NSF, Achieve, Math for America, the American Mathematical Association of Two-Year Colleges, the Mathematical Sciences Education Board and the U.S. Department of Education. The meeting was very well attended with 87 participants, including over 50 chairs of masters and doctorate-granting departments of mathematics representing institutions from across the country.

## Achieve's Projects and Activities in K-12 Education

Laura McGiffert of Achieve Inc. spoke primarily on the organization's efforts in assessing exit exams. She also discussed their work on developing mathematics expectations for the end of eighth grade. For the past year and a half, Achieve has been working on "backmapping" (looking backward to see what steps are necessary to achieve the outlined goals) those expectations from eighth grade down through kindergarten. A draft of these expectations is due to be out in December 2004.

Achieve has also been working on identifying what knowledge and skills high school graduates should possess in order to be prepared for success in college and in the world of work. High school exit exams can measure these factors and Achieve, in partnership with Michigan State University and other expert advisors, has been conducting studies in six states (FL, MA, MD, NJ, OH, TX) to analyze mathematics and English language arts exams. Achieve reached three conclusions: the tests are not overly demanding and high school graduates can be expected to pass them; the exams will need to be strengthened over time to better measure the knowledge and skills high school graduates will need to succeed in the real world; and states should not rely exclusively on these tests to measure everything that is important in the education of our youth.

## AMATYC's New Mathematics Standards for Two-Year Colleges

Susan Wood (J. Sargeant Reynolds Community College), past president of the American Mathematical Association of Two-Year Colleges (AMATYC), introduced AMATYC's 1995 publication entitled "Crossroads in Mathematics: Standards for Introductory College Mathematics Before Calculus." These standards are being revised and updated in a new publication, "Beyond Crossroads: Implementing Mathematics Standards in the First Two Years of College." The final written version is due to be released in November 2006, along with a small number of digital products.

In updating and building upon the 1995 edition of Crossroads, AMATYC hopes to improve student learning at the introductory college level by communicating a renewed vision and guidelines for curriculum, pedagogy, research, professional development and assessment. It was widely felt among two-year college math faculty that information on implementation of the standards was missing from the first Crossroads. Therefore, the focus of the new document is five implementation standards in the following areas: learning environment; instructional strategies; curriculum development; assessment; and professionalism.

## Math for America

Irwin Kra, professor of mathematics at SUNY Stony Brook and the Executive Director of Math for America (MfA), discussed the work of this new foundation which was established in early 2004 to improve the quality of mathematics education in U.S. schools by addressing the problem of teacher quality. MfA has launched two inaugural programs that create opportunities for more than 200 high school math teachers in New York City public schools - the New York City Newton Fellowships for prospective math teachers and the Newton Master Teacher Fellowships for current New York City high school math teachers.

The Newton Fellowship program seeks to add 180 new math teachers to NYC high schools over five years. This program recruits college seniors and mid-career professionals with math or math-related backgrounds and provides training and strong financial incentives to get them into the New York City public school system as high school math teachers. Forty fellows will be chosen in 2005. The Newton Master Teacher program rewards teachers who demonstrate outstanding mathematical and pedagogical skills with a $\$ 50,000$ award. Ten master teachers will be chosen in 2005.

In the near future, Math for America intends to expand their programs to other cities in the U.S., but eventually they would like to see a federally-funded national program. MfA is also developing other programs expanding beyond high school grades.

## Report on U.S. Department of Education Mathematics and Science Partnerships (MSP) Program

Pat O'Connell Ross with the U.S. Department of Education presented an update on the Mathematics and Science Partnership (MSP) program after its first year. This initiative is the signature program of the "No Child Left Behind" Act of 2001and focuses on professional development for mathematics and science teachers to improve their content knowledge and pedagogical skills. Proposals are solicited through an open competition in each state. States are then responsible for reviewing and awarding project grants to promising programs aligned to the priorities established by the state. States are asked to make multi-year awards and to make grants large enough to measure results. In 2003, the majority of states focused their priorities on elementary and middle school mathematics. Most states also made 2-3 year awards with project funding at the $\$ 100,000$ to $\$ 500,000$ level.

Ross also briefly discussed the U.S. Department of Education's Mathematics and Science Initiative (MSI), which focuses on achieving three goals: creating more public awareness of the
importance of mathematics and science education; improving teacher quality; and investing in research to improve our knowledge of what boosts student learning in mathematics and science in the classroom.

Ross also reported that the U.S. Dept. of Education has held summits on both mathematics and science in the last 1.5 years and is interested in replicating those summits around the country. As a result the Department has joined with NASA to fund an organization that will work with states that are interested in hosting such summits, which will bring together the academic and business communities, along with public school systems, to talk about mathematics and science education.

## Report on Programs and Issues from the National Science Foundation's (NSF) Division of Undergraduate Education (DUE)

Elizabeth Teles and John Haddock with NSF-DUE discussed a number of programs at DUE. The newest effort is the Interdisciplinary Training for Undergraduates in Biological and Mathematical Sciences (UBM). The goal of this program is to enhance undergraduate education and training at the intersection of the biological and mathematical sciences and to better prepare undergraduate biology or mathematics students to pursue graduate study and careers in fields that integrate the mathematical and biological sciences. Another program is the Mentoring Through Critical Transition Points in the Mathematical Sciences (MCTP) program. MCTP provides a system for mentoring students at points of transition in a mathematical sciences career path.

The NSF Director's Award for Distinguished Teaching Scholars (DTS) was also discussed. This award identifies and rewards individuals who have contributed significantly to the scholarship of their discipline and to the education of students in science, technology, engineering and mathematics (STEM) and who exemplify the ability to integrate their research and educational activities. Additionally, the STEM Talent Expansion Program (STEP) and the Advanced Technological Education (ATE) program were also discussed.

A brief presentation was given on DUE's new Teacher Professional Continuum (TPC) and the Course, Curriculum and Laboratory Improvement (CCLI) programs. The TPC program seeks to help better understand the development of infrastructure and models of implementation, to advance the research base and to develop resources in K-12 education. The CCLI program seeks to improve the quality of STEM education. Currently, the program is broken down into four tracks: adaptation and implementation; educational materials development; national dissemination; and assessment of student achievement. However, CCLI has recently been changed to address three phases instead: exploratory projects; expansion projects; and comprehensive projects.

## Panel Discussion on Aspects of VIGRE Projects That Can, Should, or Are Likely to Continue After Termination of NSF Money

Alejandro Adem (Univ of Wisconsin-Madison), Al Boggess (Texas A\&M Univ), Robert Greene (UCLA) and Doug Ulmer (Univ of Arizona) headed up a panel discussion on successful projects at their individual institutions that have been funded by NSF Grants for Vertical Integration of

Research Education in the Mathematical Sciences (VIGRE). These projects: integrate research and educational activities; enhance interaction between students and faculty; broaden the educational experiences of students to prepare them for career opportunities; and motivate students to seek an education in the mathematical sciences.

It is unclear at this time whether funding for VIGRE will be provided in the long term and at what levels.

## Report from the NSF Division of Mathematical Sciences on VIGRE Type Programs

John Conway and Hank Warchall with the NSF Division of Mathematical Sciences (DMS) gave some background information on the work of DMS and noted that the DMS is primarily focused on funding research in the mathematical sciences, but that it also has an educational component that includes training programs such as the new "Enhancing the Mathematical Sciences Workforce in the $21^{\text {st }}$ Century" (EMSW21) program, which includes VIGRE, RTG and MCTP as its three components.

The EMSW21 program has replaced VIGRE as the primary educational program at DMS and it combines VIGRE, RTG and MCTP under its umbrella. The goal of the EMSW21 program is to increase the number of U.S. citizens, nationals and permanent residents who are well prepared in the mathematical sciences and who pursue careers in the mathematical sciences and other NSFsupported disciplines. The EMSW21 budget for FY 2005 is slated to be $\$ 18.5$ million, $\$ 10$ million of which is to fund VIGRE alone. However, although funding for VIGRE has not declined in size since the shift to EMSW21, the FY 2005 budget will not allow for renewal of all five year VIGRE awards which are now closing. This is why RTG and MCTP become more important.

Research Training Groups (RTG) will provide funds for groups of researchers having related research goals in the mathematical sciences to foster research-based training and education. The budget for RTG is $\$ 4$ million with a possibility of six awards of up to $\$ 500,000$ per year for five years. The Mentoring Through Critical Transition Points (MCTP) program will provide a system of mentoring devoted to points of transition in a mathematical sciences career path that are critical for success -- from undergraduate studies to the early years in a tenure track position. The budget for MCTP is $\$ 4.5$ million, plus a contribution from the NSF's Directorate for Education and Human Resources. There is a possibility of five MCTP awards of up to \$500,000 per year for five years.

## Report from Subcommittee Evaluating AMS Graduate Education Activities

A written evaluation of AMS graduate education activities was given with Robert Greene (UCLA) and Alejandro Uribe (University of Michigan) surveying these activities and programs including: data collection and publication which provides a systematic record of graduate mathematics education; employment activities including the employment center at the Joint Mathematics Meeting, "math.jobs.org" and the Employment Information in the Mathematical Sciences (EIMS) employment listing service; fellowship and membership activities such as the AAAS Mass Media Fellowship program; and, the forum on graduate studies held at the Joint

Meetings. They also looked at the AMS’ work on the Committee on Teaching Assistants and Part Time Instructors with the MAA.

## Report on MSEB's Project "On Evaluating Curricular Effectiveness: Judging the Quality of K-12 Mathematics Evaluations"

Donald Saari (University of California - Irvine) presented a report by the Mathematical Sciences Education Board (MSEB) which was a review of evaluations that others have produced concerning the effectiveness of the thirteen sets of mathematics curriculum materials developed with support from the NSF and six sets of mathematics curriculum materials that were generated commercially. The MSEB committee which undertook this evaluation was able to identify and examine almost 700 studies on these 19 curricula. Studies deemed relevant were then categorized into four evaluation methodologies: content analyses, comparative studies, case studies and synthesis studies. The committee solicited expert testimony on these evaluations, held workshops, developed an evaluation framework, and produced a report on their findings.

In the report, recommended practices were made for evaluators including: representativeness; documentation of implementation; curricular validity of measures; multiple student outcome measures; content analyses and comparative analyses; and, case studies. Recommendations were also made for use by the three primary curricular evaluators -- the federal agencies that develop curricula, publishers and state and local districts and schools.

## Comments on State Mathematics Standards From a Group of Mathematicians

Roger Howe (Yale University) reported on his participation in a state standards comparison project at the Park City Mathematics Institute (PCMI). The National Council of Teachers of Mathematics (NCTM) was able to use the PCMI as a venue for state standards comparison activity between NCTM and the Association of State Supervisors of Mathematics (ASSM) to see how much commonality there was in these 50 sets of state standards to determine to what extent there was a defacto national curriculum. The NCTM-ASSM comparison project found that: 1) there was substantial commonality in the early years between sets of standards; 2 ) there were broad similarities at higher grades, but little concordance on details. A report on these comparisons is being drafted now. It will be posted on the PCMI website with a possible print publication.

## Panel Discussion on Issues and Challenges in Undergraduate Mathematics Education

 Deanna Caveny (College of Charleston), Robin Forman (Rice University), Bogdan Vernescu (WPI) and Lynne Walling (University of Colorado, Boulder) headed up a panel discussion on some of the issues and challenges in undergraduate mathematics education. Panelists presented their views and experiences in trying to meet the needs of students. They highlighted programs that their institutions are utilizing to address these needs and also discussed areas where improvement is needed.CoE activities at Atlanta, GA Joint Mathematics Meetings, January 2005
Events hosted by the Committee on Education that are scheduled for the Joint Mathematics Meeting in Atlanta in January 2005 were highlighted, including a Special Session entitled "Mathematicians Work on Mathematics Education" and a panel discussion entitled "Mathematicians as Educators." In addition, it was reported that the annual department chairs workshop will be held Tuesday, January $4^{\text {th }}$ and that there will be a Special Session on "Mathematical Sciences' Contributions to the Biomedical Sciences" and a session on areas in biomedical science where contributions from the mathematical sciences is critical.

## Date of Next Meeting

The next meeting of the AMS Committee on Education was scheduled for Friday-Saturday, October 28-29, 2005 in Washington, DC.

Submitted by Anita Benjamin
American Mathematical Society
November 2, 2004

## Activities of the American Mathematical Society Related to Graduate Education: Report to the AMS Committee on Education, October 2004

The AMS has a number of on-going activities and programs that are directly relevant to graduate education in the United States. Some of these are statistical in nature: publishing data on PhD production and employment and the like. Others assist graduate students directly, most importantly in finding employment. There is also a single fellowship program and a program to give nominated graduate students free AMS membership during their graduate student career. And finally, there are advisory activities designed to improve graduate education as a whole.

- The data collection and publication activities:

The Annual Survey of the Mathematical Sciences, published by the AMS, includes data on departments, students, and faculty, and on graduate students in particular. The Society collects data on new doctorates and on graduate students prior to their degrees. Each February, the Notices publishes a list of doctorates conferred, including the names of the recipients with thesis title and institution granting the degree. The September Notices contains a profile of graduate students as a whole.

The collection and publication of these data obviously require considerable time and effort on the part of the AMS personnel. However, this is a service of great value. It produces essentially the only systematic record of graduate mathematics education in the U.S., beyond the level of records in each individual PhD granting institution. And without it, the mathematics community would be only anecdotally informed about what was actually going on in its graduate educational activities as a whole.

- The employment activities:

The most familiar of the Society's employment activities is the Employment Center at the Joint Mathematics Meetings held each January ("the annual meeting"). The Center facilitates meetings and interviews between graduate students expecting to complete their degrees the following June and potential (mostly academic) employers. This service is a fixture, so to speak, of the academic mathematical life of the U.S. Everyone seems to know about it, faculty and students alike, and to use it strongly. Each year approximately 200-300 students sign up to participate, and more than one hundred potential employers participate.

The Society also runs EIMS (Employment Information in the Mathematical Sciences), an online (and print) employment listing service. This provides announcements of positions available, searchable by various categories (type of position, location, etc.) The website is well organized and easy to use. This is also one of the fixtures of U.S. mathematical life, as was its printed (only) predecessor. Somewhere between 1,000 and 1,500 finishing graduate students interact with this service in some form or another. Thus, essentially every graduate student job seeker uses this service.

A third program is "math.jobs.org", a web-based job application system. This service is attempting to be a centralized clearinghouse for job applications for PhD mathematicians. Such centralized systems have worked well in other contexts. Prospective employees can post
applications including letters of recommendation (entered by the authors of the letters, not the applicants), and prospective employers can post the types of positions available. There is a system of downloading applications for employers, and a selection process available to enable applicants to specify the jobs to which they wish to apply. The system does not involve any sort of joint evaluation by the employers. (This would seem to be both impossible and inappropriate, so its omission is completely justified; the kind of cooperative placement system used by medical school admissions, for example, is not really relevant to the picture here.)

At present, the service is not really covering the whole mathematical scene, with only approximately fifty departments participating, ranging from the very high research rated (e.g., MIT) to teaching colleges without research components. Fifty is a small fraction of the number of academic institutions that could be involved. The smallness of this number seems to reflect the lack of responsiveness to publicity for the program. (UCLA, the institution of one of the authors of this report, does not participate because none of the relevant personnel including the department chair had ever heard of the program, according to the author's informal investigation.) This is not to say that the publicity is not there -- the AMS has been making strong efforts, including numerous mailings to department chairs -- but mathematicians are apparently slow responders to such things! The Society is expecting increased use of this system in the future. Considering that all the large departments receive literally hundreds of (paper) applications each year, an on-line centralized service offers great practical advantages. Departments should be encouraged to use this service, which as noted in no way usurps any judgments by employers, but simply allows an easier transmission of information from potential employees to prospective employers.

The Society also maintains a careers website, which provides general advice on mathematical careers and information about career possibilities (www.ams.org/careers). This is especially useful in making people aware of career possibilities of a nonacademic nature, the academic possibilities being naturally familiar from students’ own experiences.

- The fellowship and membership activities:

The Society offers, through the AAAS Mass Media Fellowship Program, a summer sponsorship of at least one graduate student for work in a mass media outlet (newspapers, magazines, radio and television stations: the present holder worked for Scientific American). This is intended to allow the participant to learn how to write science articles for general audiences. Considering the lamentable state of writing on mathematics in mass media, this is no doubt a worthy cause, although the fellowship program is perhaps not large enough to have a major impact on the overall situation. This program deserves wider publicity (the author of this report had never heard of it before beginning the writing of this report.)

The Society offers free membership to graduate students upon nomination by their graduate department. There is no set limit on the number of students a department can nominate, and the 9,600 graduate student members in this program would seem to be a high percentage of the total number of graduate students eligible. Student members are also offered reduced registration fees for meetings of the AMS.

- The forum for graduate studies:

The Society has instituted a forum of the directors of graduate studies from doctoral departments, held at the Joint Meetings. This consists of discussions of topics related to graduate education, the topics being sent to the participants in advance. These have proved useful and are expected to continue, held on the morning of the first full day of each Joint Meeting.

On a related topic, jointly with the MAA, the AMS participated in the Committee on Teaching Assistants and Part Time Instructors. This committee’s work has centered on two issues of relevance to graduate students: (1) how to improve the training of Teaching Assistants; and (2) to survey how institutions train their TAs and the TAs general work conditions. Efforts of this committee have been centered in providing TA trainers with forums for discussion and by striving to make available training materials. The immediate goals of this committee emphasize the dissemination of materials related to TA training.

At the meeting of the AMS Committee on Education where the initial version of this report was discussed, it was pointed out that, while the AMS takes very good care of graduate students who are nearing the completion of their education, there is less attention paid to those in the early and middle stages of the PhD curriculum. At the meeting and thereafter, various ideas were proposed for mending this situation. Notable among these was the idea of setting up a mechanism (a website would be natural) for the exchange among mathematics departments and graduate students of information about curricula and qualifying examinations, including posting of examinations themselves and/or problems from them. This would not only provide study material for students but also would give faculty the opportunity to compare their own activities along these lines with those of other universities. Ideas were also mentioned about workshops for teaching assistants and other forms of communication across department lines. These matters are well worth further thought. The website for sharing qualifying examination and curricular information in particular would be easy to set up and very useful.

Robert E. Greene
Alejandro Uribe

# Committee on the Profession Highlights 

October 2-3, 2004
O'Hare Hilton Hotel, Chicago

The Committee on the Profession (CoProf) discussed recommendations from the final report on the focused planning effort on membership that were presented to the November 2003 ECBT. Specifically addressed were those recommendations that could be carried out by staff over a period of several years. Details on several new initiatives in 2004 that are steadily improving member recruitment and retention efforts were also shared. It was noted that initiatives requiring approval by the Board of Trustees and Council have also made progress in the past year.

