



# COUNCIL MINUTES

**11 January 2006**

*Prepared 15 February 2006*

## **Abstract**

The Council of the Society met at 1:30 p.m. on January 11, 2006, in the Alamo Ballroom, Salon D, of the San Antonio Marriott Riverwalk Hotel, 711 East River Walk, San Antonio, TX 78205.

These are the minutes of the meeting. Although several items were treated in Executive Session, all actions taken are reported in these minutes.

## **I. AGENDA**

### **1. Call to Order**

#### **1.1. Opening of the Meeting and Introductions**

The meeting was called to order at 1:35 pm. President James G. Arthur, who presided throughout, called on members and guests to introduce themselves. Members present were James G. Arthur, Haim Brezis, James W. Cannon, Sylvain Cappell, Walter Craig, Robert J. Daverman, Beverly E. J. Diamond, David Eisenbud, John M. Franks, Susan Friedlander, Mark Goresky, Robert Guralnick, Susan M. Hermiller, Sheldon H. Katz, Michel Lapidus, Brian H. Marcus, John E. McCarthy, Donald E. McClure, Matthew Miller, Paul J. Sally, Jr., Chi-Wang Shu, Michael F. Singer, J. T. Stafford, Alejandro Uribe, Karen Vogtmann, Catherine H. Yan and Paul Zorn. Among the guests present were Eddie Campbell (CMS Representative), Kevin Clancey (Math Reviews Executive Editor), John H. Ewing (AMS Executive Director), James G. Glimm (AMS President Elect), Sandy Golden (Admin. Asst., AMS Secretary), William Goldman (AMS Council-Elect), Craig Huneke (AMS Council-Elect), Judy A. Kennedy (AMS Council-Elect), James W. Maxwell (AMS Staff), Ellen J. Maycock (AMS Associate Executive Director), William McCallum (AMS Committee on Education Chair), Ken Ono (AMS Council-Elect), Robert Olin (AMS Committee on Science Policy Chair), Diane Saxe (AMS Meetings Department Director), Tina Straley (MAA Executive Director), Raquel Storti (AMS Staff), Jean Taylor (AMS Board of Trustees) and Carol Wood (AMS Board of Trustees).

#### **1.2. 2005 Council Elections**

The Society conducted its annual elections in the fall of 2005. Except for the new members of the Nominating Committee, those elected will take office on February 1, 2006. The newly elected members of the Council, the Editorial Boards Committee, the Nominating Committee and the Board of Trustees are listed under Item 4.1.

#### **1.3. Retiring Members**

The terms of David Eisenbud as Immediate Past President, of Karen Vogtmann as Vice President, of Susan M. Hermiller, Brian H. Marcus, John E. McCarthy, Paul J. Sally, Jr., and Paul Zorn as Members at Large of the Council, of B. A. Taylor as chair of the *Mathematical Reviews* Editorial Committee, of Eric D. Bedford as chair of the *Proceedings* Editorial Committee, and of Hugo Rossi on the Executive Committee will end on 31 January 2006. This will be their final Council meeting in their current positions. The Secretary requests unanimous consent to send thanks to each of them for sharing their wisdom with the Society and the Council and for their service to the mathematical community.

#### **1.4. Council Members**

Lists of Council members can be found in **Attachment A**, for the 2005 Council, and **Attachment B**, for the 2006 Council.

## **2. Minutes**

### **2.1. Minutes of the April 2005 Council**

The minutes of the 09 April 2005 Council were distributed by mail and also were made available on the web at

<http://www.ams.org/secretary/council-minutes/council-minutes0404.pdf>

The minutes were approved as distributed.

### **2.2. The 05/2005 and 11/2005 Executive Committee and Board of Trustees (ECBT) Meetings**

The ECBT met in Providence, Rhode Island, in May and November 2005. The minutes of those meetings, which had been distributed beforehand, are considered part of the minutes of the Council.

## **3. Consent Agenda**

There were no items on the Consent Agenda.

## **4. Reports of Boards and Standing Committees**

### **4.1. Tellers' Report on the 2005 AMS Elections [Executive Session]**

The Society conducted its annual elections in the fall of 2005. The tellers reported that the people listed in the three items to follow were elected.

#### **4.1.1. Tellers' Report on the Elections of Officers**

Those elected will take office on 01 February 2006. Terms of the newly elected Vice President and the Members at Large of the Council are three years. The term of the Trustee is five years. The newly elected officers are:

President Elect	James G. Glimm, SUNY Stony Brook
Vice President	Ruth M. Charney, Brandeis University
Members at Large	William M. Goldman, University of Maryland Craig L. Huneke, University of Kansas Judy A. Kennedy, University of Delaware Ken Ono, University of Wisconsin Judy L. Walker, University of Nebraska
Trustee	John B. Conway, University of Tennessee and NSF

#### **4.1.2. Tellers' Report on Elections to the Nominating Committee**

Terms of office for the following people who were elected to the AMS Nominating Committee are 01 January 2006 - 31 December 2008.

Michael G. Crandall	University of California, Santa Barbara
M. Susan Montgomery	University of Southern California
Lisa Traynor	Bryn Mawr College

#### **4.1.3. Tellers' Report on Elections to the Editorial Boards Committee**

The following were elected to the Editorial Boards Committee. Their terms of office are 01 February 2006 - 31 January 2009.

Robert L. Bryant	Duke University
Stephen Lichtenbaum	Brown University

The Council approved the Tellers' Report, which appears as Attachment C.

### **4.2. Executive Committee and Board of Trustees**

The ECBT recommended reappointments of several officers. The Executive Committee members on the ECBT Nominating Committee, reported on the background for these recommendations. The term dates for all five appointments are 01 February 2007 - 31 January 2009.

#### **4.2.1. Reappointment of Secretary**

Upon the recommendation of the ECBT, the Council reappointed **ROBERT J. DAVERMAN** to a fifth term as AMS Secretary.

#### **4.2.2. Reappointment of Associate Secretary for the Eastern Section**

Upon the recommendation of the ECBT, the Council reappointed **LESLEY M. SIBNER** to an eighth term as Associate Secretary of the Eastern Section.

#### **4.2.3. Reappointment of Associate Secretary for the Southeastern Section**

Upon the recommendation of the ECBT, the Council reappointed **MATTHEW MILLER** to a second term as Associate Secretary of the Southeastern Section.

#### **4.2.4. Reappointment of Treasurer**

Upon the recommendation of the ECBT, the Council reappointed **JOHN M. FRANKS** to a fifth term as AMS Treasurer.

#### **4.2.5. Reappointment of Associate Treasurer**

Upon the recommendation of the ECBT, the Council reappointed **DONALD E. MCCLURE** to a third term as AMS Associate Treasurer.

#### **4.2.6. Dues Levels for the 2007 Membership Year**

Following advice from the AMS staff, the ECBT recommended that the 2007 dues for individual members be increased by \$4 above the 2006 level (this for the high dues rate), putting the high dues and low dues rates at \$156 and \$117, respectively. The Council approved.

#### **4.2.7. Editorial Boards Committee Charge**

The Editorial Boards Committee (EBC) has debated its scope and mission for the past two years, and the Council modified the charge to the EBC in January 2005, adding the Secretary and Publisher as (non-voting) members. The discussion about scope and mission has continued, however, and the Long Range Planning Committee discussed the matter at its May 2005 meeting. On the basis of that discussion, a new charge for the Committee was drafted for consideration by the ECBT at its November 2005 meeting. The ECBT unanimously recommended the draft charge to the January 2006 Council. The charge to the Committee on Publications is being revised simultaneously in order to clarify the different roles of these two important bodies.

Enacting the ECBT recommendation, the Council adopted the following charge for the EBC.

##### **Charge to the Editorial Boards Committee**

**The committee shall recommend appointees to certain editorial committees to the AMS President and the Council. To that end, it shall solicit suggestions for those editorial committees by consulting with managing editors, current editorial committees, and other interested parties. The committee should take into account both the interests of the publications and the overall interests of the Society. The Editorial Boards Committee shall monitor the function of the editors, alerting appropriate bodies (for example, the Committee on Publications, Council, officers, or staff) about existing or potential problems and concerns.**

**The committee shall recommend members for the following editorial committees and submit its recommendations for approval:**

*Journal of the AMS*

*Mathematics of Computation*

*Proceedings of the AMS*

*Transactions of the AMS*

*Electronic Research Announcements*

*Electronic Journal of Representation Theory*

*Electronic Journal of Conformal Geometry and Dynamics*

*Collected Works*

*Colloquium*

*Contemporary Mathematics*

*Graduate Studies in Mathematics*

*History of Mathematics*

*Mathematical Reviews*

*Mathematical Surveys and Monographs*

*Proceedings of Symposia in Applied Mathematics*

*Student Mathematical Library*

*University Lecture Notes*

**All recommendations for these editorial committees go to the President for approval except for the following, which go to the Council:**

**Managing editor of *Journal of the AMS***  
**Managing editor of *Mathematics of Computation***  
**Managing editor of *Proceedings of the AMS***  
**Managing editor of *Transactions of the AMS***  
**Chair of *Colloquium***  
**Chair of *Mathematical Surveys and Monographs***  
**Chair of *Mathematical Reviews***

Since the new charge eliminates a role for the EBC in selecting editors for the *Notices* and the *Bulletin*, and since the selection process for chief editor of the *Notices* already in place made no special provision for reappointment, the Long Rang Planning Committee recommended the following selection process for editorial appointments to these two prominent member publications:.