At the request of the Chair of the AMS Council Subcommittee on Fellows, Henri Gillet, CoProf examined the responses to and comments on a member survey on creating an AMS Fellows program. It was noted that opinion is divided on this issue with good arguments in favor of and opposed to such a program. After a lengthy discussion of the difficulties inherent in starting a Fellows program, a member of the committee suggested a solution: choose only individuals with relatively recent PhD degrees (e.g. in the $21^{\text {st }}$ century). This suggestion led to a more optimistic assessment of the prospects of a Fellows program. CoProf concluded that a transition plan is of critical importance and suggested that the development of such a plan may be the most appropriate first step for the Council Subcommittee to consider. CoProf looks forward to more information as the AMS Council Subcommittee on Fellows studies this issue further.

In its report to CoProf, the subcommittee charged with the review of the Society's activities in the area of employment issues and opportunities made three recommendations. The recommendations were that the AMS: 1) collect data on postdoctoral positions and on the transition from postdoctoral positions to tenure-track positions, 2) aggressively advertise the MathJobs.Org service to mathematics departments, and 3) continue to collect information about jobs for mathematics majors on a regular basis. The Committee accepted the report with thanks and noted that the AMS staff is currently moving in the direction of the subcommittee's recommendations.
CoProf observed that the 1994 Council Statement on Employment of Young Mathematicians could benefit from reconsideration and updating. The Committee agreed that, if charged by the Council, CoProf will appoint a subcommittee to review the statement and recommend changes in wording where appropriate.

The Committee explored various aspects of the "pipeline" issue as seen within the mathematical sciences. Specifically, members discussed whether there is a "pipeline problem" in mathematics or if there is one looming down the road, how the pipeline issue in mathematics differs from that of other disciplines, and what is the proper role for the AMS in discussions of the pipeline issue. CoProf anticipates the need to craft a useful principles statement, expressing what is important to our community, to be directed to both the NSF and mathematical sciences departments. The CoProf Chair and AMS staff has been charged with determining how to proceed.

At the request of President Eisenbud, CoProf discussed a possible AMS project growing out of the findings and recommendations of a National Science Board Committee on Education and Human Resources workshop entitled, "Broadening Participation in Science and Engineering Research and Education". The Committee will recommend to the January 2005 Council that the AMS highlight two programs per year that: 1) aim to bring more persons from under-represented minority backgrounds into some portion of the pipeline beginning at the undergraduate level and leading to advanced degrees in mathematics and professional success, or retain them once in the pipeline; 2) have achieved documentable success in doing so; and 3) are replicable models.

Prompted by recent member inquiries received by the Executive Director and the Secretary, CoProf discussed the issues surrounding the evaluation of the professional accomplishment of mathematicians. Of special interest is the evaluation outside the math community by deans, provosts, university promotion and tenure committees and the confusion that can result from the difference between mathematical practice and that in most sciences. CoProf agreed to inform the Council of its intention to develop a series of "information statements" on the culture of research and scholarship in mathematics, statements that would be readily available on the AMS website and backed by relevant data that the Society can accurately obtain. Two examples that CoProf saw as useful and uncontroversial were a) the practice in mathematics of listing authors, including the predominance of alphabetical order in most subfields, and b) the (low) number of PhD students supervised by non-tenured mathematicians and the role of PhD students in a mathematician's research program.

The Committee selected the Society's activities to increase participation at all levels of under-represented groups (e.g., women, African-Americans, Hispanic Americans, native Americans) as the topic of the coming annual review. This subject was last reviewed in 1995. A subcommittee will be formed to conduct the review.

CoProf will hold its next meeting on September 24-25, 2005 at the Chicago O'Hare Hilton.

## Report on Fellows Survey

At the request of the Council Subcommittee on Fellows, Subcommittee Chair Gillet developed a web-based survey whose aim was to gather members' reactions to the idea of a "Fellows of the AMS" program similar to those of numerous other professional societies. A random sample of just over 1,300 ordinary and life members in the U.S. and Canada were sent email on September 13 inviting them to complete the survey via the web. As of the close of the survey on September 21, 244 individuals has responded, a $19 \%$ response rate.

The automatic tabulation of the responses to the questions, a selection of comments received and a summary of reactions to the survey results from members of the Subcommittee on Fellows follow in the order listed.

Jim Maxwell
October 27, 2004

Attachment 6
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## Results Summary

## Filter Results

To analyze a subset of your data, you can create one or more filters.

Add Filter... Total: 244
Visible: 244

## Share Results

Your results can be shared with others, without giving access to your account.

## 7. American Mathematical Society

1. Are you generally in favour of the creation of a Fellows program by the AMS?

2. If the AMS were to institute a Fellows program, which of the following do you think should be among the criteria that should be considered in selecting fellows? (CHECK ALL THAT APPLY)
$\left.\begin{array}{cccc} \\ \text { Achievement in Research } & & \begin{array}{c}\text { Response } \\ \text { Percent }\end{array} \\ \text { Response } \\ \text { Total }\end{array}\right)$

## 8. The American Mathematical Society, ctd

3. If the society were to institute a Fellows program, what percentage of the eligible membership would you prefer that the total number of fellows be limited to?

|  | Response <br> Rercent |  |
| ---: | :--- | :--- |
| $\mathbf{R e s p o n s e ~}$ |  |  |
| Total |  |  |

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## 9. Initial Implementation

4. Would you be in favour of such a transition period, during which greater numbers of fellows would be elected?

5. If there were to be a transition period, what is your preference for its length?


## 10. Length of Membership

6. For approximately how many years have you been a member of the AMS?


## 11. Thank You

## The following are a representative selection of the $\mathbf{8 5}$ comments received with the survey.

Please feel free to send a short comment for the subcommittee's consideration.
3. I am wary of this sort of self-celebration, in particular, the tendency I've seen in other organizations to engage in group celebration among various internal cliques. On the othe hand, I think the profession has suffered by being too conservative in such matters. I would hope this can be done with some care if it is done at all.
4. If we do it we should do it in a way that gains the most advantage for our profession. One reason for doing it is that it might help mathematicians compete for things like university chairs and deanships. In some universities (big state research institutions under severe budgetary pressure, for example) this could really make a difference. Another reason is that it could help lift the morale of the profession by providing an honor less inaccessible than ones currently available. Both of these reasons support the argument for a large percentage (although I thought $12.5 \%$ was going a little too far). I wasn't convinced by the objection that the honor would hurt people who didn't get one, except that I thought this might be a possibility if there was an initial land-rush for these things, which is why I opposed the idea of a rapid phase-in period.
5. I fear that a Fellows Program would become political, recognizing some areas that are currently hot while ignoring too many others. Well known mathematicians who are already recognized would likely head a list of Fellows. Young mathematicians are facing terrible difficulties today trying to secure research and travel funding. I would much rather see the AMS put more resources at their disposal.
8. I do not think a Fellows program is a good idea. It is yet another "rich get richer" scheme that labels some mathematicians as good and the rest as bad, based on who already has things like grants and prizes. Having a small number of prizes to single out especially notable contributions to mathematics is one thing, which I support; making a division between large parts of the mathematical community is another, which I deplore.
16. I love the distinguishing democracy of mathematics and would be sorry to see it change to accommodate Fellows.
21. This is a TERRIBLE! idea. I am a member of another society, the American Academy of Mechanics, that elects "Fellows" and I know (but am not a member of) many of those elected (and not elected) by the ASME. Friends get elected, others get overlooked. (I am not considering myself.) The AMS should support MATHEMATICS, rather than individual Mathematicians. There is already too much "personality cult" in all of the professional communities.
22. I feel this would be an excellent way to honor outstanding members of the mathematical profession. My only concern is that the deciding criteria not be limited to just excellence in a narrow field of research [Fields medals and other awards exist for recognizing such achieve- ments] but should include broadbased research, exposition of mathematical topics, and service and education achievements. If I may
be so bold, two of the professors at my mathematical alma mater [Univ. Wisc., Madison] certainly would meet any appropriate criteria: Professors Walter and Mary Ellen Rudin.
27. I think it's good for mathematics, as seen by people outside of mathematics, to have more awards and formal recognition of excellence in the profession than we do currently. In the same way, I think the best plan is to give awards to many mathematicians, rather than to recognize the excellence of a few, with more than one award. Also, the Fellows program is an opportunity to give recognition to mathematicians who are good at all three aspects of the job--research, teaching, and colleagueship--like an all-around award.
28. I'm a Fellow of the Insitute for Mathematical Statistics, but find that their Fellowship program is *very* capricious. Many extremely deserving members don't have Fellowships because nobody has thought/bothered to nominate them, whereas some other members are very active in producing nominations so that there is a definite clustering of Fellowships in certain departments and sub-fields. My guess is that an AMS Fellowship with result in a mix of the "usual suspects" plus somewhat undistinguished mathematicians with active colleagues that are willing to put the time in to boost their careers and their department's cachet.
30. I haven't answered any of the detailed questions because I think that they make no difference. This seems like a bad idea to me, in any form. It invites political favoritism (already evident in the question of whether teaching should be a relevant criterion, for example), and, most of all, if enacted it will require a large investment of time and energy by the AMS and its member, for purely ceremonial outcome, without direct impact on the actual goals of the AMS. A bad idea.
32. Being a fellow of the AMS should mean that one has done something significant in mathematics, but it should not be extremely exclusive. Hence having 10 percent of the membership as fellows seems about right to me.
33. I am very against the idea of having Fellows for the AMS. The AMS should be as open and welcoming as possible. Having Fellows would only encourage even more of a caste system.
36. The value of this program would consist in honoring not the great, who in most cases already have many honors, but the very good.
38. The long term benefits of a personal nature and to the Society in general far outweight any of the negative points indicated earlier. I support strongly the creation of a Fellows status within the Society. I do have one concern, and it has to do with the delicate selection process. My past experience with the Society is that certain minority groups( e.g., hispanics) at best get token representation on such committees. I would like to suggest that the committee's recommendations, if the Fellows program were to materialize, address the issue of "Fair Selection"
39. I would prefer that this be elitist so that being a fellow would be truly distinctive. I would prefer a one year transition period (if one at all) to name the first 500 fellows of the society and then maybe a fixed maximum of 50 a year.
40. The committee may want to reread Norbert Wiener's letter of resignation from the National Academy. His arguments still apply as human vanity is certain to take
over the process, however nobly motivated. Mathemamtica, par exellence, is a democratic calling and poorly suited to awarding of medals.
44. It is time for mathematicians to be recognized.
46. Dear Professor Gillet, I strongly oppose the creation of this new category of membership. It will create a second-class membership for the majority. The arguments which are put forward for this innovation seem to be to be contrary to the spirit of the American Mathematical Society. I believe that the purpose of the AMS is to foster the mathematical research, not to assist its members in gaining higher salaries through the special chairs or to achieve postions of administrative influence such as Deans. I became a foreign member of the AMS in 1980, and it was a source a pride and a stimulus to work to be a fullfledged member of the society. With creation of the fellowship category, the membership of others will be reduced to the most convenient way to subscribe to the two main society journals, Notices and the Bulletin.
51. I don't think the number of fellows should be set by percentage, but should be given to any number of people (high or low) who quality according to well-defined criteria. Given the importance of mathematics education in today's society, achievements in mathematics education, including math ed research, should be equally valued in the criteria for fellowship.
52. The idea of having AMS Fellows is a very good one and long overdue. Mathematicians have the smallest number of honors than any other descipline. It is time to remedy that. It will benefit everyone and to avoid unhappiness it should be done fairly. That will be the main issue. People are quite accepting of honors given to people who they believe are deserving.
61. I am totally against it because: 1) More letters of recommendation to write! 2) Elitist universities (like mine) will use it as a criterium for tenure (How come your candidate is not a fellow?). 3) There are already too many prizes, grants, memberships in Academies to say nothing of differences in salaries between departments or even, within a department. Enough is enough.
66. On balance I think the negative arguments outweigh the positive ones. Who would make the decisions and how much of their time would be absorbed by this, especially at the outset? How could one devise a rational cutoff point? (The NAS has never solved this problem, instead electing some people who are of retirement age even if their achievement was much earlier.) It would be a logistical nightmare for AMS to administer, and would only accentuate the current tendency of NSF grants to glorify winners over losers. The real world has a lot of uncertainties about which contributions will have ultimate impact, so short term decisions tend to overemphasize fashions in research.
71. Has the committee considered a joint fellowship program with MAA and/or SIAM?
72. The elitist tendencies of the AMS are why I have NOT been a member for the majority of my professional career, and this new program is likely to cause me to LEAVE the AMS once and for all.
80. One more stupid idea. Enough of medals and ribbons! If the AMS goes in this direction instead of focussing on Mathematics, I'll quit immediately.

## AMS Fellows Subcommittee Summarized Remarks on Survey Results

## Ron Stern:

Well, this made for interesting reading. I have always been in favor of creating an AMS Fellows program for all the obvious reasons (e.g. to point out to the academic public that our university has members of its very own mathematics department elected by their colleagues as a fellow after all physics, engineering, etc have several and math has none) More broadly, we need to find a vehicle to put a spotlight on excellence in mathematics and, I have earlier argued, the fellows program is a start.

However, there are good arguments (mentioned in the responses) that these bragging rights might come at the cost of the collegial nature of the AMS membership. After all, the goal of the AMS is to support a very broad based group of mathematicians, not just those employed at, say, Tier I research institutions. I find this to be a compelling argument against the fellows program.

However, I return to the broader issue facing our profession. Most universities and colleges do not trust their own internal evaluation. They look for external validations for which our profession provides precious few. How do we reward excellence in mathematics without creating a multi-tiered profession? Absent a fellows program, how do we more broadly convincingly highlight excellence in mathematics?

## Karen Vogtmann:

I think it would be premature to base a decision on the results of this survey, considering the extremely low response rate and the self-selected nature of the respondents. The only thing that is clear, from the comments, is that the people who have strong negative feelings about the idea are likely to voice their opinion. This is not surprising, on this or any other issue! I still feel that I have no idea what the majority of the membership thinks.

## Sheldon Katz:

As I see it, the survey results say the following:
The majority are in favor of a Fellowship Program
This majority is far from overwhelming
Some members have strong feelings on this issue
I am generally in favor of a Fellowship Program and agree with Ron that a number of good points have been made in opposition. But I'd like to separate that for the moment from some of the emotional content we read (both pro and con). It is the norm in organizational surveys for some people opposing a change to respond by flaming, and in comparison to other organizations the criticisms we saw were rather mild. Change is scary. I know, because I'm scared (about the administrative burden that could be placed on AMS and its members by an ill-conceived program). However, with a good program, we will attract more new members than we might lose.

The AMS has been thinking about this concept for years and every committee that has looked at this has been divided. This is in part the nature of trying to decide on whether a change should be made before a specific proposal is in place. This process, which we have followed for years,
invites criticisms about visions of what the program *might* look like. Not all criticisms will apply to the final form of the proposal.

I would very much like to see a specific proposal crafted which addresses the concerns that have been expressed. It would be especially helpful to me if CoProf could give their perspectives on what the most important criticisms are that should be addressed, and what strengths should be preserved, as a proposal is being formulated.

## Committee on Publications

October 1-2, 2004
The Committee on Publications met in Chicago on October 1-2, 2004. No actions from that meeting resulted in recommendations to the ECBT, although two matters will be brought to the January Council. Here are some highlights from the meeting.

Meeting with the Managing Editors: Prior to the meeting of the Committee on Publications, the managing editors of the four primary research journals met with the Secretary, Executive Director, Deputy Publisher, and Chair of CPub. The editors (or their representatives) discussed the guidelines for editors, the new Editorial Boards Committee policy for reappointment of editors, and the new system for central tracking of manuscripts. It was agreed that the Society will soon put in place a system for central receipt of manuscripts. (Managing the manuscripts will continue to be done as now, although editors will use the central tracking tool to record certain events.) In the future, the managing editors will meet as a group every other year, most likely in advance of the CPub meeting.

Guidelines for Editors: There was consensus to remove the specific times from the general guidelines, with the understanding that as a matter of good practice the managing editors of the journals will specify reasonable times for their particular journals. Slight modifications were also made to the text of the recommendations and the justification. The revised version is appended to this report. These guidelines will be brought to the January Council for approval.

Collected Works: The Committee moved to recommend to the AMS Council that the following paragraph be added as an addendum to the charge of the AMS Committee on Collected Works:
"Publishing the collected works (or selecta) of an eminent scholar honors that individual, while at the same time making that person's work conveniently available in printed form. In this sense, a collected works constitutes a prize, but a prize that has value to the community at large in addition to the honoree - a prize that may last for centuries rather than just for a few years."

Review of Member Journals: A subcommittee of CPub carried out a review of member journals, concentrating largely on the Notices and Bulletin. The subcommittee made some recommendations about ways in which both publications could be improved, and some of these have been communicated to the appropriate editors. The Committee accepted the report of the subcommittee with thanks and endorsed the main recommendation:
"The Committee on Publications recommends that the Notices continue upon its current course, as laid out in the Committee to Review Member Publications report. In particular, it should maintain its flexible policy of experimenting with new ideas and evolving to keep pace with the times."

Policy on Reappointments: The Committee discussed the new policy of the Editorial Boards Committee that members of editorial committees should generally serve at most two terms. While CPub agreed that the policy can be used as a guide in making appointments, it urged
ample consultation with the managing editors when implementing the guidelines. The need to have a healthy flow of new talent and ideas must be balanced against the need for stability and efficiency.

CPub Review for Next Meeting: The Committee agreed to review the AMS Electronic Journals since they have matured sufficiently to consider more carefully their future direction. In particular, the Editorial Boards Committee would like guidance about the scope of these journals in order to shape them through appointments in the coming years.

Information about Publication Issues: The Committee heard a number of reports about matters of copyright, ongoing legal actions affecting the Society, and progress in digitizing the past mathematical literature.

Next Meeting: The next meeting will be September 23-24, 2005.

Jonathan Wahl, Chair, Committee on Publications<br>John Ewing, Executive Director

## DRAFT

## GUIDELINES FOR JOURNAL EDITORS

## To guide the decision-making process

The journals of the American Mathematical Society are managed by editors who are appointed by the Society, but who carry out their responsibilities with much independence. The Society values the editorial independence of its journals and their editors. Nonetheless, the Society has endorsed these guidelines for editors to ensure that all authors feel respected and that the Society's journals maintain a high reputation.

1. Every submission will be acknowledged within a short period of time. The acknowledgement will provide the author with an expected time for an update on the paper's status. Editors usually will make arrangements for acknowledgement when they are traveling or unable to send acknowledgement themselves.
2. Submissions that are judged unsuitable for publication without being refereed will be declined in a timely fashion.
3. Each referee who agrees to review a manuscript will be asked to agree also to a target date for completion of a report.
4. An editor will write to the referee near the target date for a report in order to ask for a new target date.
5. An editor (or group of editors) will have a specific procedure to decide when to choose an alternative referee in order to restart the refereeing process. An editor will write to the
author when the refereeing process is restarted, providing a new expected time for an update on the paper's status.
6. Even with best efforts, decisions will occasionally require long periods of time. In all cases, if a decision has not been made 12 months after submission, the editor will write to the author to explain the reasons for delay and to offer the option of withdrawing the paper from the journal.

The goal of these guidelines is to ensure that the editorial process for AMS journals is carried out as efficiently as possible and that editors maintain regular contact with authors during this time.

## Report on the Mathematical Reviews Editorial Committee October 2004

The Mathematical Reviews Editorial Committee (MREC) met for its annual meeting at the Mathematical Reviews offices on October 18, 2004. The full committee: Heinz Engl, Lisa Fauci, Jonathan Hall, Tadao Oda, Ronald Stern, Alan Taylor (Chair); along with ex officio members, John Ewing and Donald McClure; and the MR staff were in attendance. As is customary, the meeting opened with informational items including reviews of the 2005 Operating Plan and 2003 Annual Report.

A standing item on the agenda (related to the scope of the database) is a presentation of Database statistics: the numbers of items and reviews added to the database by year for the last ten years, and within each year by 2-digit primary classification; the percentage of items listed without a review ("index only" items), again by year and classification; breakdowns of reviews by type ("author summary" versus external review); and the breakdown of reviews by type and broad cluster classifications. It is expected that in 2004 over 88,000 items will be added to the Database along with over 61,000 reviews. These represent increases of $13.9 \%$ and $6.5 \%$, respectively, over the corresponding 2003 numbers. There have been increases in all fields, but noticeably in the "Computer science" and "Biology and other natural sciences" classifications. In order to keep the number of reviews within current production limits, editors continue to use "index only" treatment; however, the preferred editorial strategy is to publish as many reviews as possible. Although MR does not expect another $14 \%$ increase in Database items in 2005, such an increase would severely overburden MR processing capacity.

The committee briefly discussed usage of MathSciNet by subject classification and the more fundamental question of how to lead researchers to the content that is in MathSciNet, for example the content in statistics, computer science and finance, where researchers have other sources of information.

During the past ten years, MR has published a new type of review, a Featured Review, for outstanding papers and books. These reviews are only solicited after expert opinion recommends Featured Review treatment for an item. Since January 1995, approximately 1000 Featured Reviews have been published, far short of the initial goal for the program. It should be noted that at the time of the inception of the Featured Review program, it was not apparent that MathSciNet would replace Mathematical Reviews as the MR publication of record. At last year's meeting, MREC set itself the task of reviewing this program and making a recommendation on its future. During the past year, committee members examined the existing Featured Reviews and help survey the community on the program. The surveys provided interesting input and valuable specific commentary, which was analyzed by the committee. MREC felt strongly that the Featured Review program is not reaching its original goal. It was decided that a journalistic program where editors choose a collection of "highlighted reviews", received as part of the normal MR process, will serve the same purpose and, at the same time, allow for easier inclusion of all subject classifications. This new program will maintain the merits of the Featured Review program by highlighting excellent reviews while affording editors the opportunity to use their journalistic and scientific knowledge without having to prejudge items for special treatment. It was suggested that a system should be developed to reward reviewers who contribute excellent reviews and enhance the Database in this "highlighted review" program. The recommendation of MREC is that: 1 . Featured Reviews be phased out, completing only those currently in the
pipeline; and 2. A new program with a new name be instituted, with editor-selected "highlight reviews". A concerted effort is to be made to balance fields in this new program. This balance will be evaluated after a period of time.

The Committee provided input on a proposed internal policy for material that was skipped (deliberately) or missed (accidentally) in the process of the construction of the database. Such a policy will allow MR to deal with community requests to add such material in a consistent and practical manner. The issue of skipped and missed material was considered by MREC at its 2000 meeting where the committee recommended "a continuation of the current practice of case-bycase evaluation". The committee felt the proposed new policy was too strict and agreed to supplement the 2000 policy with the statement: "Normally MR does not add material that is more than 5 years old."

Since the summer of 2001, the MR Database entry for items from some journals has included the list of references from the original article. Wherever possible, items in these reference lists are linked to the corresponding entries in the MR Database and a "citation database" is emerging. The committee received an update on the reference list project. By the end of 2005, reference lists for items from approximately 200 journals covering articles back to the year 2000 will be included in the Database. At that point MR will be in a position to offer the community a useful citation database of the mathematical literature. The committee reaffirmed its 2003 recommendation that priority for growth in the citation database should be in the expansion of the number of journals covered by the project.

Among the information items on the agenda was a report on the new features of the most recent version of MathSciNet. The committee showed enthusiasm for the new "collaboration distance" option. This option allows users to utilize the power of the author database and determine minimal collaboration paths between two authors. MathSciNet users now have a variety of personalization options and current awareness browsing options. Russian has been added to the list of search screen interface languages and Help pages have been redesigned in a more user friendly manner.

There were brief reports on the pricing structure for MR-related products, comparison of the MR and Zbl Databases and electronic process at MR. John Ewing provided information on activities related to the Digital Mathematics Library and the role MR and Zbl can play in retro-digitization efforts. The future interaction of the MR Database with Google was also discussed.

The committee followed up on its charge to review the MR Editorial Statement (available at http:www.ams.org/authors/mr-edit.html ). Reference to the Featured Review program will be deleted from the Editorial Statement. The committee offered additional cosmetic improvement including replacing the terminology "applied areas" with the more appropriate designation "other disciplines".

## Washington Office

Report to ECBT
November 19-20, 2004
Since the last report each of the House and Senate Appropriation Committees have marked up and approved a VA-HUD Independent Agencies bill. These bills include the National Science Foundation (NSF) budget. For FY 2005, the NSF is to receive a two percent decrease from FY 2004 in the House bill, while the Senate bill allocates the same budget level as the FY 2005 Presidential request, a 3 percent increase over FY 2004. Neither the full House or Senate have approved these bills. A compromise has to be worked out between the House and Senate, however, nothing will happen until after the November 2 election. It is anyone’s guess whether or not we will have an NSF budget this calendar year. Overall, only four of thirteen appropriation bills have been passed into law, Defense, District of Columbia, Homeland Security, and Military Construction.

The Defense bill includes funds for basic and applied scientific research and the Homeland Security bill includes $\$ 70$ million for university centers and fellowships along with funds for other specific science and technology areas. The FY 2005 DOD budget for basic research in science, mathematics, and engineering ( 6.1 funds) is up 6.1 percent over FY 2004 and the FY 2005 applied research ( 6.2 funds) budget is up 9.6 percent over FY 2004. For basic research, the Army (ARO) allocation is up 5.2 percent, the Navy (ONR) 1.4 percent, and the Air Force (AFOSR) 8.5 percent.

Other appropriation bills that are of interest to mathematics and science are the Energy and Water (Basic Energy Sciences and Advanced Scientific Computing) bill and the Labor/HHS/Education (NIH) bill.

The Director of the Washington Office continues to chair the Coalition for National Science Funding (CNSF). On June 22, the annual CNSF Exhibition was held in the Rayburn House Office Building on Capitol Hill. This 2004 Exhibition marked the tenth anniversary of the event. This was the most successful Exhibition yet, with over 370 attendees. This Exhibition highlighted NSF funded research and education projects at 33 universities and institutions across the country. The AMS sponsored Professor Lisa Fauci and postdoctoral student Nick Cogan from Tulane University. Their exhibit was titled Mathematical Modeling of Swimming Microorganisms. Anita Benjamin of the Washington Office was acutely instrumental in organizing the 2004 Exhibition.

During August, the Director of the Washington Office worked with colleagues from other professional societies to organize district visits with Members of Congress. In particular, Sam Rankin and Jane Hawkins (CSP chair) met, along with colleagues from the Optical Society of America and the American Society of Civil Engineers, with Representative David Price (D-NC) in Chapel Hill, NC. Later Sam and colleagues from the Ecological Society of America and the American Chemical Society met with Representative Jim Moran (D-VA) in Reston, VA. Sam also helped organize a visit in Houston, TX with staff from Tom Delay's (R-TX) office and William Fitzgibbon, a mathematician from the University of Houston, and colleagues
representing the American Chemical Society and the American Geological Institute. The purpose of these visits was advocacy for the NSF. Sam worked with his Washington colleagues to develop background information and talking points for the meeting participants to use.

On September 15, the annual AMS Congressional Luncheon Briefing was held. Professor Fred Roberts of Rutgers University highlighted contributions of the mathematical sciences to emergency preparedness, disaster prevention, and related security matters. Fifty-three people attended the briefing, including Congressman Vern Ehlers (R-MI), Dr. Charles McQueary, Undersecretary for Science and Technology, Department of Homeland Security, and Dr. Michael Turner, Assistant Director Mathematical and Physical Sciences, National Science Foundation, and many congressional staff.

For much of September the Washington Office was busy organizing the annual Committee on Education meeting held October 22-23. As in the last several years, department chairs or their representatives were invited to the meeting. Fifty-three department representatives registered for the meeting - thirty-two more than last year. Total attendance reached over eighty people. The day and a half meeting had a full agenda focusing on all levels of mathematics education -- K-12, undergraduate, and graduate.

Also during the fall, Sam Rankin has worked with mathematicians Sylvia Bozeman, Rhonda Hughes, Ray Johnson, David Manderscheid, William Valez, and Sylvia Wiegand to set up a December 3-4, 2004 workshop on mentoring and nurturing students. The workshop will be held in Tucson, AZ and is supported by an NSF grant, for which Sam is the PI. The workshop will focus on four key transitional points in a student's academic career: freshman-sophomore mathematics courses; transition from freshman-sophomore level mathematics to junior-senior level mathematics; undergraduate mathematical sciences major to first two years of graduate school in mathematics, or to employment, or to graduate and professional school (other than mathematics); writing a dissertation in the mathematical sciences.

In late summer and fall, Sam worked with Peter March of Ohio State University, De Witt Sumners of Florida State University, and John Whitmarsh of the National Institutes of Health to organize a special session at the 2005 Joint Mathematics Meetings entitled, "Mathematical Sciences’ Contributions to the Biomedical Sciences." This session was suggested at the Committee on Science Policy (CSP) meeting this past spring. The AMS CSP session at the Joint Meetings will include presentations by Dr. Jeremy Berg, Director of the National Institute of General Medical Sciences, an institute of the National Institutes of Health, and Dr. Adam Arkin, Department of Bioengineering, University of California, Berkeley. These presentations are intended for a general audience having interest in learning about areas in biomedical research where contributions from the mathematical sciences are critical.

Samuel M. Rankin, III

## AAAS Congressional Fellowships

The establishment of an AMS-AAAS Congressional Fellowship can add a new dimension to Washington Office operations. It would enable the director of the Washington office to have direct contact with someone on the "inside" who also has a bias for mathematics. As you can see from the statements below, Members of Congress have a high regard for the AAAS Congressional Fellowship program and they value the input of Fellows. The Fellow, through daily interactions with Members and staff colleagues, will be in a position to provide insight as to the importance of mathematics, and to its value in scientific discovery and innovation, that currently must come from "visits to the Hill" from "outsiders." As we know, most people don’t realize the critical role mathematics plays in technical innovation. Having someone that at opportune times can point this out during policy discussions can, over time, improve how the discipline is viewed on the "Hill" and perhaps eventually improve federal support for mathematics.

The following is taken from the AAAS Congressional Fellowship booklet:
Fellows spend one year working on the staffs of Members of Congress or congressional committees, beginning in September, working as special legislative assistants in legislative and policy areas requiring scientific and technical input. The program includes an orientation on congressional and executive branch operations, and a year-long seminar series on issues involving science, technology and public policy.

The fellowships are designed to provide a unique public policy learning experience, to demonstrate the value of science-government interaction, and to bring technical backgrounds and external perspectives to the decision-making process in the Congress.

A prospective Fellow should demonstrate exceptional competence in some area of science or engineering; have a good scientific and technical background; be cognizant of and demonstrate sensitivity toward political and social issues; and, perhaps most importantly, have a strong interest and some experience in applying personal knowledge toward the solution of societal problems.

Along with the AAAS, approximately 30 other national science and engineering societies sponsor Congressional Fellows (see list below). Each of these societies has an application process and requirements.

At the end of their fellowship, about one-third of the Fellows stay on in Washington, DC, working in a job that is closely linked to their fellowship placement; one-third go back to the position that they held prior to the fellowship; and a final third uses the experience as a stepping stone to a new position.

Fellows arrive in Washington in early September. AAAS provides a two-week orientation program that gives Fellows a good grounding in how government works and exposure to the
people and issues that they will deal with during a fellowship year. Prior to orientation, AAAS provides written materials that assist in preparation.

Below are comments from Members of Congress concerning the AAAS Congressional Fellowship program:
"The AAAS Congressional Fellows program provides a mutually beneficial connection between members of Congress and research scientists and engineers. I value the science and technology expertise that the fellows bring to my office and feel it is advantageous for them to gain exposure to the multifaceted nature of policy decisions."

## Sen. Olympia Snowe (R-ME)

"I have had many AAAS Congressional Fellows over the years, and each of them has been a great addition to my staff. They have made critical contributions to a wide range of legislative and oversight projects, including health, environmental, educational, technological, economic and security issues."

## Sen. Joseph Lieberman (D-CT)

"Congressional Fellows have played a key role on my staff over the past few years, and the knowledge and expertise which they bring to the table has been a tremendous asset when dealing with science and technology issues. Members of Congress who are not taking advantage of the Congressional Fellows program are missing out on a great resource."
Rep. John Peterson (R-PA)
"During my time in Congress, I have benefited from the counsel of nearly a dozen American Association for the Advancement of Science Fellows. Having a Congressional Science Fellow is always a great benefit to my office, or any other office. But the benefits continue long after their fellowships end. During their short stays on Capitol Hill, these scientists gain experience and hone skills that allow them to be more effective advocates in the world of public policy." Sen. Harry Reid (D-NV)

Samuel M. Rankin III

The following was taken from the American Institute of Physics FYI, November 10, 2003:

## House Resolution Recognizes Congressional Fellowship Programs

A resolution passed by the House on October 28, 2003 (H. Con. Res. 279) recognizes the 30th anniversary of the Congressional Science and Engineering Fellowship program of the American Association for the Advancement of Science (AAAS) and pledges continued congressional support for the program.

The resolution, which has now been referred to the Senate, finds that "Fellows bring to the Congress new insights and ideas, extensive knowledge, and perspectives from a variety of disciplines."

During discussion of the resolution, several Members of Congress spoke in praise of the Fellowships. Selected portions of the discussion are provided below:

REP. VERNON EHLERS (R-MI): "This resolution...recognizes a truly valuable educational program that gives scientists a wonderful opportunity to step out of the lab and into the political process.... [T]hey get a behind-the-scenes look at how our laws are made, writing speeches, developing legislation, and serving as liaisons to committees on which a Member serves. At the same time Members of Congress and other policy makers gain a valuable new resource to help them better understand the scientific and technical issues underpinning complex policy debates.... After 30 years, this program is still going strong. Over 800 scientists have now served Republican, Democratic, and Independent Members of Congress and many are currently working for Congress and the administration. These individuals have contributed not only their scientific expertise, but also a fresh perspective to policy making."

REP. EDDIE BERNICE JOHNSON (D-TX): "The AAAS Congressional Science and Engineering Fellowship Program has provided congressional committees and Members' offices with scientific and technical expertise that has greatly benefited governmental decision-making for three decades.... I know that many of my colleagues have repeatedly sought AAAS fellows for their personal offices because of the quality of the contributions they have made.... The presence of congressional fellows enhances the public policy formulation process. In addition, the program provides fellows with a window on the policy formulation process and the workings of Congress that they take back to their home institutions. It also provides a mechanism that many fellows have used to transition to careers in public service.... [T]he American Association for the Advancement of Science is to be congratulated for creating this successful and valuable congressional fellows program."

REP. RUSH HOLT (D-NJ): "For 30 years, the fellowship program has brought together Members of Congress with leading scientific practitioners and scholars in a variety of scientific fields. And this has provided a level of scientific expertise not otherwise found on most
congressional staffs, and it presents the congressional fellows with an intimate role in the process of decision-making in public policy.... I was an AAAS Fellow 20 years ago...and I witnessed firsthand the important role that scientific expertise can bring to policy decisions.
"Since I have been a Member of Congress for the past 5 years, I have welcomed AAAS Fellows into my staff and fully integrated them into my staff because of the wealth of knowledge they provide and their ability to pose questions.... I have benefitted from their aptitude, their ability and their energy; and I will, as long as I serve in this body, continue to recruit these motivated and high-qualified experts and do everything I can to make this program a success. It has, in many ways, benefitted America."

REP. VERNON EHLERS (R-MI): "I thank the gentleman from New Jersey [Rep. Holt] for his comments and his co-sponsorship on this resolution.... He and I, as most people know, are the only two physicists in the Congress and I am told are the only two that have ever served in this Congress. That, I think, is an indictment of the scientific community because we should have more scientists in the Congress, but most scientists tend to shy away from this particular type of activity. But the Fellows that we are honoring here have filled the gap, as the gentleman from New Jersey has so clearly outlined. They provide some very badly needed scientific advice.... [T]he Fellows are extremely important in maintaining the scientific competence of the Congress, both House and Senate. Many of the Fellows have returned to their laboratories where they serve as a good liaison between the scientific communities and the Congress. Many others have chosen to stay here.... [Y]ou will find many former science Fellows in the halls of Congress, in the administration, playing a very vital role in keeping this Nation's governing bodies current in science. So this has been a very valuable enterprise."

REP. EDWARD MARKEY (D-MA): "I have welcomed over twenty AAAS Fellows into my office since 1979 and have been consistently impressed by their contributions to policymaking and advising. They have made a significant positive impact on the quality of life for the people of Massachusetts, the United States, and the world by instilling a measure of science and humanity into the decisions we are asked to make in these chambers every day."

REP. FORTNEY "PETE" STARK (D-CA): "This program is a remarkable partnership between Congress and the 30 or so participating professional societies that select and fund the Fellows. At no cost to Congress, these Fellows offer their substantial expertise and experience to various personal offices and committees in return for the opportunity to be immersed in the legislative process. I have been fortunate enough to work with many AAAS fellows over my Congressional career. Without exception, they have been valuable additions to my staff. I especially appreciate the real world perspective they bring to us.... In my office, a fellow is treated exactly as other members of my staff. They have issue areas of expertise and perform all of the duties necessary to move those issues forward."

REP. SHERWOOD BOEHLERT (R-NY): "The AAAS [program has made] literally incalculable contributions to this institution and the nation. It has enabled scientists to have a better understanding of the governing process - both the fellows themselves and scientists with whom they interact - and it has improved the governing process by enabling Congressional
offices to better understand scientific information and scientists. The fellows program has also been an entry point for many of the best staff we have on Capitol Hill."

## AAAS Congressional Fellowships

## 2005-06 Sponsoring Societies

The following is a list of societies that sponsor Congressional Fellows. The societies each have distinct fellowship application deadlines, procedures, degree requirements and stipend levels. Successful candidates from each of these programs will participate in a year-long umbrella program of activities organized by AAAS.