### **Selection Process for Notices and Bulletin**

**1. The chief editors of the *Notices* and *Bulletin* shall be appointed by the Council. Recommendations for appointment and reappointment shall be made by a committee consisting of the Executive Director (chair), the Secretary, the President, and two elected members of the Council appointed by the President. For new appointments, the committee should advertise widely to attract applications from the entire mathematical community. The recommendation of the committee along with a written rationale shall be brought to the Council for its approval.**

**2. Members of the editorial board of the *Notices* and *Bulletin* shall be nominated by the chief editors or chief editors-elect. Those nominations should be approved by the Council or, when appointments are made between meetings, by the Executive Committee of the Council. Members of the editorial board serve terms that end with the term of the chief-editor nominating them.**

The Council approved.

#### **4.2.8. Approval of Prizes by the Executive Committee**

In Fall 2005 the Steele Prize Selection Committee strongly objected to having to react to Executive Committee (EC) comments about its short list of candidates. Similar objections have arisen occasionally in the past, but the process has been maintained, in part because it provides certain protections, including the protection against duplication of awards to a single person by different prize committees. The Executive Committee recommended that the process be changed so that in future, after completing its deliberations, a prize selection committee simply report its recommendations to the EC. The expectation is that the EC would accept the report of the selection committees, except in unusual circumstances, such as awarding of a prize to a single person by independently operating selection committees.. The Council approved the EC recommendation.

### **4.3. Editorial Boards Committee [Executive Session]**

#### **4.3.1. *Proceedings* Editorial Committee**

Acting upon a recommendation of the Editorial Boards Committee, the Council appointed **RONALD A. FINTUSHEL** as Chief Editor of the *Proceedings of the American Mathematical Society* for four year term, 01 February 2006 - 31 January 2010).

### **4.4. *Notices* Editor Search Committee [Executive Session]**

Andy R. Magid began his 3-year term as editor-in-chief for the *Notices* in January 2004. The process for appointing new editors begins with a search committee, which circulates its recommendation to the Editorial Boards Committee for comment and then forwards it to the Council. The search committee discussed its options early in the summer of 2005 and unanimously recommended reappointment of **ANDY R. MAGID** for a second 3-year term (01 Jan 2007- 31 Dec 2009). The Editorial Boards Committee was asked to comment on the recommendation, and unanimously endorsed it. Council approved Magid's reappointment for that term.

### **4.5. Committee on Education**

The Committee on Education met in Washington, D.C. on 27-29 October 2005. Its annual report has been filed in the AMS Committee Report Book as Report No. 051111-004. William McCallum, the committee chair, reported on the committee's activities and answered questions.

### **4.6. Committee on Meetings and Conferences**

The Committee on Meetings and Conferences (CoMC) met in Chicago, Illinois, on 30 April 2005. Its annual report has been filed in the AMS Committee Report Book as Report No. 051201-011.

### **4.7. Committee on the Profession**

The Committee on the Profession (CoProf) met in Chicago, Illinois, on 24-25 September 2005. Its annual report has been filed in the AMS Committee Report Book as Report No. 051201-013.

The committee chair, Carol Wood, reported on the committee's activity, answered questions and highlighted several recent committee efforts.

The committee also made three specific recommendations requiring Council action, which appear below.

#### **4.7.1. AMS Statement on the Employment of Young Mathematicians**

In January 1994, in response to a difficult job market, the Council adopted a statement on the employment of young mathematicians. This statement has been important and effective. Acting upon a CoProf observation that the current statement had become dated, at its January 2005 meeting the Council charged CoProf with the task of suggesting revisions, and CoProf brought forward the following revised statement on Supportive Practices and Ethics in the Employment of Recent Graduates in the Mathematical Sciences.

## **Supportive Practices and Ethics in the Employment of Recent Graduates in the Mathematical Sciences**

- 1. It is incumbent upon mathematics departments to make their students aware of the realities of the job market and to encourage them to prepare for a broad range of jobs in the mathematical sciences.**
- 2. Employers have a responsibility to support the development of recent graduates through mentoring and training in all aspects of professional life.**
- 3. Whenever possible, temporary positions should be offered for at least two years.**
- 4. Recent graduates should be hired at reasonable salaries and should be integrated into the scholarly life of the department. In particular, the practice of hiring recent graduates by the course at sub-standard salaries is reprehensible and exploitative.**

### Discussion

(Note that the discussion paragraphs below are correlated with the numbered points in bold.)

The long-term health of our profession is dependent upon attracting talented people and helping them to establish productive careers. Thus mathematics departments must foster effective recruitment, training, job placement, mentoring, and job remuneration for those entering the profession.

1. A good source of information on employment of new Ph.D.s is the Annual Survey of the Mathematical Sciences published yearly in three installments in the Notices of the American Mathematical Society, usually in February, August and September. Departments can also provide information on employment by hosting talks and panels involving mathematicians in industry and government.
2. The early post-graduate years are crucial in career development. Departments should provide research mentoring and opportunities for recent graduates to improve teaching; examples of the latter might include workshops and extensive feedback on teaching from peers and more established faculty members.
3. Temporary positions can play an important role in the continued professional development of recent graduates. However, a one-year appointment with a demanding teaching load will typically have adverse effects on professional growth and morale. (There are some exceptions such as the temporary hiring of one's own graduates while they are still seeking employment elsewhere.) It is important that decisions on reappointment be made as early as possible in the year.
4. Although many institutions are under severe financial pressure, this should not be used as an excuse for exploitation. In particular, the practice of hiring recent graduates by the course, without giving them the opportunity to integrate into the scholarly life of the department, is seriously detrimental to the individuals and the profession. Such practice undermines educational quality, and knowledge of such practice discourages talented people from entering the profession

Council unanimously adopted this revised statement.



It was moved and seconded that the Council adopt the statement “so as to speak in the name of the Society.” Council members expressed concern about possible misinterpretation of the statements and informally suggested several possible clarifications. The motion to adopt the statement “so as to speak in the name of the Society” was tabled.

#### **4.7.2. Eisenbud Prize**

Early in 2005 David Eisenbud announced his intention to endow a prize in his father’s memory. CoProf unanimously has recommended establishment of the Leonard Eisenbud Prize, with the following description.

**The Leonard Eisenbud Prize for Mathematics and Physics will honor a work or group of works that brings the two fields closer together. Thus, for example, the prize might be given for a contribution to mathematics inspired by modern developments in physics or for the development of a physical theory exploiting modern mathematics in a novel way.**

**The prize will be awarded every three years for a work published in the preceding six years.**

The Council unanimously approved.

#### **4.7.3. Carnegie Initiative on the Doctorate**

The Carnegie Foundation for the Advancement of Teaching chose mathematics as one of six disciplines to be included in the Carnegie Initiative on the Doctorate (CID). Selected departments in these disciplines (chemistry, education, English, history, mathematics and neurosciences) each sent 2-3 people (faculty and graduate students) as a team to gatherings in the summers of 2003, 2004 and 2005. For the mathematics teams, the main point of these gatherings was to explore the purpose of graduate education in mathematics and to identify specific ways that departments could work on the findings. With the Carnegie Foundation’s role in the CID coming to a close this year, representatives from CID mathematics departments submitted a proposal to the Committee on the Profession (CoProf). The proposal calls on the AMS to assume the directing role that the Carnegie Foundation had played in an effort to help stimulate dialog and promote change among graduate mathematics programs/departments. The proposal is contained in **Attachment D**. CoProf voted unanimously to endorse this proposal, and sent it forward to ECBT and the January 2006 Council. The Council, in turn, approved the proposal.

#### **4.8. Committee on Publications**

The Committee on Publications (CPub) met in Chicago on 23-24 September 2005. Its annual report has been filed in the AMS Committee Report Book as Report No. 051201-012.

In addition to a lengthy review of the three electronic-only journals, the committee considered a number of issues on which it made recommendations for Council action.