American Association for the Advancement of Science (AAAS)<br>Cynthia Robinson<br>1200 New York Avenue, NW, Washington, DC 20005<br>202/326-6700 Fax: 202/289-4950<br>American Association of Colleges of Pharmacy (AACP)<br>Will Lang<br>1426 Prince Street, Alexandria, VA 22314<br>703/739-2330 Fax: 703/836-8982<br>American Academy of Neurology (AAN)<br>American Neurological Association (ANA)<br>Child Neurology Society (CNS)<br>Michael J. Amery<br>1080 Montreal Avenue, St. Paul, MN 55116<br>651/695-2774

American Chemical Society (ACS)
Ray Garant
1155 16th Street, NW, Washington, DC 20036
202/872-6063 Fax: 202/872-6206
American Dental Association (ADA)
Michael Graham/Dorothy Moss
1111 14th Street, NW, Suite 1200, Washington, DC 20005
202/789-5167 Fax: 202/898-2437
American Geological Institute (AGI)
Emily Lehr Wallace
4220 King Street, Alexandria, VA 22302-1502
703/379-2480 ext. 212 Fax: 703/379-7563
American Geophysical Union (AGU)
Peter Folger

2000 Florida Avenue, NW, Washington, DC 20009 202/777-7509 Fax: 202/328-0566

American Institute of Physics (AIP)
Audrey Leath
One Physics Ellipse, College Park, MD 20740-3843
301/209-3094 Fax: 301/209-0843
American Meteorological Society (AMS)
Bill Hooke
1120 G Street, NW, Suite 800, Washington, DC 20005
202/737-9006 ext. 420 Fax: 202/737-9050
American Nuclear Society (ANS)
Joseph Green
100 Technology Center Drive, Stoughton, MA 02072
617/589-1400
American Physical Society (APS)
Jackie Beamon-Kiene
One Physics Ellipse, College Park, MD 20740-3844
301/209-3239

American Psychological Association (APA)
Ellen Garrison/Annie Toro
750 First Street, NE, Washington, DC 20002-4242
202/336-6066; 202/336-6068 Fax: 202/336-6063
American Society for Microbiology (ASM)
Heather Garvey
1752 N Street, NW, Washington, DC 20036
202/942-9209 Fax: 202/942-9335

American Society of Agronomy (ASA)
Crop Science Society of American (CSSA)
Soil Science Society of America (SSSA)
Karl Glasener/Ellen Bergfeld
677 South Segoe Road, Madison, WI 53711
608/273-8080 Fax: 608/273-2021
American Society of Civil Engineers (ASCE)
Martin Hight
1015 15th Street, NW, Suite 600, Washington, DC 20005
202/326-5125 Fax: 202/289-6797

## American Society of Mechanical Engineers (ASME)

1828 L Street, NW, Suite 906, Washington, DC 20036
202/785-3756 Fax: 202/429-9417
American Veterinary Medical Association (AVMA)
Robert Hay
1101 Vermont Avenue, NW, Suite 710 Washington, DC 20005
202/289-3208 ext. 3208 Fax: 202/842-4360
American Welding Society (AWS)
Jeff Hufsey
550 Northwest LeJeune Road, Miami, FL 33126
305/443-9353 Ext. 264 Fax: 305/445-7559
Federation of Animal Science Societies (FASS)
Marusia Iati/David Meeker
9650 Rockville Pike, Bethesda, MD 20814
301/634-7875 Fax: 301/634-7850
Geological Society of America (GSA)
Jack Hess
P.O. Box 9140, Boulder, CO 80301-9140

303/357-1039 Fax: 303/357-1074
Institute of Electrical and Electronics Engineers-United States of America (IEEE-USA)
Chris Brantley
1828 L Street, NW, Suite 1202, Washington, DC 20036-5104
202/785-0017 Fax: 202/785-0835
Institute of Food Technologists (IFT)
Theodore Cartwright
1025 Connecticut Avenue, NW, Suite 503, Washington, DC 20036-5422
202/466-5980
Institute of Navigation (ION)
Carl Andren
3975 University Drive, Suite 309, Fairfax VA 22030
703/383-9688 ext. 105 Fax: 703/383-9689
Materials Research Society (MRS)
Gail Oare
506 Keystone Drive, Warrendale, PA 15086-7573
724/779-3003 ext. 501 Fax: 412/779-8313

## Optical Society of America (OSA)

Colleen Morrison

2010 Massachusetts Avenue, NW, Washington, DC 20036
202/416-1437 Fax: 202/223-1096
SPIE-The International Society for Optical Engineering
Krisinda Plenkovich
P.O. Box 10, Bellingham, WA 98227-0010

360/676-3290 ext. 253 Fax: 360/647-1445
Society for Research in Child Development (SRCD)
Mary Ann McCabe
750 First Street, NE, Washington, DC 20002-4242
202/336-5951

| AAAS Science and Technology Policy Fellowship Program <br> Sponsoring Society Survey Results for 2004-05 Congressional \& ExBr Fellows |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Society | \# of Fellows | Apply Deadline | Stipend <br> Level | Moving Allowance | Travel Allowance | Health Insurance | Other Support or Costs | Funding Source | New Publicity Ideas | \# of Apps | $\Phi_{\text {Previous }}^{\sigma}$ |
| AAAS | 2 | 1/10/04 | \$60,500 | \$3,000 | Moving funds can be used | \$3,000 |  | AAAS funds |  | 107 | $\begin{array}{ll} \text { 是 } \end{array}$ |
| AACP | None for '04-05 year | 12/1/03 | \$20,000 | $\$ 2000$ for moving and travel combined | Unused relocation funds | N/A | Furnished condo owned by AACP | Society's own funds |  | 0 | $\underset{H}{\infty}$ |
| ACS | 2 | 1/10/04 | $\begin{gathered} \$ 50,000 \\ \text { (avg) } \end{gathered}$ | \$1,600 p.a. | Unused relocation funds | \$2,600 |  | 100\% Society's own funds |  | 20 | 22 |
| ADA | 1 | 2/1/04 | \$75,000 | None | None | None |  | 100\% Society's own funds |  | 13 | Best Ever |
| AGI | 1 | 2/1/04 | \$49,000 | \$1,000 | \$2,000 | \$3,000 | Admin costs - staff time to make arrangements / interviewee travel \& hotel costs. | AGI Foundation / William L. Fisher Geoscience F'ship Endowment |  | 13 | 25 |
| AGU | 1 | 2/1/04 | \$49,000 | \$2,000 | \$3,000 | Full coverage provided by AGU | Travel \& related costs for interviews, ads in Eos, support for Fellows attending AGU meetings, AAAS fee | 100\% Society's own funds |  | 15 | 18 |
| AIP | 1 Cong 1 State | $\begin{aligned} & 1 / 15 / 04 \\ & 11 / 1 / 03 \end{aligned}$ | \$50,000 | \$3,000 | \$3,000 | Up to \$200/mo. indiv; up to \$400/mo. family |  | Cong. F'ship $=100 \%$ own funds State Dept. F'ship $=90 \%$ own funds, $10 \%$ Am. Astronomical Society |  | 29 Cong | $\begin{gathered} \text { Cong. }=26 \\ \text { State }=11 \end{gathered}$ |
| AMS | 1 | 2/1/04 | \$50,000 | \$4,000 | \$4,000 | \$3,000 |  | $50 \%$ Society's own funds; 50\% UCAR |  | 4 | 3 |
| ANS | 1 | 4/9/04 | \$45,000 | None | \$3,000 | None | \$2,900 for training; \$3,000 for staff time, printing \& mailing | 100\% Society's own funds |  | 5 | 8 |
| APS | 1 | 1/15/04 | \$50,000 | \$3,000 | \$3,000 | Up to $\$ 160 / \mathrm{mo}$. indiv; up to $\$ 400 / \mathrm{mo}$. family |  | 100\% Society's own funds |  | 30 | 27 |
| APA | 1 ExBr; <br> 5 Cong; <br> 1 Hlth Pol | $\begin{aligned} & 1 / 2 / 04 ; \\ & 1 / 3 / 04 ; \\ & \text { late } \\ & \text { summer / } \\ & \text { early fall } \end{aligned}$ | $\$ 53,500 ;$ $\$ 50,000-$ $\$ 65,000 ;$ $\$ 69,000$ | \$3,000; <br> limited funds for travel \& moving | Moving funds can be used | $\begin{gathered} \$ 250 / \mathrm{mo} . ; \\ \$ 350 / \mathrm{mo} \\ \text { N/A } \end{gathered}$ | Hotel expenses at annual convention covered Interview expenses, AAAS mgt fee, recruitment costs, monthly lunch mtgs and receptions; same as for Cong. Fellows | $100 \%$ Society's own funds; $80 \%$ Society's own funds 20\% APF (beginning 9/04); ~5\%, 95\% contract w/ Ctr for Mental Hlth Svcs / SAMHSA |  | $\begin{gathered} 3 \text { (ExBr) } \\ 24 \text { (Cong) } \\ 3 \end{gathered}$ | ? (ExBr) <br> 21 (Cong) <br> ~ same |
| ASA CSSA SSSA | 1 | 3/1/04 | \$53,000 | \$1,500 | None | None | Travel to Societies' annual meeting; participation in AAAS Orientation | 100\% Society's own funds |  | 10 | 12 |
| ASCE | 1 | 4/3/04 | \$52,000 | \$2,000 | N/A | N/A |  | 100\% Society's own funds |  | 4 | 5 |

AAAS Science and Technology Policy Fellowship Program
Sponsoring Society Survey Results for 2004-05 Congressional Fellows
Page 2

| Society | \# of Fellows | Apply Deadline | Stipend Level | Moving Allowance | Travel Allowance | Health Insurance | Other Support or Costs | Funding Source | New Publicity Ideas | \# of <br> Apps | Previous |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ASM | 1 | 2/18/04 | \$50,000 | Up to \$1,500 | ASM General Meeting; Other travel as approved up to $\$ 1,200$ | Complete coverage |  | 75\% Society's own funds 25\% Endowment |  | 5 | 11 |
| ASME | 1 | 4/1/04 | \$50,000 | 1,000 | TBD | N/A | Orientation, recruiting costs, travel for interviews | 100\% Society's own funds |  | $\begin{gathered} \hline \text { Too early } \\ \text { to } \\ \text { determine } \\ \hline \end{gathered}$ | ```Too early to determine``` |
| AVMA | 2 | 1/15/04 | \$50,000 | Up to \$3,000 | \$1000/fellow for travel to district or state | None | Costs associated with attending the 2005 AVMA Annual Convention | 100\% Society's own funds |  | 7 | 9 |
| AWS |  |  |  |  |  |  |  |  |  |  |  |
| ESA | None for '04-05 year |  |  |  |  |  |  |  |  |  |  |
| FASS | 1 | 4/30/04 | \$48,000 | \$3,600 | \$1,100 | 0 |  | $100 \%$ Society's own funds |  | 2 (to date) | Same |
| GSA | 1 | 1/23/04 | \$49,000 | \$2,500 | \$4,000 | \$2,640 | \$8,050 | 50.4\% Society's own funds; 49.6\% Grant; and GSA cosponsors with USGS |  | 8 | 8 |
| IEEE | 2 Cong <br> 3 ExBr | 2/23/04 | \$50,000 | \$5,000 | Moving funds can be used | N/A | Employer support (where relevant-e.g academic sabbatical, employer salary/benefits, etc) and State Department | 100\% Society's own funds |  | 7 Cong; 6 ExBr | Below avg for Cong; Avg for ExBr |
| IFT | None for '04-05 year |  |  |  |  |  |  |  |  |  |  |
| ION | 1 Cong | 4/30/04 | \$54,600 | Up to \$8,000 for 2-way expenses | Travel, lodging \& registration fees for ION NTM \& annual mtgs | None |  | 100\% Society's own funds |  | Not Complete | $\begin{aligned} & 3 \text { Cong } \\ & 3 \text { ExBr } \end{aligned}$ |
| NRC/NAS | 1 | 12/1/03 | \$60,000 | Up to \$4,000 | N/A | \$100/mo. |  | 100\% Society's own funds |  | 13 | N/A |
| OSA/MRS | 1 | 1/15/04 | $\begin{aligned} & \$ 47,000- \\ & \$ 50,000 \end{aligned}$ | Negotiable | Negotiable | N/A |  | $100 \%$ Society's own funds (cosponsoring with MRS 50/50) |  | 13 | 末 ${ }_{6}$ |
| SAE | None for <br> '04-05 year |  |  |  |  |  |  |  |  |  | 安 |
| SPIE/OSA | 1 | 2/16/04 | \$50,000 | \$6,000 total for moving, travel, and health |  |  | Interview travel; travel to cosponsoring societies annual mtgs | 50\%OSA <br> Society's own funds - $50 \%$ SPIE, |  | 9 |  |
| SRCD | 5-8 | 12/13/03 | minimum <br> of $\$ 60,000$ | \$1,000 | \$2,750 | $\underset{\$ 3,600}{\operatorname{minimum}} \text { of }$ | Add't'l benefits for ExBr Fellows possible depending on placement and funding arrangement | Society's own funds cover overhead costs for infrastructure \& professional funds for fellows; William T. Grant Foundation supports 1 Cong fellow; Contracts with ExBr agencies |  | 29 |  |

I:SPPPICGOODYEAISOCIETY REPS MEETINGS AND INFO 5 5.26.04/SPONSORING SOCIETY $04-05$ SURVEY RESULTS

## Determining the 2006 Individual Member Dues Recommendation to the Council

## The New Guidelines.

In May 2004 the Board of Trustees approved, and the Executive Committee recommended to the January 2005 Council, a new procedure for setting dues each year, replacing the (almost) automatic formula that was used for many years by a procedure based on a set of principles for setting dues. Assuming approval by the Council in January, the new procedure is to be used for determining the 2006 dues.

The new procedure requires beginning the process of setting dues slightly earlier than before. To change the dues rate for year $\mathrm{X}+2$, the discussions must begin in year X .

- In November of year X, staff makes a recommendation about dues, following the principles described below. The ECBT recommends a dues rate for year $\mathrm{X}+2$ to the Council.
- In January of year $\mathrm{X}+1$, the Council reviews the ECBT recommendation and sets the dues rate for year $\mathrm{X}+2$.
- In May of year $\mathrm{X}+1$, the Board of Trustees approves the dues set by Council.

The process for setting dues is meant to be guided by the following principles.
Principle 1: The total revenue from individual dues should exceed the total net direct costs of the following membership related areas: privilege journals, members-only services, membership development, membership administration and governance, as reported to the Board of Trustees.

Principle 2: When an increase in dues rates is deemed to be appropriate, the following factors should guide the Council and the Board of Trustees in establishing the new dues rates:

- The current rate of inflation.
- The recent rate of growth in faculty salaries.
- The rate of growth in the net direct costs of the membership related areas listed in Principle 1.

Principle 3: A single increase in dues rates substantially beyond the level of the factors listed in Principle 2 should be avoided in favor of several successive moderate annual increases.

Recommendation for 2006 Dues.
The dues rate for 2005 is $\$ 152 / \$ 114$ (high/low). The table below shows that in the budget presented for 2005, budgeted revenue from individual dues exceeds the total budgeted net direct cost of the membership activities (listed in Principle 1) by $\$ 284,000$.

A similar favorable balance can likely be maintained in 2006 without an increase in the 2005 rates. The 2006 estimate assumes that the dues revenue remains consistent with the 2005 budget and that the cost of the membership activities for 2006 is consistent with a general inflation figure of 3\%.

These assumptions seem justified: paying membership levels are relatively stable; no new costly initiatives are currently planned for the membership activities. With no increase in dues, revenue will continue to exceed the cost of membership activities by approximately $\$ 251,000$.

## Dues Revenue and Net Direct Cost of Membership Activities

| Year | Dues <br> Revenue | Net Direct <br> Costs of <br> Membership | Net |  |
| :--- | :--- | :--- | :--- | :--- |
| 2001 | $\$ 1,413$ | $\$ 844$ | $\$ 569$ |  |
| 2002 | 1,387 | 960 | 427 |  |
| 2003 | 1,367 | 1,042 | 325 | 235 |
| 2004 Projection | 1,390 | 1,155 | 284 |  |
| 2005 Budget | 1,392 | 1,108 | 251 |  |
| 2006 Estimate | 1,392 | 1,141 |  |  |

Explanatory Notes:
Membership Activities under Principle 1 are:
a) Notices \& Bulletin,
b) Membership development and administration, and
c) Governance

The amounts are taken directly from the B-Pages, pages 5 and 6, as presented to the Agenda and Budget Committee. The estimate for 2006 assumes a stable membership and a $3 \%$ increase in the net direct costs.

While the above table indicates there is no requirement to increase dues in 2006 in order to meet the requirement of Principle 1, the data also points to a trend that bears watching closely over the next several years. The net cost of the direct membership activities increased annually at rates of $13.7 \%$ from 2001 to 2002 and $8.5 \%$ from 2002 to 2003. The increase in these net costs between 2003 and the projected results for 2004 is $10.8 \%$.

Principles 2 and 3 describe the factors to be taken into consideration for the determination of the amount of a dues increase. Staff considered the economic data related to growth in faculty salaries and general inflation, shown in the chart at the end of this attachment. The data on salaries relate to the general ability of members and potential members to pay dues with total personal income. It seems prudent for a membership organization to increase dues at the same or slower rate than its members' salaries increase. If the dues are held constant in 2006, the cumulative increase in dues since 1997 lags the salary increase (in the AMS survey) by a little more than four years. As of the end of 2003 (the last year of actual data), the cumulative dues increase lags the salary increase by about three years. Similar results are seen if one used the AAUP salary data, although the lag time and differences in the cumulative increases are slightly smaller.

The data on inflation relate to the ability of members and potential members to pay dues from discretionary income. Again, it seems prudent for a membership organization to maintain the cumulative increase in dues in line with general inflation in the absence of any significant financial needs. If one assumes an annual inflation rate of $3 \%$ for 2004-2006 and dues are held constant in 2006, the cumulative increases inflation and dues (using 1997 as the base year) will be almost equal
to each other by the end of 2006. It should be noted that dues for year N are generally paid by members in the last quarter of year N -1, so the inflationary effect on discretionary income felt by the individual member is likely somewhere in between the cumulative increase of year N and $\mathrm{N}-1$.

Finally, staff looked at the overall financial health of the Society to determine if there were any foreseeable financial needs to raise dues in 2006. While revenue has remained somewhat flat over recent years with no substantial increase expected in the foreseeable future, the Society has been able to maintain positive net operating income in recent years. There are no known plans for 2006 at this point in time that would change this. Staff concluded that the financial health of the Society is strong and that a dues increase in 2006 is not required to maintain that financial health.

Principle 3 states that small increases in dues over time are preferable to a large increase in any one year. With no apparent economic need of the Society and no expectation that this situation will change dramatically in the near future, it is unlikely that large dues increases will be necessary in the next few years.

In conclusion, staff recommend that the dues rate for individual members remain constant at the 2005 level in 2006.