##### **4.8.1. Committee Charge**

The charge to the Committee on Publications was last updated in 1997. Because CPub and the Editorial Boards Committee (EBC) must work closely together on the AMS publication program, the charges to for both were

reviewed simultaneously. In particular, CPub recommended adoption of the following charge for itself, designed to reflect the committee's current operations and responsibilities:

### **CHARGE TO THE COMMITTEE ON PUBLICATIONS**

#### **Principal Activities**

**The primary responsibility of the Committee on Publications (CPub) is to keep itself informed on matters of scholarly publishing and the AMS publishing program, including books, research journals, and member publications (*Bulletin*, *Notices*, and *Abstracts*). The main focus should be on matters of policy. When appropriate, the committee should recommend to Council changes in policy or other actions that might support and improve the AMS publication program and scholarly publishing more generally. Since policy recommendations formulated by CPub may require commitments of staff and other resources, CPub shall also recommend priorities for actions to the Council and the Board of Trustees.**

**CPub also has the responsibility for high-level oversight of the Society's publications and will review all aspects of the publication program on a continuing basis, reporting its findings to the Council along with possible recommendations. The committee will conduct detailed periodic reviews of certain activities in a four year cycle, as follows:**

**[Year 1:] Primary journals (JAMS, PAMS, TAMS, Math of Comp)**

**[Year 2:] All other journals**

**[Year 3:] AMS book program**

**[Year 4:] Member Journals (*Bulletin*, *Notices*, *Abstracts*)**

**The primary responsibility for *Mathematical Reviews* (MR) remains with the MR Editorial Committee. In the course of its work, however, CPub may occasionally find it expedient to consider matters that involve MR in a secondary way. In particular, the Committee should keep itself informed about the interplay of *Mathematical Reviews* and the rest of the Society's publications.**

**CPub should keep its attention fixed on long term policy questions, and the committee as a whole should not allow itself to be diverted from this goal by getting involved with day to day operational details of the Society's publication program.**

The Council unanimously adopted the new charge.

#### **4.8.2. History of Mathematics Charge**

When the History of Mathematics series was first created, people wanted to make certain that it focused on *recent* history rather than ancient. For that reason, the agreement establishing the series contained a specific prohibition about publishing history of mathematics prior to a specific date. The committee wished to have its charge modified so that it would have the latitude to publish *interesting* books, even if they happen to concern history prior to the last 200 years. The History of Mathematics series is copublished with the London Math Society, and its editorial committee is the union of two committees, one from the AMS and one from the LMS. CPub recommended the following new principal activities section of the charge to the (AMS portion of the) committee:

## **CHARGE TO THE *HISTORY OF MATHEMATICS* EDITORIAL COMMITTEE**

### **Principal Activities**

**The main aspect of the Committee's work is to solicit and recommend for publication suitable books on historical topics for joint publication with the London Mathematical Society.**

**The series will, in the main, publish manuscripts on the post-1750 period but will consider manuscripts of exceptional merit outside of that timeframe on a case by case basis.**

**A committee will often seek the advice of one or more outside experts in order to facilitate its decision process, but this is not always necessary. The AMS Acquisitions Staff is available to help the committee in any possible way, including communication with outside experts suggested by the committee.**

**Although most proposals will come to a committee from an AMS Acquisitions Editor, the Editorial Committee itself may solicit proposals.**

The Council adopted the new charge.

### **4.8.3. Access to the *Notices***

At its April 2004 meeting, the Council decided that access to the *Notices* should be granted through username/password. Although *any* mathematician can receive a username, this has provided the Society a means for gathering information about who uses the online *Notices*, and at the same time it provided a mechanism for reminding users that the *Notices* is made possible by AMS members. The new procedure was instituted in March 2005, and the number of accesses subsequently dropped dramatically. At its September 2005 meeting CPub recommended that the username/password access be discontinued. The Council rescinded its previous action requiring username/password access.

### **4.8.4. Best Practices for E-Journals: Integrity of Scholarship**

Some electronic journals are becoming increasingly sloppy – making corrections to papers after publication without notification, replacing online papers by new versions. even removing papers after they are published. People at Mathematical Reviews noticed the problem, and Executive Editor explained that, while the number of instances is relatively small at present, the eventual effect could be catastrophic for the integrity of the mathematical literature. Mathematical Reviews is taking steps of its own to address the matter, and Clancey urged the Society to make a strong statement about best practice on these fronts, so that editors and authors will be aware of the issue (and sloppy editors will be encouraged to act responsibly). The following statement was unanimously recommended to the Council by CPub, in order to promote responsible e-journal publication policies.

**Mathematical research depends on a body of research literature that has reliable content and assured persistence. Mathematicians use the literature to anchor new research in the old, and mathematics crucially depends on the integrity of this structure. For many years, journals have provided the framework for creating this body of literature. Those journals adhered to standards of scholarship that were designed to protect their integrity. Recently, however, a few electronic journals have adopted practices that threaten these past traditions. This could have profound consequences for**

**future mathematicians who may not be able to rely on the research literature in the way we do today.**

**Articles posted on a journal's website should be considered "published" unless the journal indicates clearly in the posting itself that the article is not in final form. Once an article is "published" it should be revised only in one of two ways -- by adding a link in the article to a dated revision or by replacing the article with a dated revision and adding an evident link to the original article. This practice should apply to every aspect of the published article, including the text, title, references, and ancillary information. Published articles and all revisions should persist indefinitely in the scholarly record.**

The Council endorsed the statement.

#### **4.9. Committee on Science Policy**

The Committee on Science Policy (CSP) met in Washington, D.C., on 08-09 April 2005. Its annual report has been filed in the AMS Committee Report Book as Report No. 051215-016.

President Jim Arthur related that the 2005 meeting produced much discussion about the best way to make the case for increased funding for basic research, especially with the nation's current budget constraints. As a result, the Committee decided to restructure its April 2006 meeting so that its members would have the opportunity to bring their concerns directly to Capitol Hill by making visits to Congressional offices.

#### **4.10. Mathematical Reviews Editorial Committee**

The annual report of this committee has been filed in the AMS Committee Report Book as Committee Report No. 051215-017. Executive Editor Kevin F. Clancey gave an oral report.

#### **4.11. Arnold Ross Lecture Series Committee**

The annual report of this committee has been filed in the AMS Committee Report Book as Committee Report No. 051212-014.

#### **4.12. Fan Fund Selection Committee**

The annual report of this committee has been filed in the AMS Committee Report Book as Committee Report No. 051124-007.

#### **4.13. Human Rights Committee**

The annual report of this committee has been filed in the AMS Committee Report Book as Committee Report No. 051115-006.

#### **4.14. Committee on Professional Ethics**

The annual report of this committee has been filed in the AMS Committee Report Book as Committee Report No. 051202-008.

#### **4.15. Short Course Subcommittee (of the National Program Committee)**

The annual report of this committee has been filed in the AMS Committee Report Book as Committee Report No. 051216-018.

#### **4.16. Young Scholars Committee**

The annual report of this committee has been filed in the AMS Committee Report Book as Committee Report No. 051115-005.

#### **4.17. Joint Policy Board for Mathematics**

The annual report of this committee has been filed in the AMS Committee Report Book as Committee Report No. 051214-019.

#### **4.18. Joint AMS-MAA Archives Committee**

The annual report of this committee has been filed in the AMS Committee Report Book as Committee Report No. 051207-009.

#### **4.19. Joint Committee on Mathematicians with Disabilities**

The annual reports of this committee for 2004 and 2005 have been filed in the AMS Committee Report Book as Committee Report Nos. 050509-002 and 051215-010, respectively.

#### **4.20. Joint AMS-MAA Committee on Teaching Assistants and Part-time Instructors**

The annual report of this committee has been filed in the AMS Committee Report Book as Committee Report No. 051212-015.

### **5. Old Business**

#### **5.1. AMS Council Subcommittee on Fellows**

Following the January 2005 Council discussion of issues surrounding the creation of an AMS Fellows Program, AMS President Arthur appointed a small subcommittee to draft a concrete proposal for an AMS Fellows program (not to consider if it would be a good or bad idea but to permit continuation of the discussion with a definite and very feasible program in mind). The members of the subcommittee are: John Franks, Susan Friedlander (chair), Sheldon Katz, John Ewing (consultant). This subcommittee produced a draft of a detailed proposal for an AMS Fellows Program, which was discussed at the April 2005 Council meeting. This proposal appears on pages 4 - 8 in **Attachment E**, in which this subcommittee is referred to as Subcommittee III.

The January 2005 Council asked that the proposal be discussed by the Committee on the Profession before the Council took action. At the September 2005 CoProf meeting, there was no general agreement among committee members about the merits of establishing an AMS Fellows Program nor was there a consensus about the specific proposal. CoProf decided to identify individuals on both sides of the issue, in favor of and opposed to a Fellows Program, who would write essays arguing each case. These essays appear in **Attachment F**.

**Attachment E** begins with a brief history of the consideration of this issue by Council, along with a copy of the report presented to the January 2005 Council by Henri Gillet, chair of the Council Subcommittee on an AMS Fellows Program (Subcommittee II of the attachment). Further background provided to the Council for their April 2005 discussion is available at:

[http://www.ams.org/ams\\_fellows/council-items.html](http://www.ams.org/ams_fellows/council-items.html)

It was moved and seconded that the proposal for an AMS Fellows Program given in Attachment E be presented to the membership in 2006 for their vote, as follows:

1. I support the formation of an AMS Fellows program as detailed on the website above.
2. I oppose the formation of an AMS Fellows program as detailed on the website above.

The members will be informed that if at least 55% of the people who vote support this proposal for an AMS Fellows Program, the AMS will begin to initiate the program; The website mentioned above will contain the details of the proposal given in Attachment E. Background material will be made available to the members.

It was moved and seconded to amend by changing the required margin rate from 55% to 2/3. There was considerable discussion, without specific resolution, about whether implementation of the program would require a change in the AMS Bylaws. The amendment carried by a vote of 16 in favor, 7 against, and 2 abstentions.

The amended motion then carried by a vote of 13 in favor, 11 against, and 1 abstention.

## **6. New Business**

There was no New Business on this agenda.

## **7. Announcements, Information and Record**

### **7.1. Budget**

The Board of Trustees (BT) adopted the budget for 2006 as presented at the BT meeting of 19 November 2005.

### **7.2. Next Council Meeting**

The next AMS Council Meeting will be held Friday, 07 April 2006, in Chicago, Illinois, at the O'Hare Airport Hilton Hotel starting at 6:30pm. As usual, a significant component of the Council Meeting will be the actual nomination of candidates for election to AMS offices, as proposed by the Nominating Committee. In addition, plans are to have an oral report from the Committee on Meetings and Conferences concerning its March 2006 meeting. Continuing a tradition of the past several years, there will be a Council discussion period about what the AMS might do to better engage young mathematicians into the profession, including what services the Society could provide them. Previous discussion topics were: the role of the AMS in graduate and post-doctoral mathematics education (2002, 2003); membership, specifically, retention of nominee members and providing access to the Notices at certain periods as a members-only benefit (2004); and the composition of the Council itself (2005).

## **8. Adjournment**

The meeting adjourned at 8:40 pm CST.

**2005 AMS GOVERNANCE****2005 COUNCIL***Officers*

President	James G. Arthur	University of Toronto	2006
Immediate Past President	David Eisenbud	MSRI/Univ. of California, Berkeley	2005
Vice Presidents	Haim Brezis	Université Paris VI	2007
	Vaughan F.R. Jones	University of California, Berkeley	2006
	Karen Vogtmann	Cornell University	2005
Secretary	Robert J. Daverman	University of Tennessee	2006
Associate Secretaries	Matthew Miller	University of South Carolina	2006
	Michel Lapidus	University of California, Riverside	2007
	Susan Friedlander	University of Illinois at Chicago	2007
	Lesley Sibner	Polytechnic Inst of NY	2006
Treasurer	John M. Franks	Northwestern University	2006
Associate Treasurer	Donald E. McClure	Brown University	2006

*Representatives of Committees*

Bulletin Editorial	Susan Friedlander, Chair	University of Illinois at Chicago	2008
Colloquium Editorial	Paul J. Sally, Jr., Chair	University of Chicago	2007
Executive Committee	Walter L. Craig	McMaster University	2006
Executive Committee	Hugo Rossi	University of Utah/MSRI	2005
Journal of the AMS	Ingrid Daubechies	Princeton University	2006
Math Reviews Editorial	B. A. Taylor, Chair	University of Michigan	2005
Math Surveys & Monographs	J. T. Stafford, Chair	University of Michigan	2007
Mathematics of Computation	Chi-Wang Shu, Chair	Brown University	2007
Proceedings Editorial	Eric Bedford, Chair	Indiana University	2005
Transactions and Memoirs	Robert Guralnick, Chair	University of Southern California	2008

*Members at Large*

Sarah C. Billey	University of Washington	2007
James W. Cannon	Brigham Young University	2006
Sylvain E. Cappell	Courant Institute	2006
Beverly E. J. Diamond	College of Charleston	2006
Carolyn S. Gordon	Dartmouth College	2007
Mark Goresky	Institute for Advanced Study	2006
Susan M. Hermiller	University of Nebraska	2005
Sheldon H. Katz	University of Illinois, Urbana	2007
Brian H. Marcus	University of British Columbia	2005
John E. McCarthy	Washington University	2005
Paul J. Sally, Jr.	University of Chicago	2005
Michael F. Singer	North Carolina State	2007
Alejandro Uribe	University of Michigan	2006
Catherine H. Yan	Texas A&M University	2007
Paul Zorn	St. Olaf College	2005

**2005 EXECUTIVE COMMITTEE**

James G. Arthur	University of Toronto	<i>ex officio</i>
Walter L. Craig	McMaster University	2006
Robert J. Daverman	University of Tennessee	<i>ex officio</i>
David Eisenbud	University of California, Berkeley	<i>ex officio</i>
Robert Guralnick	University of Southern California	2008
Hugo Rossi	University of Utah	2005
Paul J. Sally, Jr.	University of Chicago	2007

**2005 TRUSTEES**

James G. Arthur	University of Toronto	<i>ex officio</i>
John B. Conway	University of Tennessee	2005
John M. Franks	Northwestern University	<i>ex officio</i>
Eric M. Friedlander	Northwestern University	2009
Linda Keen	CUNY	2008
Donald E. McClure	Brown University	<i>ex officio</i>
Jean E. Taylor	Rutgers University	2007
Carol S. Wood	Wesleyan University	2006



**2006 AMS GOVERNANCE****2006 COUNCIL***Officers*

President	James G. Arthur	University of Toronto	2006
President Elect	James G. Glimm	SUNY at Stony Brook	2006
Vice Presidents	Vaughan F. R. Jones	University of California, Berkeley	2006
	Haim Brezis	Université Paris VI	2007
	Ruth M. Charney	Brandeis University	2008
	Robert J. Daverman	University of Tennessee	2006
Secretary	Robert J. Daverman	University of Tennessee	2006
Associate Secretaries	Michel Lapidus	University of California, Riverside	2007
	Matthew Miller	University of South Carolina	2006
	Susan Friedlander	University of Illinois at Chicago	2007
	Lesley Sibner	Polytechnic Inst of NY	2006
	John M. Franks	Northwestern University	2006
Treasurer	John M. Franks	Northwestern University	2006
Associate Treasurer	Donald E. McClure	Brown University	2006

*Representatives of Committees*

Bulletin Editorial	Susan J. Friedlander, Chair	University of Illinois, Chicago	2008
Colloquium Editorial	Paul J. Sally, Jr., Chair	University of Chicago	2007
Executive Committee	Walter L. Craig	McMaster University	2006
Journal of the AMS	Ingrid Daubechies	Princeton University	2006
Math Reviews Editorial	Jonathan I. Hall, Chair	Michigan State University	2008
Math Surveys & Monographs	J. T. Stafford, Chair	University of Michigan	2007
Mathematics of Computation	Chi-Wang Shu, Chair	Brown University	2007
Proceedings Editorial	Ronald Fintushel, Chair	Michigan State University	2009
Transactions and Memoirs	Robert Guralnick, Chair	Univ. of Southern California	2008

*Members at Large*

Sarah C. Billey	University of Washington	2007
James W. Cannon	Brigham Young University	2006
Sylvain E. Cappell	Courant Institute	2006
Beverly E. J. Diamond	College of Charleston	2006
Carolyn S. Gordon	Dartmouth College	2007
William M. Goldman	University of Maryland	2008
Mark Goresky	Institute for Advanced Study	2006
Craig L. Huneke	University of Kansas	2008
Sheldon H. Katz	University of Illinois, Urbana	2007
Judy A. Kennedy	University of Delaware	2008
Ken Ono	University of Wisconsin	2008
Michael F. Singer	North Carolina State	2007
Alejandro Uribe	University of Michigan	2006
Judy L. Walker	University of Nebraska	2008
Catherine H. Yan	Texas A&M University	2007

**2006 EXECUTIVE COMMITTEE**

James G. Arthur	University of Toronto	<i>ex officio</i>
Walter L. Craig	McMaster University	2006
Robert J. Daverman	University. of Tennessee	<i>ex officio</i>
James G. Glimm	SUNY at Stony Brook	<i>ex officio</i>
Robert Guralnick	University of Southern California	2008
Paul J. Sally, Jr.	University of Chicago	2007
_____		2009

**2006 TRUSTEES**

James G. Arthur	University of Toronto	<i>ex officio</i>
John B. Conway	University of Tennessee	2010
John M. Franks	Northwestern University	<i>ex officio</i>
Eric M. Friedlander	Northwestern University	2009
Linda Keen	CUNY	2008
Donald E. McClure	Brown University	<i>ex officio</i>
Jean E. Taylor	Rutgers University	2007
Carol S. Wood	Wesleyan University	2006