Jim Maxwell, Associate Executive Director
Connie Pass, Chief Financial Officer
October 2004

November 2004 AMS ECBT

## Factors for Consideration in Setting Individual Dues Rates for 2006

| Faculty Salaries Data |  |  |  | Calendar Year | Inflation Data |  | Ordinary High Dues Rates |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AAUP Reports |  | AMS Annual Survey |  |  |  |  |  |  |  |  |
| Annual Increase | Cumulative Inc. | Annual Inc. Grps 1-3 combined | Cumulative Inc. |  | Annual Inc. CPI-U | Cumulative Inc. CPI-U | Actual Dues | Cumulative Inc. | Covert Dues | High/Low Cutoff |
| 5.8\% |  |  |  | 1988 | 4.4\% |  | 88 |  |  | 30,000 |
| 6.1\% |  |  |  | 1989 | 4.6\% |  | 88 |  | 88.000 | 38,000 |
| 5.4\% |  |  |  | 1990 | 6.1\% |  | 92 |  | 93.104 | 43,000 |
| 3.5\% |  |  |  | 1991 | 3.1\% |  | 100 |  | 98.783 | 45,000 |
| 2.5\% |  |  |  | 1992 | 2.9\% |  | 104 |  | 104.117 | 45,000 |
| 3.0\% |  |  |  | 1993 | 2.7\% |  | 108 |  | 107.761 | 45,000 |
| 3.4\% |  |  |  | 1994 | 2.7\% |  | 112 |  | 110.455 | 45,000 |
| 2.9\% |  |  |  | 1995 | 2.5\% |  | 116 |  | 113.769 | 45,000 |
| 3.0\% |  |  |  | 1996 | 3.3\% |  | 120 |  | 117.637 | 45,000 |
| 3.3\% | 3.3\% | 2.7\% | 2.7\% | 1997 | 1.7\% | 1.7\% | 124 | 3.3\% | 121.048 | 45,000 |
| 3.6\% | 7.0\% | 3.8\% | 6.6\% | 1998 | 1.6\% | 3.3\% | 128 | 6.7\% | 124.679 | 45,000 |
| 3.7\% | 11.0\% | 3.8\% | 10.7\% | 1999 | 2.7\% | 6.1\% | 132 | 10.0\% | 128.918 | 55,000 |
| 3.5\% | 14.9\% | 5.0\% | 16.2\% | 2000 | 3.4\% | 9.7\% | 132 | 10.0\% | 128.918 | 65,000 |
| 3.8\% | 19.2\% | 4.2\% | 21.1\% | 2001 | 1.6\% | 11.4\% | 136 | 13.3\% | 133.559 | 75,000 |
| 3.0\% | 22.8\% | 3.3\% | 25.1\% | 2002 | 2.4\% | 14.1\% | 140 | 16.7\% | 138.501 | 75,000 |
| 2.1\% | 25.4\% | 2.0\% | 27.6\% | 2003 | 1.9\% | 16.2\% | 144 | 20.0\% | 143.349 | 75,000 |
|  |  |  |  | 2004 Prj | 3.0\% | 19.7\% | 148 | 23.3\% | 148.796 | 80,000 |
|  |  |  |  | 2005 Est | 3.0\% | 23.3\% | 152 | 26.7\% | 153.260 | 80,000 |
|  |  |  |  | 2006 Est | 3.0\% | 27.0\% | 152 | 26.7\% | 156.478 | 80,000 |

Explanatory Notes

1. AAUP data: Percentage increase in average nominal salaries for institution reportings comparable data for adjacent one-year periods.
2. CPI-U data: Based on the December to December annual change in the index, with estimates for 2004 and
3. 
4. Covert Dues: For the period from 1990 through 1999, covert dues for Year N+1 are calculated by increasin
the covert dues for Year $N$ by an amount equal to the AAUP percentage increase for Year $N-1$. A "holiday" was taken in applying the usual AAUP increase for 2000, and the formula has been applied since 2000 using the 4AUP figure for Year N-2.

$$
\text { 4. } 2004 \text { dues revenue reflect current projections and } 2005 \text { dues revenue is as budgeted. }
$$



## Streamlining Administration of Category S eligibility

Eligibility for membership at the very low Category S dues rate is determined by the economic status of the country in which the member resides. The AMS uses lists of the financial status of countries published annually by the World Bank as the basis for determining the "Category S Countries;" that is, those countries whose residents are eligible for Category S membership. All countries except those on the "high income" list are considered to be Category S Countries. The current World Bank lists begins on page 2.

Traditionally, a country's status (Category S Country or non-Category S Country) has been automatically changed as soon as its position on the World Bank list warranted a change. For most of the 1990's this automatic system worked relatively well as there were few changes in the list of Category S Countries and very few members resided in those countries that did change status. Since the end of the 1990's there have been quite a few instances where a country with a sizable number of AMS members lost Category S eligibility, including one that lost and then regained eligibility (Greece). Naturally, members who lose their eligibility for this low dues rate experience a significant increase in the cost to maintain their membership. Furthermore, administering these changes requires a considerable amount of work: modifying and reprinting membership materials, editing web pages, and special handling of dues renewals for those members losing (or gaining) Category $S$ eligibility, to name a few.

The principle governing Category S eligibility is fine; the traditional administration of it needs to be refined. Staff plan to make the following two modifications to the administration of Category $S$ eligibility:

1. The list of countries eligible for Category S membership will be revised only once every five years, with the next review scheduled for early 2006, so that changes can be effective for the 2007 membership year.
2. A country's status on the World Bank's lists will be the primary factor in determining the eligibility of its residents for Category S membership going forward, but it will not be the only factor, nor will it be applied automatically. In particular, a country's Category S status will be adjusted on or off the eligible list only if it appears that the recent change in status on the World Bank list is likely to remain in effect over the upcoming five years.

A member in a country that loses its Category S eligibility faces renewal at a significantly increased dues rate. To maximize the likelihood of keeping that member, staff recommend an adjustment in the usual procedures that govern eligibility for the lowest Ordinary dues amount, Ordinary Entry. Staff request ECBT approval of the following:

Members in a country that loses its Category S status will be eligible to renew as Ordinary Entry members for the usual five year period available to new (non-student) members, without regard to their previous membership history.

## Jim Maxwell

October 25, 2004

Attachment 12
Item 2.12
Page 2 of 3
November 2004 AMS ECBT
This is the World Bank's lists of countries by income status, as of $9 / 14 / 2004$. The list is available at http://www.worldbank.org/data/countryclass/classgroups.htm .

Low-income economies (61)

Afghanistan
Angola
Bangladesh
Benin
Bhutan
Burkina Faso
Burundi
Cambodia
Cameroon
Central African Republic
Chad
Comoros
Congo, Dem. Rep
Congo, Rep.
Cote d'Ivoire
Equatorial Guinea
Eritrea
Ethiopia
Gambia, The
Ghana
Guinea

Guinea-Bissau
Haiti
India
Kenya
Korea, Dem Rep.
Kyrgyz Republic
Lao PDR
Lesotho
Liberia
Madagascar
Malawi
Mali
Mauritania
Moldova
Mongolia
Mozambique
Myanmar
Nepal
Nicaragua
Niger
Nigeria

Lower-middle-income economies (56)
Albania Georgia

Algeria Guatemala
Armenia
Azerbaijan
Belarus
Bolivia
Bosnia and Herzegovina
Brazil
Bulgaria
Cape Verde
China
Colombia
Cuba
Djibouti
Dominican Republic
Ecuador
Egypt, Arab Rep.
El Salvador
Fiji

Georgia
Guyana
Honduras
Indonesia
Iran, Islamic Rep.
Iraq
Jamaica
Jordan
Kazakhstan
Kiribati
Macedonia, FYR
Maldives
Marshall Islands
Micronesia, Fed. Sts.
Morocco
Namibia
Paraguay
Peru

Pakistan
Papua New Guinea
Rwanda
Sao Tome and Principe
Senegal
Sierra Leone
Solomon Islands
Somalia
Sudan
Tajikistan
Tanzania
Timor-Leste
Togo
Uganda
Uzbekistan
Vietnam
Yemen, Rep.
Zambia
Zimbabwe

Philippines
Romania
Russian Federation
Samoa
Serbia and Montenegro
South Africa
Sri Lanka
Suriname
Swaziland
Syrian Arab Republic
Thailand
Tonga
Tunisia
Turkey
Turkmenistan
Ukraine
Vanuatu
West Bank and Gaza

Upper-middle-income economies (37)
American Samoa Grenada

Antigua and Barbuda Hungary
Argentina
Barbados
Belize
Botswana
Chile
Costa Rica
Croatia
Czech Republic
Dominica
Estonia
Gabon
Latvia
Lebanon
Libya
Lithuania
Malaysia
Mauritius
Mayotte
Mexico
Oman
Palau

Northern Mariana Islands

High-income economies (54)
Andorra
Aruba
Australia
Austria
Bahamas, The
Bahrain
Belgium
Bermuda
Brunei
Canada
Cayman Islands
Channel Islands
Cyprus
Denmark
Faeroe Islands
Finland
France
French Polynesia

Germany
Greece
Greenland
Guam
Hong Kong, China
Iceland
Ireland
Isle of Man
Israel
Italy
Japan
Korea, Rep.
Kuwait
Liechtenstein
Luxembourg
Macao, China
Malta
Monaco

Panama
Poland
Saudi Arabia
Seychelles
Slovak Republic
St. Kitts and Nevis
St. Lucia
St. Vincent and the Grenadines
Trinidad and Tobago
Uruguay
Venezuela, RB

Netherlands
Netherlands Antilles
New Caledonia
New Zealand
Norway
Portugal
Puerto Rico
Qatar
San Marino
Singapore
Slovenia
Spain
Sweden
Switzerland
United Arab Emirates
United Kingdom
United States
Virgin Islands (U.S.)

## Status Report on 2005 Life Memberships

The new eligibility criteria for life membership went into effect with membership renewals for 2005 (see below). The new criteria were featured prominently in the cover letter from President Eisenbud that accompanied the 2005 dues renewals mailed in late July. The letter was also available via link on the dues renewal website.

As of October 21, 2004, a total of 137 individuals have joined as life members with their renewal for 2005, accounting for a total of $\$ 117,232$ in dues payments. A profile of these new life members is provided in Table 1.

Table 1

| Age Group | US \& Canada | Outside US \& Canada | Total |
| :---: | :---: | :---: | :---: |
| $40-49$ | 7 | 6 | $\mathbf{1 3}$ |
| $50-59$ | 15 | 9 | $\mathbf{2 4}$ |
| $60 \&$ above | 74 | 26 | $\mathbf{1 0 0}$ |
| Total | $\mathbf{9 6}$ | $\mathbf{4 1}$ | $\mathbf{1 3 7}$ |

In the past, AMS has immediately recognized into revenue the entire amount of a life member's payment of life dues. This was acceptable under generally accepted accounting principles (GAAP) as the annual amount received for life dues was small and the difference between this method of accounting for the dues revenue and one that amortized the life dues payment over the expected life of the member was negligible. Under the expanded eligibility rules, this is likely to be no longer the case. This is because of the increased numbers of members expected to elect this option each year compared to the past, the related increase in life member dollars received each year and the longer time period over which services are likely to be rendered to 'average' life member as compared to the old policy. Accordingly, as noted in the proposal for the change, commencing in 2005 life membership dues will be amortized into revenue over the approximate life span (to age 70) of the new members. To keep the process simple while still adhering to GAAP, it will be assumed that life members in each category start at the youngest eligible age and their life dues payment will be recognized into revenue each year using the straight line method. For example, a new 2005 life member from the U.S. in the 40-49 age group will pay $\$ 2280$. This payment will be amortized over thirty years (age 40 to 70), resulting in dues revenue recognized in 2005 and each of the succeeding 29 years of $\$ 79.00$.

## Life Membership

A person may become a life member by making a single payment of dues determined by age at the start of the membership year according to the following:

Age 60 or above: five times ordinary high dues,
Age 50 through 59: ten times ordinary high dues,
Age 40 through 49: fifteen times ordinary dues.
A life member is subsequently relieved of the obligation of paying dues. The status and privileges are those of ordinary members.

An exception to the above would be made for a person who is currently a member by reciprocity,

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has been a member by reciprocity for the previous two years and asserts the intention of continuing to be a member by reciprocity. Such a person may purchase life membership by a single payment of dues determined by the formula above but with ordinary high dues replaced with reciprocity dues.

Jim Maxwell
Associate Executive Director
October 25, 2004

## Internal Control at the AMS.

In recent years, there have been numerous corporate scandals, with the corporate malfeasance having been perpetrated at the highest levels of management. The internal and external audits of these companies had failed to disclose years of accounting manipulation and fraud, with some independent auditors charged with complicity in the various schemes. One response has been the Sarbanes-Oxley Act, applicable to publicly held for-profit entities and which requires more internal oversight and attestation to the public, among other requirements. Not-for-profit organizations have also not been without their troubles in recent years, of which some have resulted in the Internal Revenue Service's "Intermediate Sanctions" rules and regulations a few years ago.

In the fall of 2003, officers and members of the Board of Trustees met with the KPMG senior manager assigned to the Society's external audit to discuss the Society's internal control structure, their role in the internal control structure and the auditing firm's understanding and testing of the Society's internal control structure during its annual audit of the Society's financial statements. While this meeting provided reassurance to the officers and Board members that the likelihood of a financial scandal at the Society was remote under its current internal control structure, certain procedures were suggested by the senior manager and adopted by the Board of Trustees and management.

Since the officers and Board of Trustees are an integral part of the Society's internal control structure, a discussion of what internal control is, as well as what areas of internal control external auditors must look at in performing the annual audit was deemed appropriate by the Board.

The formal definition of internal control is as follows:
Internal control is a process, effected by an entity's board of directors, management and other personnel - designed to provide reasonable assurance regarding achievement of objectives in the following categories: (a) reliability of financial reporting, (b) effectiveness and efficiency of operations, and (c) compliance with applicable laws and regulations. Internal control consists of five interrelated components:
(a) Control environment sets the tone of an organization, influencing the control consciousness of its people. It is the foundation for all other components of internal control, providing discipline and structure.
(b) Risk assessment is the entity's identification and analysis of the relevant risks to achievement of its objectives, forming a basis for how the risks should be managed.
(c) Control activities are the policies and procedures that help ensure that management directives are carried out.
(d) Information and Communication systems support the identification, capture and exchange of information in a form and time frame that enable people to carry out their responsibilities.
(e) Monitoring is a process that assesses the quality of internal control performance over a period of time.

There is a direct relationship between objectives, which are what an entity strives to achieve, and the five components, which represent what is needed to achieve the objectives. In addition, internal control is relevant to the entire entity, as well as to any of its operating units or functions.

Since the Board and officers were primarily concerned with internal control as it relates to finance and accounting, the discussion will be focused in this area, although other examples will also be used.

In the financial and accounting function of an organization, the principle objectives are:
(a) To safeguard the assets of the entity against loss or misuse;
(b) To process and record transactions in accordance with management's authorization;
(c) To prepare and disseminate financial information that is reliable, relevant and timely for management decision-making purposes; and
(d) To prepare financial statements for external purposes that are fairly presented in conformity with generally accepted accounting principles (or other comprehensive basis of accounting).

The control activities, the policies and procedures put in place to achieve these objectives, should be designed such that errors or irregularities that would materially affect the achievement of the objectives above are detected by people in the normal course of performing their assigned duties.

The discussion will focus on the five components of internal control as they relate to the accounting and finance function of the Society, as well as their interplay with the audit of the Society's external financial statements.

Constance W. Pass<br>Chief Financial Officer

## What does the auditor do?

The auditor's responsibility is to understand the internal control of the organization in order to plan and perform the audit of its financial statements. They are concerned with only one objective - The preparation of financial statements for external purposes that are fairly presented in conformity with generally accepted accounting principles. They must develop a sufficient understanding of the controls relevant to the audit and determine if they have been placed in operation. This understanding is then used by the auditor to assist in assessing the risks of material misstatements in the financial statements and to plan and perform the audit - the nature and timing of the tests performed.

The auditor is not required to rely on any aspect of the internal controls at the organization. The audit may be performed using only substantive tests - direct tests of accounts and transactions and the underlying assertions in the financial statements (ownership rights and obligations, completeness, valuation, disclosure, etc.). The auditor may rely on aspects of the organizations internal control to reduce the extent of substantive testing. To do so, the auditor must perform tests of the controls to be relied upon to develop the appropriate evidence that the controls exist, are designed properly, and are placed in operation.

Because of the limited work performed on internal controls performed by auditors in connection with the audit of financial statements, the auditor does not provide a report on internal controls that provides positive assurance to the organization. Positive assurance would be an opinion from the auditor to the organization about the existence and effectiveness of internal controls at the organization.

Rather, they provide 'negative assurance' to the organization. They state whether they have noted any reportable conditions in internal control and they state if they have detected any material weaknesses in internal control. They may also state that they found no material weaknesses. Remember, the area of internal control discussed n these reports relate only to the preparation of the external financial statements in accordance with GAAP.

## Control Activities in Finance

Control activities can be divided into two types - accounting controls and administrative controls. Accounting controls are concerned with the safeguarding of assets and the reliability of financial records. They are designed to provide reasonable assurance that:

1. Transactions are executed in accordance with management's general or specific authorization;
2. Transactions are recorded as necessary to (a) permit preparation of financial statements in conformity with GAAP and (b) to maintain accountability of assets;
3. Access to assets is permitted only in accordance with management's authorization; and
4. The recorded accountability for assets is compared to the existing assets at reasonable intervals and appropriate action is taken whenever there are differences.

The key tools used in establishing control activities are (a) segregation of duties - duties are assigned so that no one person is able to perpetuate and conceal an error or irregularity, (b) authorization of management - appropriate levels of responsibility and authorization are formally designated within the organization and (c) review procedures routine review of transactions and reports by financial executives and other management not directly involved in the processing of financial information in order to detect material misstatements.

## Controls Related to Assets (Nos. 2(b), 3 and 4 above):

Fungible assets - cash and those that can easily be converted to cash, are the assets with the highest level of risk of misappropriation. Further, they represent over $85 \%$ of the Society's assets. Consequently, the control activities applicable to this type of assets are extensive.

## Long-term investments (66\% of AMS assets at 12/31/03):

1. The BT is the only entity that can authorize the investment vehicles in the long-term investment portfolio (AMS owned portfolios such as Frontier, mutual funds, etc.). All investment managers, be they individual portfolio managers or mutual fund managers, require specific BT resolutions to establish the investment, and the investment is always and only in the name of the AMS.
2. The BT authorizes the individual staff members who may liquidate investments (currently the DED and CFO).
3. The accounts are established with the investment advisors so that the proceeds of any liquidation must be moved to a bank or other investment account in the name of the AMS. This is a requirement of the Society as well as the investment advisor - assets must stay in the name of the Society. The proceeds generally move by wire transfer, so that no staff member may intercept them. If proceeds are being moved outside the control of the investment advisor (e.g. not being moved to another fund in the name of the AMS managed by the investment advisor such as from Vanguard S\&P 500 Index fund to Vanguard Total Stock Market Index Fund or the Vanguard Prime Money Market Fund), written authorization signed by both the DED and CFO must be sent to the investment advisor.
4. Monthly statements received from the investment advisors are reconciled to the general ledger by the CFO and monthly reports of the investment activity in and
valuation of the investments are prepared by the CFO distributed to the DED, other staff members and the investment committee. Quarterly reports are distributed to the SEC. The Green Pages (prepared four times a year) also include these reports.
5. The CFO and DED are not responsible for reconciling bank accounts (where the proceeds of any liquidation must move if being removed from the investment advisor).