**American Mathematical Society**  
**2005 Election**  
**Official Results**

<b>Trustee (Five Years)</b> <b>(Vote for One)</b>	<b>Votes</b>	<b>Percent</b>
John B. Conway	2,321	58.8% *
James A. Donaldson	1,617	41.0%
Write-In	6	0.2%
Total Valid Votes	3,944	
Unexercised Vote(s)	336	
Invalid Vote(s)	0	
Total Ballots	4,280	





**American Mathematical Society**  
**2005 Election**  
**Official Results**

<b>President (Two Years)</b> <b>(Vote for One)</b>	<b>Votes</b>	<b>Percent</b>
James G. Glimm	2,035	50.1% *
Ronald J. Stern	2,017	49.6%
Write-In	13	0.3%
Total Valid Votes	4,065	
Unexercised Vote(s)	215	
Invalid Vote(s)	0	
Total Ballots	4,280	

<b>Vice President (Three Years)</b> <b>(Vote for One)</b>	<b>Votes</b>	<b>Percent</b>
Ruth M. Charney	2,441	61.7% *
Carlos E. Kenig	1,508	38.1%
Write-In	10	0.3%
Total Valid Votes	3,959	
Unexercised Vote(s)	321	
Invalid Vote(s)	0	
Total Ballots	4,280	





**American Mathematical Society**  
**2005 Election**  
**Official Results**

<b>Trustee (Five Years) (Vote for One)</b>	<b>Votes</b>	<b>Percent</b>
John B. Conway	2,321	58.8% *
James A. Donaldson	1,617	41.0%
Write-In	6	0.2%
Total Valid Votes	3,944	
Unexercised Vote(s)	336	
Invalid Vote(s)	0	
Total Ballots	4,280	



**American Mathematical Society  
2005 Election  
Official Results**

<b>Member at Large of the Council (Three Years) (Vote for Five)</b>	<b>Votes</b>	<b>Percent</b>
Judy L. Walker	2,092	52.2% *
Ken Ono	1,905	47.5% *
Judy Anita Kennedy	1,853	46.2% *
William M. Goldman	1,760	43.9% *
Craig L. Huneke	1,501	37.4% *
Christina Sormani	1,491	37.2%
Ravi Vakil	1,349	33.6%
Dan-Virgil Voiculescu	1,348	33.6%
William McCallum	1,302	32.5%
Freydoon Shahidi	1,084	27.0%
Write-In	43	1.1%
Total Valid Votes	4,009	
Unexercised Vote(s)	271	
Invalid Vote(s)	0	
Total Ballots	4,280	





**American Mathematical Society**

**2005 Election  
Official Results**

<b>Editorial Boards Committee (Three Years) (Two to be elected)</b>	<b>Votes</b>	<b>Percent</b>
Robert L. Bryant	2,355	68.5% *
Stephen Lichtenbaum	1,822	53.0% *
Allan L. Edmonds	1,736	50.5%
Maciej Zworski	1,673	48.7%
Total Valid Votes	3,438	
Unexercised Vote(s)	842	
Invalid Vote(s)	0	
Total Ballots	4,280	

<b>Nominating Committee (Three Years) (Three to be elected)</b>	<b>Votes</b>	<b>Percent</b>
M. Susan Montgomery	2,575	70.7% *
Lisa M. Traynor	2,131	58.5% *
Michael G. Crandall	1,922	52.8% *
Henri Gillet	1,789	49.1%
William K. Allard	1,631	44.8%
Richard M. Kane	1,413	38.8%
Total Valid Votes	3,643	
Unexercised Vote(s)	637	
Invalid Vote(s)	0	
Total Ballots	4,280	



**Carnegie Initiative on the Doctorate**  
**Renewal of Doctoral Education in Mathematics: A proposed AMS program**

*Presented to the AMS Committee on the Profession, 24 September 2005*

**Peter March, John Meakin and David R. Morrison**

The Carnegie Initiative on the Doctorate (CID) is drawing to a close. But its twin goals, namely to think deeply about the purpose of doctoral education and to act purposefully to improve doctoral programs, remain vital concerns of the national mathematics community. The CID asks, "What is the purpose of doctoral education?" and proposes the answer, "to prepare stewards of the discipline". Guided by the notion of stewardship, the mechanisms developed by the CID in its annual convenings led a representative group of departments to a deeper exploration of the programmatic and human resources issues in doctoral education than would otherwise have been the case for each department in isolation. We feel strongly that this experience was beneficial to our graduate programs and that the CID experience should be widely shared.

We propose that the AMS sponsor a program designed to help departments in the mathematical sciences sustain the work begun by the CID. The program would adapt those aspects of the CID that were essential to its effectiveness: (a) a competitive application process; (b) annual workshops consisting of facilitated discussion and exploration of specific aspects of the graduate program, its explicit and implicit goals, the extent to which those goals are attainable by the program as it currently exists, appropriate improvements to the program, and mechanisms to assess the impact of the program; (c) deliberate and meaningful engagement of graduate students in the process; (d) an atmosphere of honesty, transparency and friendly criticism; and (e) periodic follow-up during the year. The precise format of the process will have to be clearly formulated, as will the structure of the workshops, but we can expect help from the relevant Carnegie Foundation senior scholars as well as faculty and students of the current CID departments.

A department wishing to participate will submit a proposal outlining the current state of doctoral education in their department and directions for possible change. The department will commit to sending a small team of faculty and graduate students to workshops for the program during three consecutive summers. A new iteration of the AMS program will begin every second year, and during the third summer a departmental team will help lead newer departments in the program as well as assessing the change in their own department. Departments that have been through the CID program or previous iterations of the AMS program will be asked to help lead a subsequent iteration of the AMS program.

It is not clear to us what the magnitude of funds required would be for such a program, but if the AMS chooses to seek external funding to sustain this program, we would be happy to assist in this process.

Because the workshops will be small, on the order of 5-8 departments and 20-30 individuals, not every qualified department that applies can be accepted during the first round. Departments will be invited to resubmit their applications in subsequent rounds.



### **A Brief History of the Consideration of an AMS Fellows Program.**

An early discussion of a possible Fellows Program occurred during 1989-1990, when the idea was considered by the Trustees' Membership Committee. That committee recommended against the establishment of such a program at the November 1990 ECBT. The topic was renewed a decade later, when the January 2002 Council adopted a recommendation from the Committee on the Profession (CoProf) to form a subcommittee, referred to here as Subcommittee I, in order to consider the merits of a Fellows Program. The report of Subcommittee I was presented at the January 2003 Council. After support was shown in the meeting for a program, the Council decided to form a new subcommittee (Subcommittee II) to poll the AMS membership about the merits of a program as well as to propose specific suggestions about implementation.

The members of Subcommittee II, formed following the January 2003 Council, were: Henri A. Gillet (University of Illinois at Chicago), chair, Curtis Greene (Haverford College), William H. Jaco (Oklahoma State University), Sheldon H. Katz (University of Illinois at Urbana-Champaign), John Lowengrub (University of Minnesota), Carolyn R. Mahoney (Elizabeth City State), Ronald J. Stern (University of California, Irvine), and Karen Vogtmann (Cornell University). Subcommittee II gave its report at the January 2005 Council; that report is included below, in this attachment. In summary, the report stated that there was no consensus among members of Subcommittee II on whether to recommend that the AMS initiate a Fellows Program. After an extensive discussion, the Council decided to accept the report of Subcommittee II, to discharge Subcommittee II with thanks, and to construct a new (small) subcommittee (Subcommittee III), which would be charged with preparing one concrete proposal and with presenting that proposal to the Committee on the Profession for its reaction prior to any further consideration by the Council.

Subcommittee III's members, appointed by President Arthur following the January 2005 Council, are: Susan Friedlander (University of Illinois at Chicago), chair, John Franks (Northwestern University), Sheldon Katz (University of Illinois at Urbana), and John Ewing (AMS), consultant. A concrete proposal written by Subcommittee III was presented to the April 2005 Council, and is included at the end of this attachment. The Council decided to consider the proposal again in January 2006 along with advice from the Committee on the Profession.

Members of CoProf discussed at length the plan proposed by Subcommittee III as well as the merits of an AMS Fellows Program during its September 2005 meeting. Committee members spoke in favor and against a Fellows Program. There were several concerns about the specific proposal. One was that the number 50, mentioned in item III C of the plan, was too low to adequately address the imbalances that would occur using the lists suggested in the proposal. There was a suggestion that, in order to remedy these imbalances while developing the initial list, the AMS should go to various mathematics organizations that serve underrepresented groups, such as AWM, NAM, SACNAS, and CAARMS. In the end, the Committee could not reach any consensus about the proposal of Subcommittee III. Therefore, CoProf decided to return the proposal to the Council without any recommendation. Instead, the Committee decided to identify individuals, in favor and opposed to an AMS Fellows Program, who would write essays arguing each case. These essays will be available at the January 2006 Council.

*Jim Maxwell, Associate Executive Director  
Ellen Maycock, Associate Executive Director  
December 1, 2005*

The following is a report presented to the January 2005 Council by Henri Gillet, chair of the Council Subcommittee on an AMS Fellows Program (Subcommittee II).

### **Report of the Committee on the creation of a Fellows Program**

The committee sent a survey to 1300 randomly selected members of the AMS. Recipients were asked to answer questions on a web site hosted on [www.surveymonkey.com](http://www.surveymonkey.com). The survey included an opportunity to make comments. The survey questions and copies of the results, including copies of all the responses, are attached.

We received 244 responses, *i.e.*, 19% of the sample. Of those who responded, 52% of were in favor of creating a program and 31% against, while 18% were not sure whether they were in favor of a program or not. Many respondents did feel that a Fellowship program would be a valuable method of recognizing the contributions of members of the society. Of those who were opposed, it seems from the written comments that a significant minority of respondents were strongly opposed to the creation of a program. Unfortunately, we had no obvious way to determine whether those who were opposed to the program were more likely to respond to the survey. The only methods that eliminate response bias tend to be expensive. It is also hard to tell what the reason for the response rate, which is somewhat low compared to other surveys done by the AMS was.

Given that a bare majority of respondents were in favor, it would seem difficult to go ahead with the creation of a program at this time. Thus one option is simply to suspend, or terminate, consideration of a Fellows program at this point. If the Council wishes to determine, with certainty, the views of the membership, it may wish to consider asking the entire membership about the desirability of a Fellows program by adding a question to the annual election ballot. Given that a majority of respondents were in favor of creation of a program, another option would be to go ahead, and design a program that meets the objections of those who were not in favor.

At the October 2004 meeting of the Committee on the Profession, the following proposal was made that might deal with some of the objections made by opponents of a program, and which the council may want to consider. In order to avoid the appearance of the Fellows being a "self selected club", fellowship would be restricted to members of the society who received their Ph.D. on or after a fixed date (such as January 1, 1990 or January 1, 2000). This would mean in particular that for many years the Fellowship selection committees would presumably consist of individuals who would not themselves be eligible for fellowship.

Note however that this proposal does not address the objections of those who feel that this would provide few benefits for the amount of work involved, and is even unnecessary in a discipline which prides itself on having objective measures of excellence.

Under this proposal we would not worry about the transition or "start up" period for the program. Thus if we were to follow the pattern of the American Physical Society, and have as our ultimate goal that about 12.5% (1375) of the ordinary or life members of the Society would be fellows, we would elect about 65 fellows per year. Under this new proposal, while it will take at least 20 years to reach the target for the total number of fellows, there will not be the transition

problems of picking who among all the members of the society should be the first 65 (say) fellows. Note that survey respondents were divided on the desired number of fellows, with 26% wanting 550 (5%) of the ordinary or life members to be fellows, while 24% wanted 1375 fellows (12.5%). In the discussion above, the 12.5% figure was chosen because it is more consistent with being less “elitist”.

Survey respondents were in favor of using all three of the possible criteria: achievements in Research, achievements in Education, or service to the Profession for election to fellowship. Note however that achievement in research was approved of by a much larger percentage of respondents.

In summary, if the society is to institute a fellows program, it will be based not on responding to the demands of its membership, but rather to the perceived long-term benefits for the mathematics community. To change the status quo and establish a fellows program will require Council leadership.

*Henri Gillet, Chair  
January 3, 2005*

The proposal below, written by Subcommittee III, was submitted to the Council in April 2005. It is under consideration at the January 2006 Council.

## A Proposal for a Fellows Program of the AMS

*Following discussion by the AMS Council in January 2005, the President appointed a small committee, which was asked to formulate a concrete proposal for an AMS Fellows program. Such a proposal was meant to stimulate informed debate about the wisdom of creating an AMS Fellows program. The proposal below is intended to fulfill that purpose.*

*A number of other scientific societies have Fellows programs. This proposal is based on characteristics of those programs, but adapted to the governance structure of the AMS. The proposal also reflects information gathered for the Council in 2002 by the Committee on the Profession as well as results of a recent survey of members.*

*The goals of the Fellows Program are:*

- *To create an enlarged class of mathematicians recognized by their peers as distinguished for their contributions to the profession.*
- *To honor not only the extraordinary but also the excellent.*
- *To lift the morale of the profession by providing an honor more accessible than those currently available.*
- *To make mathematicians more competitive for awards, promotion and honors when they are being compared with colleagues from other sciences.*
- *To support the advancement of more mathematicians in leadership positions in their own institutions and in the broader society.*

*Details concerning the background material and data used in formulating this proposal are available on the following web site*

*[http://www.ams.org/ams\\_fellows/council-items.html](http://www.ams.org/ams_fellows/council-items.html)*

## I. Program (steady-state)

A. The Fellows program of the American Mathematical Society recognizes members who have made outstanding contributions to the creation and exposition of mathematics through original research and publications. Exceptional contributions to the teaching of mathematics or service to the mathematical profession may also be recognized.

B. The responsibilities of Fellows are:

- To take part in the election of new Fellows,
- To present a “public face” of excellence in mathematics, and
- To advise the President and/or the Council on *public matters* when requested.

C. All AMS members except student and nominee members are eligible to be elected Fellows.

D. The target number of Fellows will be determined by the AMS Council as a percentage of the number of eligible members.<sup>i</sup> The target percentage will be revisited by the Council at least once every ten years and may be increased or decreased in light of the history of the nomination and election process.<sup>ii</sup> The intended size of each year’s class of new Fellows should be set with this target size in mind.

E. Following an election process (see below), individuals are invited to become Fellows. They may decline and they may also resign as Fellows at any time.

F. Each year all Fellows are invited to a reception at the AMS annual meeting, and the new Fellows are announced at this reception followed by a press release. New Fellows receive a certificate and their names are listed on the AMS web site. The names of new Fellows are also included in the Notices.

G. If they are not already Fellows, the AMS President and Secretary are made Fellows when they take office. They remain Fellows so long as they remain members.

## II. Election Process

A. New Fellows are elected each year after a nomination process. Eligible voters consist of current Fellows who are also members of the Society. Both the election and the nomination process are carried out under the direction of the Secretary with help from the AMS staff.

B. The Election Committee will consist of nine members of the AMS who are also Fellows, each serving a three-year term, and with three new members appointed each year. The AMS president, in consultation with the Executive Committee of the Council, nominates the new members of the Election Committee in November of each year. At the same time, the President nominates a continuing member of the Election Committee to serve as Chair. The President’s choices are approved by Council at its January meeting.

C. The Election Committee accepts nominations for Fellows between February 1 and March 31 each year. Nominations are made by members of the AMS. A member can nominate no more than 4 nominees a year.

D. To be eligible for nomination to Fellowship, an individual must be an AMS member for the year in which he or she is nominated as well as for the prior year.<sup>iii</sup>

E. A nominator must supply a package with the following information on the nominee:

1. A Curriculum Vitae *of no more than five pages*.
2. A citation of fifty words or less explaining the person's accomplishments.
3. A statement of cause of 500 words or less explaining why the individual meets the criteria of Fellowship.
4. The signatures of the nominator and three additional AMS members who support the nomination, with at least two of these individuals current Fellows.<sup>iv</sup>

F. A person can be nominated no more than 3 times in a 5 year period.

G. Each year the January Council provides a guideline for the number of nominations to appear on the ballot.<sup>v</sup> The Election Committee assembles the ballot from the nominations bearing in mind this guideline, diversity of every kind, and the quality and quantity of the external nominations. The Election Committee has the discretion to make nominations itself if necessary to fulfill the general goals of the fellowship.

H. The ballot is available electronically (only) and voting is conducted throughout the month of September of each year. The Curriculum Vitae and citation for each candidate will be available to all eligible voters. Election is by plurality with the top one-half of the candidates elected. In case of a tie, more than one-half of the candidates may be elected.<sup>vi</sup>

I. Those nominees elected are invited by the President to become new Fellows of the AMS as of January 1 of the following year.

4.

### **III. Initial Implementation**

A. In the initial year of the program, all eligible AMS members who have done one or more of the following<sup>vii</sup> are invited to become AMS Fellows.<sup>viii</sup>

1. Given an invited AMS address (including at joint meetings).
2. Been awarded an AMS prize.
3. Given an invited address at an ICM.<sup>ix</sup>

B. For the initial "seed pool" of Fellows there is no length of AMS membership required. Any person who falls into one of the three categories above, and who is an AMS member during the year in which this program is initiated will be invited to be a Fellow.