## Short-term Investments (21\% of AMS assets at 12/31/03):

1. The BT authorizes the investment vehicles allowed. The approved vehicles and maximum investment limits are reported every may to the BT. Mutual fund accounts require a specific BT resolution to be established; certificates of deposit are initiated using a general resolution of the BT that authorizes the CFO to establish the account in the name of the AMS.
2. The BT authorizes the individual staff members who may liquidate investments (currently the DED and CFO).
3. All accounts are established such that proceeds of liquidation must be moved to another account in the name of the AMS (either another investment account such as the Vanguard Prime money market fund or the AMS primary bank account). This is a requirement of the AMS and the investment advisors - assets must stay in the name of the Society.
4. The Assistant Controller initiates investments in certificates of deposits and the CFO approves these and sends correspondence for each certificate investment and liquidation.
5. Monthly statements received from the investment advisors are reconciled to the general ledger by the Assistant Controller and weekly and monthly reports of the investment activity in and valuation of the investments are prepared by the Assistant Controller and distributed to the CFO and other staff members. The Green Pages (prepared four times a year) include reports on the short-term investment portfolio (combined with the long-term portfolio and on the mutual funds.
6. The DED, CFO and Assistant Controller are not responsible for reconciling bank accounts (where the proceeds of any liquidation must move if being removed from the investment advisor).

## Property, plant and equipment (6\% of assets at 12/31/03):

1. Ownership records are maintained by the AMS's attorneys and/or the CFO.
2. Additions require the approval of the DED and ED, and if in excess of $\$ 100,000$, the approval of the BT. Computing additions require the additional approval of the Director of Systems and Operations.
3. All purchases are subject to the authorization and control procedures in Purchasing (administrative controls - such as checking for authorization, obtaining multiple bids, recommendation of specific vendor, etc.).
4. Sales of unused or obsolete equipment require authorization of Manager of Facilities and Purchasing, reviewed by CFO, and a purchase and sales agreement with the buyer.
5. Any sale of a significant asset, such as a building, requires the approval of the BT.
6. Access to property, plant and equipment is subject to various administrative controls, such as access tokens to buildings, computing access limitations and password authentication, etc. Computing servers are also subject to physical access controls (all reside in specified areas with limited physical access).
7. Inventory of the assets with the most risk of misappropriation (computers) is taken once a year and agreed to the accounting records (for Providence, only).
8. Detailed inventory records are reconciled to the GL monthly by accounting staff and reviewed in detail annually by CFO.
9. Other administrative controls - insurance policies, fire and security alarms, sprinkler systems, security personnel.

## Controls Related to Revenue and Expense Transactions (Nos. 1 and 2(a) above):

## Revenue.

All revenue transactions are initially recorded in one of the following applications:
The main corporate sales database is used for subscriptions, book sales, sales of other tangible items, exhibit fees, membership, donations and other miscellaneous receipts. The recording of these transactions is performed by personnel in Customer Services.

The CHER system is used to record registration fees and other miscellaneous revenue related to meetings activities. The recording of these transactions is performed by Meetings personnel.

Notices advertising and other miscellaneous revenue is recorded in ACCESS databases maintained by the Fiscal Department. Payments from customers for these transactions are initially recorded in the corporate database by Customer Services staff.

Since the Society requires prepayment from most customers, the controls over cash receipts and their reconciliation to the transactions in the various databases are of utmost importance.

## Cash Receipts:

1. Substantially all cash receipts are received directly by the Society's bank via lockbox deposit, wire transfer or ACH transfer (mainly credit card deposits). The few payments that are received directly in Providence are sent through to the lockbox so that they can be processed subject to the same subsequent controls as those received directly by the bank.
2. A daily cash deposit record is created in the Society's database by Fiscal staff, and staff from Customer Services or Meetings process the cash according to the accompanying documentation forwarded by the bank and apply the payment to the appropriate transactions in the corporate or meetings database.
3. Fiscal staff monitors the status of the daily cash deposit records to ensure timely processing of the payments in the corporate databases.
4. At month end, all the transactions processed in the month in the databases are recorded in the Society's general ledger. Any cash receipts that had not been applied as payment for a transaction or to another appropriate account are recorded as a liability.
5. A daily cash balance is maintained by Fiscal and agreed to information downloaded from the bank. At month end, the bank statement is reconciled to the Society's balance in the general ledger by Fiscal staff. This staff member does not authorize cash disbursements. Cash reconciliations are reviewed by the CFO.

## Expenses.

## Payroll and Benefits (represent 66\% of expenses in 2003):

## Payroll:

1. All positions are authorized by the ED/DED.
2. Pay amounts approved by the DED/ED.
3. Authorization to hire from ED or DED.
4. Intermediate Sanctions - ED compensation set by the BT; compensation for the DED and CFO set by the ED and disclosed to the BT.
5. Outside processor is used for payroll and HR management (ADP)
6. Only HR personnel have access to add, delete, change status and change pay rates in the ADP system. HR staff do not have access to the payroll application.
7. 3 staff members in Fiscal have access to the payroll application (one primary and 2 backup).
8. Payroll processed in accordance with timesheets approved by individual's supervisor.
9. Weekly payroll reviewed by CFO or Assistant Controller for completeness and accuracy prior to distribution of funds to employees.
10. Funds distributed directly into employee's bank account or hand delivery of check to the individual.

Benefits:

1. Significant changes in benefits (health insurance, pension, etc.) from those currently offered must be approved by the BT.
2. Most benefits under contract with outside provider, such as health insurers, TIAA for pension and 403(b) plans - monies not managed by the AMS staff.
3. Eligibility for benefits determined by HR staff in accordance with provisions of written plan documents.
4. Payments to providers subject to the control procedures applicable to cash disbursements.
5. Payments to employees subject to the control procedures for payroll disbursements (study leave, termination pay, computing benefit).

## Cash Disbursements:

1. All cash disbursements require supporting documentation prior to entry into the Accounts Payable System by Fiscal staff, such as an invoice from the vendor, approved travel voucher with supporting documentation, approved check request from staff, etc. The documentation is reviewed by Accounts payable staff for completeness and proper authorization and entered into the AP system. The review includes matching of the invoice to the Purchase Order executed by Purchasing, receiving report for tangible goods, checking of prices, etc. for applicable purchases.
2. Prior to checks being printed, a report from the $\mathrm{A} / \mathrm{P}$ system of the planned payments is reviewed by a second fiscal staff member. This is reviewed for unusual vendors, proper account codes, etc.
3. Once the planned check run is approved, checks are prepared by a third Fiscal staff member and the checks and all supporting documentation given to a fourth fiscal staff
member. This fourth staff member matches all the checks to the original supporting documentation, checks addresses and amounts, and mails the payments.
4. Checks must be signed as follows:
a. Signature plate with Treasurer's signature for all checks under $\$ 5,000$.
b. One manual signature by CFO, DED, ED or AED for Programs and Services for checks of $\$ 5,000$ or more, but less than $\$ 20,000$.
c. Two manual signatures (same people) for checks of $\$ 20,000$ and greater.

All supporting documentation is given to the manual signer(s) for review prior to signing.

# Developing countries and the global science web 

## Enabling scientists from developing countries to bridge the gap between rich and poor depends on closing another gap - the "digital divide". Now the technology exists to monitor this divide, and it reveals some alarming results.



Most developing countries experience great difficulties because of adverse economic conditions and political instability, which means they lag behind in scientific and technological development. Building science facilities can be very expensive, so there is the potential for an enormous gap between the rich and the poor. However, science has been quite successful in leapfrogging this gap, enabling scientists from developing countries to participate in many scientific activities. This has taken many forms, including the interaction between scientists by e-mail, and visits by senior scientists and graduate students. Large facilities have also opened their doors to scientists from economically disadvantaged countries (see CERN Courier July/August 2003 p26), literature and equipment has been donated by both organizations and individuals, and conference access has been made available.
With the advent of the World Wide Web and the rapid exchange of information via the Internet, one might naively have thought that much of the gap between developed and developing nations would disappear, even if problems still persisted for those areas of science that need expensive facilities. However, access to information, peer reviewed or not, depends on having the appropriate hardware, i.e. a computer, and Internet connectivity, and there is a serious problem with access to the Internet in developing countries. Gaining access to a computer is more of a question of economics, and one that we will assume will somehow be overcome. In this article we will instead concentrate on the issue of Internet connectivity.
Most of the countries with the lowest income economies have or have had serious problems with bandwidth, as well as with the high cost of access to the Internet. The high cost of connectivity is mainly due to the monopolies that communication companies are able to establish in developing countries. These costs, added to the low bandwidth, do not allow scientists to have timely access to information. In addition, there is also the expense of scientific literature, which is often prohibitive.
In most cases scientists in basic research do not attach economic value to their product, and so are willing to share their knowledge with fellow scientists, independent of their nationality or race. In addition, many scientific publishing companies are run at least partially by scientists, and most are willing to allow those from disadvantaged countries to access their journals, despite the usual high prices. This has given birth to some very successful initiatives in areas such as medicine (HINARI - Health InterNetwork Access to Research Initiative), biology (PERI - Programme for the Enhancement of Research Information), agriculture, fishery and forestry (AGORA - Access to Global Online Research in Agriculture), and physics, mathematics and biology (eJDS - electronic Journals Delivery Service). These are run by the World Health Organization, the International Network for the Availability of Scientific Publications, the Food and Agriculture Organization of the United Nations, and the Abdus Salam International Centre for Theoretical Physics (ICTP), respectively, in strict collaboration with major publishing companies and societies.


All these initiatives, even if they use different ways to access the sources of information, have a common characteristic: they allow scientists in the least-developed countries (individually, or through their libraries) to access the best and most appreciated literature in their fields. And in most cases this access is free.

Renowned Ghanaian scientist Francis Allotey, who is active in the politics of science in Ghana, has said: "We paid the price for not taking part in the Industrial Revolution of the late eighteenth century because we did not have the opportunity to see what was taking place in Europe. Now we see that information and communication technology (ICT) has become an indispensable tool. This time, we should not miss out on this technological revolution."
Up until a year ago it was not clear, despite the efforts of many, whether bridging the digital divide with Africa would be feasible. However, at a recent meeting in Trieste, "Open Round Table on Developing Countries Access to Scientific Knowledge: Quantifying the Digital Divide", we were able to see that some of the African countries had come up with very ingenious ideas to keep up with ICT. It is clear that Africa has decided to take Allotey's words to heart, and has engaged in whatever may be necessary to bridge the

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technological divide. It is therefore more important than ever that the efforts to help them that have already begun do not stop; the results are there to see. If this ICT revolution is not to be missed, scientific institutions must keep up to date, and this in turn relies on the Internet connectivity of these institutions. But do they have it?
For the first time, at the same round table, Les Cottrell of SLAC, Warren Matthews of the Georgia Institute of Technology and Enrique Canessa of ICTP, Trieste, presented results on the connectivity of institutions in Third World countries, using measurements performed by the SLAC/PingER project. Figure 1 shows all the countries covered by this project, which measures the return time of an Internet packet between monitor sites and remote sites. Monitoring Internet connectivity or Internet performance in this way gives a good idea of trends - who is catching up, who is falling behind - and also allows a comparison of Internet performance with economic indicators. Since it is a quick way of measuring trends in ICT, decisions on investments can be made quickly enough to avoid irreversible damage.


The PingER project started some years ago to monitor Internet performance for data exchange in the large high-energy and nuclear-physics collaborations around the world. Recently, following an agreement with the ICTP and eJDS, the measurements have been extended to a selection of institutional hosts in developing countries, and are now available for around 80 countries.

Figure 2 shows throughputs in kilobytes per second as a function of time between January 1995 and January 2003. The measurements were made from SLAC in the US. The results show that Latin America, China and Africa, while at much lower levels of performance than the US (Edu), Canada and Europe, are keeping pace with these countries. Russia is quickly improving, but surprisingly India is lagging behind. This is a piece of information that should worry policy makers in India, as it is a country with a very well developed ICT. So why are their institutions behind? Part of the reason may be the choice of hosts being monitored in India, which are at academic and research institutions. But even so, this means that some institutions are very backward, with very poor connectivity.
The amount of data gathered is not enough to give a complete picture of the whole world, but it does show that the technology to monitor is there. Policy makers from developing countries can benefit from the data, since the information is freely available on the eJDS website (www.ejds.org). Moreover, it can also help when large funding agencies decide to invest in development, and will give an idea of the performance of the various countries. This measure of connectivity should be considered as a new variable in the complex field of economics.

## Further reading

For the proceedings of the round table meeting, see www.ejds.org/meeting2003/ictp/programmel.

## Author:

Hilda Cerdeira, Enrique Canessa and Carlo Fonda, Abdus Salam International Centre for Theoretical Physics, Trieste, and R Les Cottrell, SLAC. Cerdeira is a member of the International Advisory Committee for the conference on The Role of Science in the Information Society.

## SCIENTIFIC PUBLISHING:

## Suit Seeks to Ease Trade Embargo Rules

## Yudhijit Bhattacharjee

Journals should be free to edit and publish articles by scientists and other authors living in countries under U.S. trade embargoes, says a suit filed this week by a coalition of publishers and authors. Current regulations require U.S. publishers and authors to seek a government license before working with authors in Iran, Cuba, and Sudan; these rules violate trade laws and the freedom of speech, according to the suit, filed 27 September in U.S. federal court in New York City.

The issue has been simmering since October 2003, when the Treasury Department's Office of Foreign Assets Control (OFAC) ruled that U.S. journals needed prior government approval to publish work from embargoed countries (Science, 10 October 2003, p. 210). After a heated discussion with publishers, OFAC reversed that ruling 6 months ago but asserted that activities leading to "the substantive or artistic alteration or enhancement" of materials from the embargoed countries were still prohibited without a license. In a 2 April letter to the Institute of Electrical and Electronics Engineers, OFAC Director Richard Newcomb explained that the agency was enforcing the Trading with the Enemy Act and the International Emergency Economic Powers Act.

But OFAC's regulations are illegal, say the Association of American Publishers, Association of American University Presses (AAUP), PEN American Center, and Arcade Publishing. The plaintiffs argue that OFAC has violated 1988 and 1994 revisions to these laws that exempt "information and informational materials" from trade embargoes. OFAC maintains that the 1988 and 1994 revisions do not apply to informational materials "that are not fully created and in existence."

The restrictive regulations "should be stricken from the books because they violate the very statutes that OFAC is purporting to enforce," says Peter Givler, executive director of AAUP. OFAC's rulings have already had "a chilling effect" on the publishing climate, says Givler, citing a recent decision by the University of Alabama Press to suspend plans for publishing archaeology and history books by Cuban scholars.

Publishers were compelled to take the legal route because of OFAC's "double-talk," says Mark Brodsky of the American Institute of Physics. "Sometimes they say editing that involves changing syntax will require a license; when pressure is put on them, they say it's not necessary. Publishing should not be subject to the whims of the bureaucracy."

OFAC spokesperson Molly Millerwise says the agency has no comment on the suit, which asks the government to remove the publishing restrictions.

# NEWSLIETTER 

FALL 2004

A PUBLICATION TO INFORM
MEMBERS ABOUT SOCIETY
ACTIVITIES. THIS ISSUE
COVERS AMS OUTREACH
TO MATH DEPARTMENTS.

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## AMS Outreach to Math Departments

In addition to programs for individuals in the mathematics profession, the Society has a variety of programs aimed at math departments and department chairs.

## New AMS Award for Exemplary Programs or Achievement in a Mathematics Department

This prize was established in 2004 to recognize a department that has distinguished itself by undertaking an unusual or particularly effective program of value to the mathematics community, internally or in relation to the rest of society. Examples might include departments that:

- run a notable minority outreach program,
- institute an unusually effective industrial mathematics internship program,
- promote mathematics so successfully that a large fraction of the university's undergraduate population majors in mathematics,
- make some form of innovation in research support to faculty and/or graduate students, or
- create a special and innovative environment for some aspect of mathematics research.


Mathematical sciences departments in North America that offer at least a bachelor's degree are eligible. One or more individuals may submit a letter of nomination, and writers may nominate their institution. The prize is $\$ 1,200$. The AMS plans to make the initial award at the January 2006 Joint Mathematics Meetings.

Read more To learn more, contact the Office of the AMS Secretary at www.ams.org/secretary/contact.html.

## Early Career Profiles Project

The AMS has embarked on a Sloan Foundation-funded project to develop a network of mathematical sciences departments that will systematically provide profiles of their recent bachelor's-level alumni. Each participating department will place alumni profiles on a departmental computer server, and the AMS will place links to the profiles from the AMS Careers web page at www.ams.org/careers. This method of building a bank of career profiles of math science majors will fulfill a need of students and will be useful for departments in tracking majors, counseling future students, and discussing curricula. The initial group of U.S. mathematics departments-urban and rural, public and private, bachelor's-, master's- and doctoral-granting-has been recruited to participate in the network. Alumni will be asked a standard set of questions so that the profiles will include consistent information. The project is scheduled for release in 2005.

Read more Information for Mathematics Department Leaders is at www.ams.org/outreach/mathdept.html.

## Publication of Doctoral Degrees Conferred

Each February Notices of the AMS publishes the Doctoral Degrees Conferred, providing visibility to both the new Ph.D.'s (with their name and thesis title) and the departments in which they received their degrees.

[^1]AMS OFFICES:
PROVIDENCE, RI
ANN ARBOR, MI
WASHINGTON, DC

Attachment 19
Item 2I. 4
A M S Page 2 of 4B ER NE W S L E T T E R
November 2004 AMS ECBT

## Workshop for Department Chairs

The AMS's Washington, DC, office organizes and hosts a one-day Workshop for Department Chairs. The workshop is held in the same location as and just prior to the Joint Math Meetings each January. Topics include personnel challenges, departmental communications, and departmental leadership. The 2005 workshop will be held on January 4 in Atlanta, Georgia.

"I have attended two of these workshops and found them extremely valuable. In addition to providing 'group therapy' for me as department chair, I picked up a number of ideas from other chairs that I have implemented in my own department."

- David Manderscheid, University of lowa
"I have attended the Annual Math Chairs
 Workshop every year for the past six years, and I have found the experience and participation very rewarding. I get a lot of useful information by talking directly to chairs of other departments and from the discussions of the workshop-information that you simply cannot get by scanning web pages of departments."


## - Krishnaswami Alladi,

University of Florida

"As a new department head with six months in the position and a semester's experience three years ago (as an interim head of department), I found the Workshop for Department Chairs extremely useful. In the workshop experienced chairs and previous chairs (including a present dean and high-ranking officeholders at the AMS and the NSF) talked about the whole range of issues which a chair of a present-day mathematics department has to deal with: the faculty, the administrative staff, the university at large, students, financial issues, national agencies, etc. Since the workshop, I have recalled to myself and to the faculty in our department various suggestions and strategies that were discussed at the workshop."

## For Undergraduate Students

The AMS maintains a web page of highly selective websites aimed at undergraduates who are considering a major in mathematics or who are well on their way toward a bachelor's degree in math.

- Considering Graduate School in the Mathematical Sciences? includes links to Assistantships \& Graduate Fellowships, a report on current employment trends in the mathematical sciences, NSF's website of graduate research fellowships, and more.
- Summer Programs links to a list of all the REUs.
- Semester Programs links to information about semesters at Penn State, Moscow, and Budapest and also links to a relevant article in Notices of the AMS.

The web page also has extensive links to Clubs, Conferences, Events, Online Journals, Competitions, Prizes, Honorary Societies, Careers, Job Internships, and websites with mathematics problems.

Reactions from some of the students who participated in the spring 2004 Math in Moscow semester:
"Thanks again for your generous support. This is a wonderful program, and I have told all my professors and many students in the U.S. about this program in the hope that more will apply to take advantage of this great opportunity."

- Murray Stokely, California State University, Hayward
"The spring I spent in Moscow was a time that will remain with
 me the rest of my life. I had the opportunity to live in another culture, try new things, practice another language, meet many new friends, and learn mathematics in an excellent university. I am very grateful to the AMS for allowing me to have what will be one of the greatest experiences of my life."
- Jeff Taft, University of Arizona
"I believe my semester abroad in Moscow was by far my most mathematically interesting semester yet. I took courses in algebraic geometry, commutative and homological algebra, representation theory, Russian language, and the history of mathematics and science. All of my professors and teaching assistants were excellent."
- Owen Baker, Cornell University

Read more Resources for undergraduates are at www.ams.org/outreach/ undergrad.html. Department chairs may request bulk quantities of the brochure Resources for Undergraduates at emp-info@ams.org.

## Institutional Membership

The AMS currently has approximately 400 institutional members in the U.S.-mainly departments in the mathematical scienceswhose institutional dues entitle them to:

- Complimentary subscriptions to Notices of the AMS, Abstracts, and Bulletin of the AMS.
- Nominees. All regularly enrolled graduate students may be appointed individual AMS members; in departments that do not have a graduate program in mathematics, up to four individuals may be nominated for membership.
- Free copies of the annual Combined Membership List, Mathematical Sciences Professional Directory, and Assistantships \& Graduate Fellowships.
- Discounts on AMS publications and the Database Fee for Mathematical Reviews.
Institutional Membership dues are based on a number of factors, including faculty size, number of full-time students, and number of papers reviewed in Mathematical Reviews.

Read more Find more about Institutional Membership at www.ams.org/ membership/institutional.html.

## Surveys

Initiated in 1957, the Annual Survey of the Mathematical Sciences collects information about departments, faculty, and


Percentage of Total Full-Time Faculty by Highest Degree-Granting Department, Fall 2003 students in the mathematical sciences at fouryear colleges and universities in the U.S. Guidance is provided by the Data Committee, a joint committee of the AMS, the American Statistical Association, the Institute of Mathematical Statistics, and the Mathematical Association of America. The Annual Survey is published in three issues of Notices of the AMS and includes reports on new doctoral recipients (with special analyses of gender, race/ethnicity, and citizenship) and their employment status; salary data for tenured and tenure-track faculty; doctoral degrees conferred; starting salaries of new doctoral recipients; and instructional programs at the undergraduate and graduate levels, including data on fall course enrollments, majors, graduate students, and departmental faculty.
Read more The Third Report of the 2003 Survey is in the September issue of Notices of the AMS (on page 901) and online at www.ams.org/notices/ 200408/third-report-notices.pdf. Links to the most recent and older survey reports are at www.ams.org/outreach.

## Employment Services

Many departments take advantage of the various AMS or AMShosted outlets to announce open positions in their departments-outlets that reach arguably the largest number of mathematicians in the world:

- MathJobs (www.mathjobs.org), where departments can conduct their recruiting entirely online, without setting up and maintaining their own servers and databases;
- Notices of the AMS (www.ams.org/notices), in which over 29,000 readers worldwide see classified and display ads;
- Employment in the Mathematical Sciences (in print and online at https://www.ams.org/eims), where employers can submit and revise job postings;
- Employment Center (www.ams.org/emp-reg), a joint program of the AMS and MAA, organized and staffed by the AMS at the Joint Mathematics Meetings, where department hiring personnel can conduct computer- or employer-scheduled interviews in an organized setting with applicants who have preregistered for the service.
Read more See resources on employment and career services at www.ams.org/employment and survey reports on employment and hiring at www.ams.org/employment/surveyreports.html.


## Public Awareness

The AMS Public Awareness Office produces a number of posters for math departments to post on bulletin boards to attract interest and generate discussion. Among them are:

Mathematical Moments: A series of $8.5^{\prime \prime} \times 11 "$ posters designed to promote appreciation and understanding of the role mathematics plays in science, nature, technology, and human culture. Each year a new set of eight is mailed to depart-
 ment chairs in the U.S. There are now forty available for anyone to download and print at www.ams.org/mathmoments.
"Wonderful job! Colorful, catchy, and designed to attract the attention of the passerby, these posters will be up outside my office."

What Can I Do with a Math Degree? This poster was created in response to undergraduate students who ask us that very question. A limited number are available upon request (paoffice@ams.org), but an $8.5^{\prime \prime} \times \mathrm{II}$ " version is available for anyone to download and print at www.ams.org/outreach/ what-mathdegree.pdf.

Read more See the Public Awareness Office website at www.ams.org/public-awareness for more information on these and other public awareness resources for math department faculty.

Nonprofit Org.
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Providence, RI

## 201 Charles Street

Providence, Rhode Island 02904-2294, USA

## AMS MEMBER NEWSLETTER



Math in the Media is a new centralized tracker of articles about mathematics that appear in the media. The collection-Tony Phillips'Take on Math in the Media; Math Digest (summaries of mathematics in the news); and Reviews of books, plays, and films with mathematical themes - is a great way to keep abreast of math research and news as reported in newspapers and general science magazines. The Feature Column is a series of essays on various mathematical themes.
Math in the Media and the Feature Column can serve as a starting point for math club or classroom discussions.

Read more Bookmark Math in the Media at www.ams.org/mathmedia. The monthly Feature
Column is at www.ams.org/featurecolumn, and members may sign up to receive Headlines \&
Deadlines at www.ams.org/enews.

## Allocation of Spendable Income

The 2005 budget reflects the following allocations of spendable income from the unrestricted endowment.

MR Citations Project ( $\mathbf{( 7 0 , 0 0 0 ) : ~ F o r ~ t h e ~ p a s t ~ s e v e r a l ~ y e a r s , ~ M a t h ~ R e v i e w s ~ h a s ~ a d d e d ~ a ~}$ new kind of data to the database -- lists of references, tagged with the corresponding MR number when it exists. The resulting collection of citation data, based on the data within MR itself, provides a new way to study and understand the mathematical literature. At the moment, these reference lists exist for only about 100 journals and extend back to 1997 for most. Next year, the project will be greatly expanded. MR will begin adding reference lists for approximately 200 journals, and extend the newly added journals back to 2000. For most, this means having the reference lists keyboarded by an outside contractor (Apex), although the MR staff has created a process to produce some of this material by automatic extraction from pdf files. These lists will be extended back to 1997 in the following year, and tools will be added to "mine" the citation data.

Young Scholars Program ( $\mathbf{\$ 5 0 , 0 0 0 ) : ~ T h e ~ S o c i e t y ~ h a s ~ p r o v i d e d ~ s m a l l ~ g r a n t s ~ t o ~ y o u n g ~}$ scholars programs across the country for the past 5 years, and the program will continue in the future. In 2004, grants totaling $\$ 80,000$ were awarded to 8 programs across North America. The same amount is budgeted for 2005. Eventually, this program will be supported by income from the Epsilon Fund, which currently amounts to more than $\$ 1,000,000$ (endowment and quasi-endowment combined). In the meantime, the Society uses income from the unrestricted endowment and operating income to fund the grants.

What's Happening in Mathematics (\$25,000): The next volume in this series was supposed to appear in 2004, but the writing was delayed. The AMS anticipates producing volume 6 in 2005. The allocated funds from the unrestricted endowment cover part of the expense of writing the material.

Project NExT Support $\mathbf{( \$ 1 5 , 0 0 0 ) : ~ T h e ~ S o c i e t y ~ h a s ~ a g r e e d ~ t o ~ f u n d ~} 6$ Project NExT Fellows each year at $\$ 2,500$ each. (Approval is done on the consent agenda in year X-2 for support in year X.) The money pays for the Project NExT program and the expenses incurred by the fellows at two meetings. (Travel is paid by the fellow's department.)

AAAS Mass Media Fellowship (\$10,000): For a number of years, the Society has supported one or more mathematics graduate students, who spend 6-8 weeks in the summer working with a media outlet (newspaper, magazine, or radio/TV station). The program has built a cadre of young mathematicians with some experience in carrying out public awareness, and we have used them in various ways (often at the annual meeting). This has been a great program for the entire science community, increasing the number of scientifically literate journalists (as well as the number of media-savvy young scientists).

Mathjobs (\$10,000): This service provides a way for mathematics departments, job candidates, and referees to exchange various materials related to job searches. It was created at Duke University, and it continues to reside there. Customer support is now done by the AMS, which also provides overall control and administration. The number of departments and candidates continues to grow, and the Society is now prepared to be more aggressive in promoting the service. Duke receives a stipend of $\$ 10,000$ each year to update and support the software and hardware behind the service.

Congressional Fellow (\$75,000): Several years ago, the ECBT considered the possibility of sharing support for a Congressional Fellow with another society. While most people seemed enthusiastic about supporting a fellow, many were uneasy about the idea of sharing support. Fellows do not provide direct services to the supporting organization, and a large part of the value is building a relationship between those who provide support and the congressional office in which the person works. That value is greatly diminished when the obligation for support is shared. A separate item on this agenda asks whether the ECBT wishes to support a fellow for 2005. Providing a substantial portion of that support using income from the endowment makes it possible to greatly reduce the cost from operations.

John Ewing<br>Executive Director<br>October 2004

## BOARD OF TRUSTEES STANDING COMMITTEES

Boxes indicate where attention is needed.

## AGENDA AND BUDGET COMMITTEE

(as of February 1, 2005)
James Arthur, Chair (ex officio - President)
Robert Daverman (ex officio - Secretary)
John Franks (ex officio - Treasurer)
Donald McClure (ex officio - Associate Treasurer)
Carol Wood (ex officio - Chair of BT)
AUDIT COMMITTEE
(as of February 1, 2005)
John Franks, Chair (ex officio - Treasurer)
Donald McClure (ex officio - Associate Treasurer)
Jean Taylor (ex-officio - incoming Chair of BT)
Carol Wood (ex officio - Chair of BT)

## INVESTMENT COMMITTEE

(as of February 1, 2005)
John Franks, Chair (ex officio - Treasurer)
Linda Keen (term expires January 31, 2005)
Donald McClure (ex officio - Associate Treasurer)
Peter Weinberger (term expires January 31, 2007)

## LIAISON COMMITTEE

(NOT REALLY A BT COMMITTEE, BUT LISTED HERE FOR CONVENIENCE)
(as of February 1, 2005)
James Arthur, Chair (ex officio - President)
Robert Daverman (ex officio - Secretary)
John Franks (ex officio - Treasurer)
Carol Wood (ex officio - Chair of BT)

## SALARY COMMITTEE

(as of February 1, 2005)
John Franks, Chair (ex officio - Treasurer)
Donald McClure (ex officio - Associate Treasurer)
Carol Wood (ex officio - Chair of BT)

# EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES STANDING COMMITTEES 

## LONG RANGE PLANNING COMMITTEE

(as of February 1, 2005)
James Arthur, Chair (ex officio - President)
Walter Craig (ex officio - third-year member of EC)
Robert Daverman (ex officio - Secretary)
John Ewing (ex officio - Executive Director)
John Franks (ex officio - Treasurer)
Paul Sally (ex officio - second-year member of EC)
Carol Wood (ex officio - Chair of BT)

## ECBT NOMINATING COMMITTEE

(as of February 1, 2005)
Walter Craig (ex officio - third-year member of EC)
Jean Taylor, Chair (ex officio - third-year member of BT)
??? (ex officio - Chair of Council Nominating Committee)
NOTE: When the position of Secretary is under consideration, the Treasurer is a member of this Committee. When the position of Treasurer is under consideration, the Secretary is a member of this Committee.

# TRUSTEE ASSIGNMENTS TO POLICY COMMITTEES 

## COMMITTEE ON EDUCATION

John Conway (term expires January 31, 2005)

## COMMITTEE ON MEETINGS AND CONFERENCES

Jean Taylor (term expires January 31, 2005)

## COMMITTEE ON THE PROFESSION

Carol Wood (term expires January 31, 2005)
COMMITTEE ON PUBLICATIONS
Linda Keen (term expires January 31, 2005)
COMMITTEE ON SCIENCE POLICY
Eric Friedlander (term expires January 31, 2005)

TRUSTEE LIAISON ASSIGNMENTS TO DIVISIONS FOR 2004

| Division (Division Director) | Board Liaison |
| :---: | :---: |
| Executive Director (John Ewing) | David Eisenbud |
| Administration (Gary Brownell) Electronic Products Development Human Resources Management Information Systems Systems and Operations | John Conway John Franks Jean Taylor |
| Finance (Connie Pass) <br> Distribution <br> Facilities and Purchasing <br> Fiscal <br> Member and Customer Services | John Conway John Franks Don McClure |
| Mathematical Reviews (Kevin Clancey) <br> Administration <br> Bibliographic Services <br> Copy Editors <br> Editorial <br> Production <br> Reviewer Services <br> Slavic Languages <br> Systems Support | Don McClure Carol Wood |
| Meetings and Professional Services (Jim Maxwell) <br> Meetings and Conferences <br> Membership and Programs <br> Public Awareness | Linda Keen Jean Taylor |
| Publications (John Ewing) <br> Acquisitions <br> Printing <br> Production <br> Promotions <br> Sales Administration | Eric Friedlander Linda Keen |
| Washington Office (Sam Rankin) | Eric Friedlander Carol Wood |

## AMERICAN MATHEMATICAL SOCIETY

To: Staff Executive Committee<br>From: Gary Brownell<br>Subject: Focused Planning for Infrastructure Project Update<br>Date: October 5, 2004<br>Cc: Tom Blythe and Gerry Loon

The purpose of this memo is to provide an update on the Focused Planning for Infrastructure project. I will provide a list of the committee members, describe our current focus, discuss issues that may prove difficult and discuss our current progress.

## The Focused Planning for Infrastructure Committee Members

- To ensure that all interaction, transaction and data departments are included in this focused planning effort, the following group was selected as committee members:
o Gary Brownell, Committee Chair
o Connie Pass
o Beth Huber
o Tom Blythe
o Gerry Loon
Because it is important that the committee stay focused on the overview and steering of the project, they will delegate the more detailed work to staff members. Most members of the CCC, some Ann Arbor staff and some SEC members will become involved in this project at some point. Other staff members will likely be asked to contribute.


## The Committee’s Current Focus

The committee has met several times with the focus being on two major paths currently underway, the Systems Assessment project and the documentation of Business Rules.

Connie Pass is leading the Business Rules piece of the infrastructure project and has already begun documenting AMS Business Rules. A model has been developed to gather business rules and practices information from all departments; the Facilities department will be used as our test subject. Information from department managers and interviews with key employees within each department will help the committee assemble a list of rules and practices that apply to each department.

The Systems Assessment project includes all three computing department managers and consists of compiling systems inventory lists, technical assessments and user assessments. This independent project and is expected to be complete by March 2005.

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It has become clear to the committee that a glossary needs to be developed that will clearly define several items, including "rules", "practices", "policies" and "computing systems". The committee is currently working on this item.

## Issues that may prove difficult

In terms of difficult issues, one item the committee is still struggling with is the scope of this project. Because this project has the potential to become overwhelming, the committee will adjust the scope as it moves forward and we can see what is involved.

The committee is considering whether or not a consultant would be helpful to while working on the Business Rules portion of the project.

## Summary

The AMS Focused Planning for Infrastructure project is moving forward at a good pace. All reports and meeting minutes can be read on our webpage:
https://amsweb.ams.org/fin/Infrastructure_Focused_Planning/infrastructure_index.htm

## Report on AMS Sale of Service Activities

For decades, as part of our overall mission to further mathematical research and scholarship, the Society has offered other mathematical organizations and publishers of mathematics access to a variety of publishing-related services on a Sale of Service ("SOS") basis. Our SOS services cover every aspect of book and journal production from receipt of manuscripts to print and online posting to product fulfillment. We tailor these services to meet specific customer need in the ever-changing and increasingly demanding publishing environment.

The Publications Division routinely has periods of excess capacity in key areas that allow us to offer our services at extremely competitive rates. Most of the services we supply are patterned identically after our own product publishing and fulfillment schemes, so we can easily incorporate new product production into our existing infrastructure.

Our current Sale of Service offerings can be divided into three categories: Production, Hosting, and Distribution.

PRODUCTION SERVICES: We offer complete post acceptance editorial, typesetting, and printing and binding services. In recent years we have extended our production services to include electronic versions of journals. We currently have provision of service agreements with Brown University, the Association for Symbolic Logic, University Press of Hong Kong, Mathematica Josephina, Inc. and Bar-Ilan University.

JOURNAL HOSTING: The newest of our Sale of Service offerings is
 journal hosting for small publishers that lack the resources to offer online versions of their journals. Under our journal hosting program we provide publishers with a secure environment that enables them to offer an electronic version of their journal to subscribers. The journals are provided a "home page" from which subscribers can easily navigate both the journal content as well as administrative details for the publication. An example of a journal hosted at the AMS can be viewed at http://www.mrlonline.org/mrl/.


The information available in the hosted journal environment and subscription records is managed by each journal's coordinator, who is employed by the publisher, not the AMS. The publisher maintains the online journal through a Web-based tool, which they use to perform the necessary maintenance functions, including management of journal home page content, article/issue file uploading, and proofing. In addition, access to the online journal is based on subscriber information collected by the publisher and provides for access by either Class B IP address or user ID/password which is uploaded into the hosted journal environment using the Web-based tool.

We are able to offer this product to publishers at a very reasonable cost since our expenses are limited to development of the environment. The more costly processing and maintenance of
information is managed directly by the publisher. We have three publishers that are currently hosting their journals with the AMS: International Press (Mathematical Research Letters), Independent University of Moscow (Moscow Mathematical Journal), and the Institute of Applied Mathematics and Mechanics National Academy of Science of Ukraine (Ukrainian Mathematical Bulletin).