C. An additional 50 Fellows are selected by a committee appointed by the President with the advice of the Executive Committee of the Council. The purpose of these selections is to fill the "gaps" left by the initial seeding described above.

D. At least ten (10), but no more than fifty (50), new Fellows are elected each year until the total number of Fellows reaches 95% of the targeted size of the Fellowship.<sup>x</sup>

## End Notes

<sup>i</sup> This proposal's recommendation to Council is 8% of eligible members. At present there are about 19,000 eligible members so the number of Fellows would be about 1,500. (Note that all AMS members are eligible except for student/nominee members.) This number lies in the range of other societies. It is large enough to honor a significant number of mathematicians but small enough that it is no insult not to be a Fellow.

<sup>ii</sup> Here are some numbers that provide context to the proposed total number of Fellows. The total number of tenured faculty at the 48 top-rated mathematics departments, the Group I departments, is approximately 1,700. The tenured faculty at the next 56 highest rated math departments is approximately 1,550. The total tenured faculty at all the doctoral math and applied math departments is approximately 4,700. There are another 2,300 tenured (doctorate-holding) faculty at the masters math departments and 4,100 at the bachelor's math departments.

<sup>iii</sup> Membership in AMS is officially tracked on a calendar year basis. However, a 2004 member who has not paid 2005 dues is not dropped from the membership roles until early March, at which time the Notices & Bulletin subscriptions are stopped, and the member is officially dropped.

<sup>iv</sup> The signatures are not required to be original. Additional information will be requested to assist in accurately identifying these individuals within the AMS membership records.

<sup>v</sup> AMS membership records show that approximately 0.5% of the total pool of eligible members die each year. Demographic considerations suggest that an overall annual attrition rate of 1.0% of Fellows is not unreasonable, yielding an estimated average attrition of 15 Fellows per year.

<sup>vi</sup> The committee writing this proposal debated the wisdom of a contested election rather than a more controlled nomination process (by an appointed committee). In the end, there were compelling reasons for making the present recommendation:

Contested elections are now the norm for the AMS and are consistent with the democratic spirit of the Society.

A contested election alleviates the "old boy" accusation of a nominating committee's absolute control.

An election will give the Fellows direct involvement in the Fellowship; they have a vested interest in maintaining the quality of the Fellowship.

Every name on the ballot will have been approved by the election committee so the x new fellows will have been vetted by a competent committee appointed by the President and approved by the Council.

Such an election by the Fellowship is the practice in the most prestigious fellowships, for example, The National Academy, The American Academy of Arts and Sciences.

<sup>vii</sup> Each of these needs careful definition in a final proposal.

<sup>viii</sup> We now know that the seeding process described in III.A would produce offers of Fellows status to more than 800 current AMS members. The group of IA speakers also includes approximately 400 additional individuals who are not currently AMS members. Some of these non-members may elect to become members if offered status as a Fellow, increasing this number still further.

<sup>ix</sup> This will help include more foreign-based AMS members who tend not to be invited to U.S.-based meetings because of travel expenses.

<sup>x</sup> If 1,000 Fellows are named through the initial seeding, then we estimate that a steady state of 1,500 would be achieved in approximately 10-20 years under the proposed plan. Note that this is considerably larger than the number of eligible members who have received AMS prizes or delivered AMS invited addresses.



## **The Arguments for and against the Fellows Proposal**

At its September 2005 meeting, the Committee on the Profession asked that some short essays be commissioned to explain the arguments for and against the Fellows proposal. The committee solicited four essays, which appear below. Their purpose is to help focus the discussion at the Council meeting on the points that have already been raised.

In addition, we have included material from a past meeting of Council of the Society for Industrial and Applied Mathematics (SIAM). Because SIAM considered a similar proposal in 2001 and carried out an extensive discussion of the surrounding issues, the minutes from their final discussion help to lay out the key issues.

*Carol Wood, Chair  
Committee on the Profession*

### **In favor of a Fellows program**

J. Brian Conrey  
Executive Director  
American Institute of Mathematics

I am in favor of establishing an AMS Fellow program. The proposed program has the potential to benefit mathematics in several ways. First, celebrating the accomplishments of some of our most successful mathematicians will draw much-needed positive attention to our community. Also, AMS Fellows would serve as role models and representatives of the mathematical community. Finally, the mere existence of an AMS Fellows program could spur mathematics departments to action in encouraging their faculty to develop outstanding programs of research, teaching, and outreach.

The main benefit that I see is that this program will bring needed attention to mathematics and mathematicians from outside the mathematical community, both within our institutions and in the general public. I think our community suffers a little from being too inward looking. For example, a mathematician who serves as a department chair or as an NSF rotator is viewed by peers with suspicion or pity. Few mathematicians are deans, provosts, or presidents at universities. Not many departments have strong ties with their alumni. Fewer than half of mathematicians even put their preprints on the web where those most interested would have easy access.

Possible consequences of our inwardness are that mathematics departments get fewer resources than one would expect. Mathematics departments do not receive gifts from alumni in the quantities anything like engineering departments. Mathematicians get fewer NSF graduate fellowships than our undergraduate numbers suggest would be appropriate because relatively few applications are from future mathematicians. The Waterman Award is given annually by the NSF to one young outstanding scientist in the U.S. Only one of the past 20 winners was a mathematician. A disproportionately small number of mathematicians are in the National Academy of Sciences. Mathematics journals have low “impact factors.”

Outside academia, mathematics could do with a little more positive PR, too. Mathematicians often feel that it is impossible to explain what they do the “person on the street,” and so do not attempt to do so. There are not many high quality popular books about mathematics. Encyclopedia “Books of the Year” rarely include any description of mathematical advances, whereas they do have yearly descriptions of recent breakthroughs in physics, astronomy, and chemistry. We miss out to a certain extent each year when Nobel Prizes are awarded.

Perhaps the establishment of a Fellow program would be a step in helping our community to be more outward looking and proactive -even the act of preparing nominations for Fellows would help that. To be able to make a convincing case outside our community we first need to learn to do that within the community. A Fellow program would give us an opportunity to showcase our collective accomplishments. Having a visible Fellows program could lead universities to pay more attention to their math departments, might increase the scientific and public visibility of accomplishments by mathematicians, and might even help attract students. In turn, this could help us to be more successful at competing for resources.

A second benefit from a Fellow program is that having AMS Fellows would give our field a large cadre of role models, people to be looked up to, who could be called on to represent mathematics and mathematicians, and effectively present the case for all of us. They could represent to our departments, colleges and universities, and Congress that we value what we do and reward our members who do it particularly well. Fellows could help our profession earn the respect of onlookers and could be instrumental in recruiting young people to mathematics. I think there could be many other unforeseen benefits.

Finally, the existence of an AMS Fellows program could help spur mathematics departments to action in encouraging their faculty to develop outstanding programs of research, teaching, and outreach. Let me use an anecdote to illustrate this point. My former department, like many math departments, had its share of good teachers. However, few, if any, had ever won any university wide teaching awards. When the MAA instituted sectional and national teaching prizes, we decided to form a committee whose purpose it was to nominate one person in the department each year for various

teaching awards. The committee's charge was to document the good teaching practices of that individual and to prepare a strong case highlighting that individual's accomplishments and efforts. As a consequence of this action, members of our department won the first four MAA awards given in our section; two of those individuals went on to win university wide teaching awards, due in good part to the fact that they were recognized in a multi-state area as one of the best teachers. And perhaps more importantly, the faculty learned not only about some of the qualities of good teaching, but also about innovative ways to document and present a strong case for a colleague. Similarly, the existence of an AMS Fellow program and the act of preparing nominations for Fellows could yield many valuable insights and strategies for us as we develop our professional programs, whether it be research, teaching, or outreach.

Mathematicians have many accomplishments that are worth celebrating; we shouldn't be shy about honoring those that have done well; awards are a tribute to all of us. I advocate for a more celebratory community. Math is currently popular in the public eye. Perhaps we can build on this popularity. Who knows what unforeseen benefits may come from such a program, what doors may be opened?

I think, on the whole, that an equitable, manageable Fellow program could be created in a way that would celebrate and reward the careers of some of the outstanding individuals in our community and would have benefits for the whole community. I favor moving ahead with the proposed AMS Fellows program.

*November 2005*

### **Opposed to a Fellows program**

John E. McCarthy  
Department of Mathematics  
Washington University

Two separate issues have been confounded in the proposal.

- (1) Should there be a Fellows program for mathematicians?
- (2) If so, should the AMS run such a program?

I believe the answer to 1 is a qualified "no", and the answer to 2 is "absolutely not".

(1) Mathematics is culturally unique. Even though mathematicians are status conscious, collaboration is strongly encouraged, even between "greater" and "lesser" mathematicians. Our practice of listing authors alphabetically and giving both authors

full credit for an article is a huge incentive for mathematicians to freely discuss their ideas with others, with no fear that they will be giving away valuable secrets.