We anticipate more interest in this product as smaller publishers find the hosted environment a viable alternative to moving the entire journal to a large commercial publisher in order to deliver the product electronically.

MARKETING/FULFILLMENT/DISTRIBUTION SERVICES: Because the AMS maintains a strong dialogue with individuals, institutions, and distributors interested in mathematics publications, we are often sought out by other publishers to assist in the marketing and distribution of their publications. The majority of the publishers and organizations that seek out the AMS for assistance in distributing their products are from outside of North America and want the AMS to distribute their publications within the Americas.


We pattern the marketing and fulfillment services offered to other publishers to be similar to our own efforts in these areas so the additional costs associated with servicing these accounts are minimal. The fees we collect are normally based on a per book or per subscriber increment and are intended to contribute to the fixed costs associated with these areas of our publications program.

Currently we have book distribution agreements with 12 publishers and organizations with inventory maintained in our warehouse for over 170 titles. With few exceptions, these agreements provide for AMS members to receive discounts on distributed publications that are consistent with AMS discounting practices.

We have similar contracts with 6 journal publishers for product promotion, subscription renewal management, inventory management and distribution services for 11 mathematics journals.

A detailed list of publishers and organizations for which the AMS provides Sale of Service Services to is presented in pages 3 and 4 of this attachment.

Beth Huber
Deputy Publisher
November 2004

## SOS CLIENT LIST Journal Related Activities



# SOS CLIENT LIST Book Related Activities 

| Publisher / Organization |  |  |  |  |  | - |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Barllan University Press | $\sqrt{ }$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ |  |  |  |
| Centre de Recherches Mathématiques |  |  |  | $\checkmark$ | $\checkmark$ | $\sqrt{ }$ |  |  |  |
| European Mathematical Society |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |
| Hindustan Book Agency |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |
| Institure for Scientific Computing |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  | $\sqrt{ }$ |
| International Press of Boston, Inc. |  |  |  | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ | $\sqrt{ }$ |  |  |
| Mathematical Sciences Research Institute |  |  |  |  |  |  |  |  | $\checkmark$ |
| Mathematical Society of Japan |  |  |  | $\checkmark$ | $\checkmark$ | $\sqrt{ }$ |  |  |  |
| Société Mathématique de France |  |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |
| Tata Institute of Fundamental Research |  |  |  | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ |  |  |  |
| Theta Foundation of Romania |  |  |  | $\checkmark$ | $\checkmark$ | $\sqrt{ }$ |  |  |  |

## Proposal to augment the EBC

The American Mathematical Society is a publisher. It publishes a dozen journals, almost 100 new books each year, and a sophisticated database of more then 2 million items. The AMS has more than 3000 books in print. It has its own printing plant, its own warehouse, and its own online bookstore. It sells its publications in every part of the world, and it distributes books and journals for other publishers.

Our publishing program is crucial to the intellectual and financial health of the Society. The scientific reputation of the AMS is built on its publication program (as well as its meetings). AMS journals are ranked highly; Math Reviews is widely admired; the Society's books increasingly compete with those of the most prestigious publishers. Revenue from publishing amounts to $75 \%$ of the Society's nearly 23 million dollar budget, and funds much of our outreach. More than 160 of our staff work primarily on publishing, and many others are involved indirectly. Without its publishing, the AMS would be a very different organization.

Of course, the AMS is also a scientific society and its publishing program is meant to serve its members. For society publishers, editorial policy ought to be shaped by the members, and that was part of the motivation for forming the Editorial Boards Committee in 1988. On the other hand, to be a successful publisher, editorial policy must be shaped by business concerns as well. Blending a society and a publisher requires balancing scientific expertise, good governance, and sound business practice. Society publishers thrive when all parts of their organizations work smoothly together. That's a principle that guides almost every activity of the AMS.

## History

When Irwin Kra proposed the Editorial Boards Committee in 1987, the motivation was efficiency and flexibility. Editorial appointments had previously been a chore for the Council and appointments were not always made with diligence. The task of achieving broad representation on editorial committees was hard work and required attention. Because many aspects of the editorial boards were specified in the Bylaws, making changes was cumbersome.

The proposed Editorial Boards Committee fixed these defects. The Committee of six members would be selected in (contested) elections. They would each serve a three-year term, rotating responsibility for selecting editors among various constituencies. Because their sole responsibility would be publishing, they could concentrate their energy on a single task -- finding the best editors.

From the beginning, however, there was uncertainty about the precise nature of the EBC. The six members were directly elected by the members, but the committee was not connected to other parts of the Society or its programs. Except for communicating nominations to the Secretary, there was no official interaction with any other program or person. When the committee's charge was first discussed in 1988, the Council introduced the idea that the EBC should "monitor the function" of editorial committees. What this meant was never clear. Other committees dealt with
publications policy. The Council reviewed publications using ad hoc committees (later the Committee on Publications). The editorial boards themselves acted with considerable autonomy. No one knew how the EBC fit in with these activities.

What was the proper role of the EBC? There were attempts to better define its role over the next few years, and the historical highlights at the end touch on some of these. For example, in 1990 the EBC was asked to comment on specific issues (page allocations for the Proceedings and Transactions, as well as the perennial problems with the Bulletin). The EBC provided advice about policy, and even added its concerns about the growing AMS book program. But nothing seems to have come from their comments or concerns.

After this brief foray into policy, the EBC settled down to a dozen years of routine, making appointments, fine tuning the appointment process, and generally carrying out the narrow mission defined in its charge. That's not to say the EBC was inactive -- quite the contrary. The committee energetically sought new editors, carried on lengthy discussions (by e-mail), and made many, many appointments. But it operated largely independently from the rest of the Society.

When the Committee on Publications was founded and charged with formulating publications policy for the Council, the EBC was asked to designate a member to serve as liaison. The aim was to keep the EBC informed about policy. As the book program expanded and became more professional, the EBC agreed to consult informally with the acquisition staff about appointments and reappointments. The process seemed to work reasonably well. But mainly the business of the EBC was making appointments.

In the past two years, the EBC has slightly expanded its activity. The committee formulated a policy for editorial appointments (reappointing editors to a third term should be exceptional and must be justified in some way). The EBC considered a request from the Collected Works Committee to disband and, presumably, to dissolve the series; it consulted with staff and decided against this. Most recently, the committee considered the scope of the Journal of Representation Theory, determining that the scope was too narrow and should be broadened.

This increased activity left some members of the EBC uneasy. They were not certain of their authority or the relevant background and history for some of these issues. Indeed, their uncertainty reflected the ambiguity about the nature of the EBC present from its beginning: The EBC was somewhat isolated. Eventually, the committee sought advice from the Committee on Publications, which discussed and commented on these issues at its October 2004 meeting.

## Connections

When the EBC was formed 15 years ago, it was meant to provide a way to involve the membership directly in the Society's publication program. This goal was achieved. But when it was created, no one gave much thought to integrating the committee and its function into the rest of the Society. This lack of clarity has consequences. The committee is asked to consult with the editorial boards when making appointments. What happens if the committee and the boards disagree? How do they resolve disputes? How much weight should be given to the opinions of
editors? The committee is asked to monitor the functioning of the editorial boards. What should it do when it discovers a problem? How much authority does it have to solve problems? None of these questions has a clear answer.

There is an even more troublesome consequence. One creates "policy" each time one makes an appointment. Over time, this implicit policy-making can profoundly change the nature of a journal or a book series. It is a small (and natural) step to make changes explicitly, first deciding how a journal or a book series should change and then making appointments accordingly. How should the Committee on Publications (charged explicitly with making recommendations on publications policy to the Council) be involved in these decisions? How should the Council itself be involved?

Actions of the EBC can profoundly affect the Society's publication program as well as its finances. What if the EBC decided that the Journal of the AMS should focus only on a particular area of mathematics? What if they decided that the level of the Graduate Studies series should move up or down? What if they decided to cease making new appointments to Collected Works because the committee was too inactive? Of course, these are unlikely actions. But members of the EBC are elected to a single 3-year term, and while many have been editors, most are not involved in the Society's governance or know about its future plans.

The missing ingredient in the present arrangement is a deeper connection to the rest of the Society, both its governance structure and its staff.

## Proposal

There is a simple and direct way to make that connection:
The EBC should be expanded to include two additional members, the Secretary and the Publisher, both non-voting.
Making the two new members non-voting ensures that decisions continue to be made by the elected members of the committee. On the other hand, both ex officio members will participate fully in the committee's deliberations. The Secretary and Publisher would be able to provide information, even when the committee wasn't aware that information was required. They could provide advice about the easiest way to make changes, about which issues might be sensitive, and about the protocols for dealing with various parts of the AMS. They could inform the elected members of the EBC about other programs and future plans. They could act as liaisons to every other part of the Society.

Why add only two people? Clearly the EBC's deliberations must be kept confidential, and therefore the number of additional members should be small. Adding these two would not compromise the confidentiality of the process.

Why add precisely these two? The Secretary is in an ideal position to connect the EBC to the rest of the Society's governance structure. The Publisher ${ }^{1}$ is the person who knows best how

[^2]particular decisions will affect the publications program and also knows the Society's plans for the future.

There are some additional advantages to adding the Secretary and Publisher. Because they will be privy to all deliberations of the EBC, they can better carry out their other responsibilities. The Secretary acts as counselor to the President in making appointments; knowing the rationale for a particular appointment will sometimes help in this capacity. The Publisher is in charge of the acquisition editors, with whom the EBC is supposed to consult about appointments to book series; this makes consultation with staff easier and more certain, which is increasingly important as the Society's publication program matures. Both are members of the Committee on Publications, and hence better connect that committee with the EBC. Finally, these two are well positioned to provide a warning to the Society in the unlikely event that a future EBC goes astray. Although unlikely, it is always sensible to create a system of checks and balances.

Mainly, augmenting the EBC with two ex officio members is sensible because it adheres to the principle annunciated earlier: Scholarly publishers thrive when all parts of their organizations work smoothly together. This makes that possible.

John Ewing

## Proposed charge to EBC

## General Description

-Committee is standing. This is a committee of the Council
-Number of members is eight, six elected and two ex officio.
-Two members are elected each year in a contested election, each serving a three-year term.
-Candidates for the elected positions shall be nominated by the President
-The Secretary and Publisher are ex officio non-voting members

## Principal Activities

The Editorial Boards Committee shall monitor the function of the AMS Editorial Committees. This committee shall solicit suggestions of nominations for each such editorial committee and shall consult with that editorial committee about nominations.

The committee shall nominate members for these committees and submit its nominations for approval by the AMS President, except for the following appointments: the Chief Editor and the Book Reviews Editor of the Bulletin; the Editor of the Notices; the Managing Editors of the Journal of the AMS, Transactions/Memoirs of the AMS, Proceedings of the AMS, and Mathematics of Computation; and the chairs of the Colloquium Editorial Committee, the Mathematical Reviews Editorial Committee, and the Mathematical Surveys and Monographs Editorial Committee. All of the exceptions mentioned require approval by the AMS Council.

## History of the Editorial Boards Committee

## Creation of EBC

- April 1987: Irwin Kra writes a letter to Council proposing a new system to select editors, using an elected committee called "Editorial Board Appointment Committee (EBAC)". Council refers to Executive Committee.
- May 1987: EC discusses the proposal and approves it in principle, asking Kra and Secretary to prepare amendments to Bylaws.
- August 1987: Council is told that proposal being formulated.
- November 1987: EC brings forward a proposal that it will present to Council.
o EBC shall have six members serving 3-year terms.
o EBC shall solicit nominations for editorial committees named in Article III, sections 1 and 3, consulting with those same committees
o EBC shall nominate chairman of each editorial committee
- January 1988: There was a lengthy and detailed discussion of the EC proposal, including such issues as whether or not associate editors were to be nominated by the EBC and the benefits (free subscriptions) accorded to members of the EBC. Wording was modified and a new feature of the proposal was added:
o The EBC shall monitor the function of the editorial committees named in Article III, sections 1 and 3.
- April 1988: The Council approved an amendment to the Bylaws that must be made before the EBC can act. The amendment is to be submitted to the membership on the fall ballot. (It was approved.)
- January 1989: The Council agrees that members of editorial committees who begin serving in 1990 shall be selected using the new procedure.


## Refining EBC Function and Charge

- April 1990: The EBC clarifies its role by deciding that nominations to Colloquium Committee should be made by Nominating Committee (because the Colloquium Committee is not a true editorial committee).
- May 1990: The ECBT asks the EBC to consider how to solve the (perennial) problem of backlogs for the Proceedings and the Transactions. Should the AMS create a new journal? Should page allocations be increased? The EBC is also asked to comment on the Bulletin and its problems. The EBC writes a response, which is considered at the November 1990 meeting.
- August 1990: The EBC clarifies its role by recommending that appointments of associate editors should be done in consultation with the EBC. The Council approves the recommendation.
- November 1990: In connection with his response to specific questions from the ECBT, the Chair of the EBC (Haynes Miller) writes to the AMS President and expresses the EBC's concern about the proliferation of AMS book series (and the expansion of the Society's book program more generally). This will lead to a massive increase in staff, he writes, and is inappropriate for the Society. The ECBT discusses the EBC's concern and decides to bring the matter to the Council along with the larger review.
- January 1991: The review of the publications program comes to the Council, is discussed, and (apparently) promptly ignored. The EBC concerns about the expansion of the book program seem to be forgotten.
- January 1991: The EBC makes a recommendation to amend its charge. A slight revision is adopted by the Council. The new charge reads:

The Editorial Boards Committee shall monitor the activities of the editorial committees of the AMS.

It shall act as a general liaison between these committees on the one hand and the Council and the President on the other. After consultation with the editorial committees, it shall make recommendations to the Council. These shall include: nominating of editors to fill openings; recommendations for the choice of managing editor or chair of each committee; recommendations concerning the size and structure of an editorial committee; and other aspects of the AMS editorial committee activities of concern to the Council.

When it is appropriate for editors to form a panel of associate editors, they will do so in consultation with the EBC, which has the authority to ratify the selections.

While editors are often chosen from a panel of associate editors, the pool of candidates for an editorship is not limited to that panel.

The Council, or its Executive Committee, shall determine for which committees the EBC shall have specic responsibility for nominating editors. It is understood, however, that the Editorial Boards Committee is available for consultation regarding any appointments to editorial positions, and should be kept informed of all such appointments.

The list of editorial committees for which the EBC has specific nominating responsibility is the following:

- Bulletin Editorial Committee
- Contemporary Mathematics Editorial Committee
- Journal of AMS Editorial Committee
- Mathematical Reviews Editorial Committee
- Mathematical Surveys and Monographs Editorial Committee
- Mathematics of Computation Editorial Committee
- Proceedings Editorial Committee
- Proceedings of Symposia in Applied Mathematics Editorial Committee
- Transactions and Memoirs Editorial Committee
- History of Mathematics Editorial Committee
- University Lecture Series Editorial Committee
- Collected Works Editorial Committee
- Graduate Studies Editorial Committee
- AMS Representative on the American Journal of Mathematics
- All translation committees
- August 1991: The Council brings appointments to the Colloquium Committee back under the control of the EBC (since it is now functioning as an editorial committee).
- September 1992: The Council approves a recommendation to the EBC. "The Council encourages the Editorial Boards Committee to include, where desirable, international members on editorial committees."
- August 1994: The American Journal of Mathematics terminates its agreement with the AMS. The EBC no longer has responsibility for appointing an editor to the AJM board.
- January 1995: The Council splits the Colloquium Committee into two, one with editorial responsibilities and the other charged with finding speakers. The EBC has responsibility for the former.
- January 1996: The Council agrees that editorial appointments to the new electronic-only journals (Representation Theory and Conformal Geometry) are to be made by the EBC.
- January 1999: The Council votes to implement a new procedure to search for and approve the editor-in-chief of the Notices. The Secretary, the Executive Director, and two members of the EBC will form a search committee. The EBC will provide comments on any nominations, which will then go to the Council for approval as usual.
- January 2001: The Council votes to simplify the appointment process for certain editorial committees. The new procedure reads as follows:

> The Editorial Boards Committee (EBC) approves members for all AMS editorial committees, subject to final approval by the President, except for the Chief Editor and Book Reviews Editor of the Bulletin; the Editor of the Notices; the Managing Editors of the Journal of the AMS, Transactions/Memoirs of the AMS, Proceedings of the AMS and Mathematics of Computation; and the chairs of the Colloquium Editorial Committee, the Mathematical Reviews Editorial Committee, and the Mathematical Surveys and Monographs Editorial Committee. All of the exceptions mentioned require approval by the Council.

- April 2001: In view of the changes to the way in which the EBC operates, the changes its charge, which now reads:

The Editorial Boards Committee shall monitor the function of the AMS Editorial Committees. This committee shall solicit suggestions of nominations for each such editorial committee and shall consult with that editorial committee about nominations. The committee shall nominate members for these committees and submit its nominations for approval by the AMS President, except for the following appointments: the Chief Editor and the Book Reviews Editor of the

Bulletin; the Editor of the Notices; the Managing Editors of the Journal of the AMS, Transactions/Memoirs of the AMS, Proceedings of the AMS, and Mathematics of Computation; and the chairs of the Colloquium Editorial Committee, the Mathematical Reviews Editorial Committee, and the Mathematical Surveys and Monographs Editorial Committee. All of the exceptions mentioned require approval by the AMS Council.

Current members of Editorial Boards Committee (9/16/04)

| NAME | LOCATION | SPECIALTIES | START <br> DATE | END <br> DATE |
| :--- | :--- | :--- | :--- | :--- |
| Dr Richard A <br> Brualdi | Madison, WI | 05,15 | 01-feb-2003 | 31-jan- <br> 2006 |
|  | Chair |  | 01-feb-2004 | 31-jan- <br> 2005 |
| Clifford J Earle | Ithaca, NY | 30 | 01-feb-2002 | 31-jan- <br> 2005 |
| Svetlana Y <br> Jitomirskaya | Irvine, CA | 37 | 02-feb-2002 | 31-jan- <br> 2005 |
| Emma Previato | Boston, MA | $14,32,34,35$, | 01-feb-2004 | 31-jan- <br> 2007 |
| Karl Rubin | Irvine, CA | 11,14 | 01-feb-2004 | 31-jan- <br> 2007 |
| Leonard L Scott | Charlottesville, VA | $18,20,22$ | 01-feb-2003 | 31-jan- <br> 2006 |
|  | Representative to Comm. on <br> Publications |  | 31-jan- <br> 2005 |  |


[^0]:    ${ }^{1}$ An ad hoc committee appointed in 1993 by the AMS President to review the AMS's conference program.

[^1]:    Read more Doctoral Degrees Conferred is at www.ams.org/employment/degrees.html, and Programs for Graduate Students and Recent Ph.D.'s is at www.ams.org/outreach/gradinfo.html.

[^2]:    ${ }^{1}$ Currently, the Executive Director holds the position of Publisher. This may not be true in the future, however, and the Publisher's position is viewed as separate.