If a successful Fellows program is implemented, non-Fellows may fear that work they do in collaboration with a Fellow will be devalued, with the community (or at least their Dean) assuming that the Fellow deserves most of the credit. Even without this fear, a social barrier may have been erected that makes it harder for a non-Fellow to approach a Fellow to discuss a mathematical problem. Why should we increase the perception of hierarchy?

Implementing a program fairly would be an enormous amount of work, and would inevitably be controversial. There are wide-spread beliefs amongst mathematicians that certain fields are over- or under-represented in prestigious departments (though of course there is no agreement on which these fields are!). This would apply to any selection of Fellows too.

Indeed, the current proposal ducks the difficult issue of how one could fairly choose Fellows, even in the beginning, by instead awarding Fellowships to everybody who has already received one from a certain list of honors. This is like giving a medal to everybody who already has a medal, on the grounds that they must be deserving. It is not a fair method to choose Fellows, as the criteria for the listed honors in III.A are different from those to be a Fellow. (Indeed, if they are not different, then the argument that becoming a Fellow is a valuable new honor is specious).

(2) Suppose that you believe that a Fellowship program is still worthwhile. Then I think you should found some Honor society for brilliant (American?) mathematicians, and elect fellows to that society. This would have the same benefit to potential Fellows as doing a Fellowship program through the AMS, but would not harm the Society.

The 30,000 members of the American Mathematical Society joined it to support mathematics, or to further their mathematical careers or interests. They did not join a Society that had a program to differentiate its members into first-class and second-class. Seventy-five percent of the members of the society will think they have no hope of being in the top eight percent. Of the remainder who think they do, the majority will be disappointed. How are the interests of either group possibly served by setting up an elite from which they are deliberately excluded?

It is of course true that membership in the Council of the AMS has a disproportionate number of those who would expect to become Fellows under the proposal (i.e. more than 2). Nonetheless, Members of the Council should bear in mind that they represent all the members of the AMS, not just the elite. They should also weigh the cost to the Society of the resignations and resentments that implementing a Fellows program through the AMS would cause.

The American Mathematical Society has an honorable 117 year history of promoting mathematics. It should continue to do this, and not to get involved in the invidious business of classifying members as first rate or second rate.

*December 2005*

**In favor of a Fellows program**

Sheldon Axler

Dean, College of Science & Engineering

San Francisco State University

San Francisco, CA 94132

Mathematicians tend to let their work speak for them more than do academics in other fields, possibly because the correctness and importance of mathematical work are rarely in dispute among mathematicians. A Fellows program for the American Mathematical Society is not needed to help us as mathematicians decide who is making valuable contributions to our subject—we already know how to do that.

However, from my perspective as a dean I believe that a Fellows program for the AMS will benefit mathematics by highlighting to nonmathematicians some of the fine work we do. The Fellows designation can serve as a certification external to the university of the high quality of a faculty member. Other fields already have such mechanisms; the absence of sufficient honors to mathematicians works to the detriment of our subject.

External honors, such as a Fellows designation, carry large weight with university presidents, provosts, and deans, who are responsible for evaluating faculty in fields with wildly varying cultures. External evaluations are usually obtained only at the time of hiring and promotion/tenure. Because the average university president, provost, and dean has been in her/his position for less than five years, key administrators may be unfamiliar with the accomplishments of many of their faculty. Every bit of recognition from outside the university helps.

Mathematics has put itself at a disadvantage by not providing as much recognition as other subjects. For example, at my university the chair of our Computer Science Department is an IEEE Fellow. Our Mathematics Department can offer nothing comparable in terms of credentials that seem meaningful to nonmathematicians, even though I know that our Mathematics Department has an overall higher research profile within its subject than does our Computer Science Department.

One potential objection to a Fellows program is that no selection process will work perfectly. In my opinion, undeserving people are very unlikely to be designated as AMS Fellows, but some highly deserving mathematicians will probably never receive the Fellows designation. Although the nonrecognition of some deserving mathematicians will be unfortunate at the individual level, I do not consider this to be a fatal flaw. As mentioned above, mathematicians already know who is doing good work. A key purpose

of the AMS Fellows program should be to help celebrate to the rest of the world a small percentage of our excellent mathematicians. The attitude should be that all mathematicians in a department can take pride in the honor bestowed upon a colleague who is designated an AMS Fellow.

In the spirit that the designation as an AMS Fellow should be (within mathematics) a low-stakes rather than a high-stakes outcome, I would not like to see the designation or nondesignation as an AMS Fellow be a factor in tenure decisions. Thus I would recommend that the AMS Fellow designation should be awarded for an accumulation of high-quality contributions to mathematics rather than for a few excellent papers. A good rule of thumb, or even a good formal rule, might be that AMS Fellows should be at least ten years beyond the PhD (this would eliminate the tenure factor, even for mathematicians who have had a postdoc). I would even support a rule that an AMS Fellow should have been a member of the AMS for at least ten years (not counting time as a student member), because a productive mathematician in the United States should consider it a professional obligation to be an AMS member.

Another change that I might recommend to the current proposal lies in the End Notes. The first paragraph of the End Notes proposes that there should be about 1,500 Fellows (which seems about right to me). However, the second paragraph then mentions that there are about 1,700 tenured faculty in the Group I mathematics departments. These numbers are sufficiently close together to lead some readers to conclude that being a tenured faculty member at a Group I university will be roughly necessary and sufficient for being an AMS Fellow. That perception, which I am sure is not intended, could seriously hurt the political viability of the AMS Fellows program among the AMS membership. I would delete from the document the data about the number of tenured faculty in the various groups. I think it suffices to say that the proposed number of AMS Fellows is 8% of the eligible members.

The suggestions in the two previous paragraphs are minor points. Even without these changes, I am strongly in support of an AMS Fellows program as outlined in the proposal. The AMS Fellows program will be a low-cost device for mathematics to honor itself while helping mathematicians in the friendly competition with other fields. I see essentially no disadvantages to adopting an AMS Fellows program and some nice potential advantages.

*December 2005*

### **Opposed to a Fellows program**

Cal Moore  
Department of Mathematics  
University of California, Berkeley

I am responding to a request that I comment on the proposal that will come before the Council to establish a fellowship grade of membership of the AMS. Although many professional societies have established such a class of membership, the egalitarian nature

of mathematical community is I think a matter of pride to many or most of us and a strong reason that we have never gone in the direction of special grades of membership. I am strongly opposed to the proposal and think it is a terrible idea for a number of reasons

Even if AMS (that is, its members) were to devote a huge amount of time and energy to this project, which it would require, the results I am sure would have a substantial degree of randomness in the outcomes. In the end, it would only create divisiveness within the Society and foster anger towards the Society—for instance, from those not elected as fellows and by those who might consider the election of some other individual as a mistake. I could see this causing a general lowering of the respect in which the Society is held and a number of resignations. Also imagine the turmoil that would surround the appointment or election of the members of the committee that would oversee the selection process of fellows. In sum, the proposal would involve substantial extra work and effort by members on a task that is not central to the mission of the Society, and which is almost assuredly going to be divisive.

I gather the argument is made that creation of such a class of membership would be useful to chairs and deans in the personnel review process. As a former Dean and Department Chair, I would question this argument. In my view, Chairs and Deans and their faculty colleagues involved in the personnel review process ought to do an evaluation of their colleagues based on a direct assessment the quality of the research, the teaching and service, and place less reliance on such surrogates (cop-outs?) as fellowship grade membership in a professional Society, or (another one of my pet peeves) the alleged quality of the journal where the research article appears. For heavens sakes, look at the mathematics and evaluate it on its own terms.

The egalitarian nature of the profession is evident in my own department, which has made it clear to the Dean that we do not want any endowed chairs in the department, unless there are enough so that just about everybody has one. We have taken this view although, as this becomes a more and more popular vehicle to raise money, the temptation may be harder and harder to resist. The only chair we have is an "administrative chair" where the chair holder is the Department Chair and uses the money for general departmental purposes.

*December 2005*

## **SIAM Council Discussion**

Minutes of Meeting – July 12, 2001

(slightly edited to ensure anonymity)

### Report from Committee on Possible Fellow Member Category

At the summer 2000 meetings of the SIAM Council and Board of Trustees, the SIAM President and Board Chair were commissioned to create a committee to examine the pros and cons of creating a Fellows membership category. A preliminary report from the committee was included in the support materials for this meeting.

The committee created a model of what a SIAM fellows program might look like, thinking it would help their arguments for and against the program. However, in retrospect, the committee pointed out that most of the pros and cons that were argued were independent of the model. A copy of the model was provided to the Council.

The committee said that most other professional societies regard their fellows program primarily as an honor bestowed by the society on the fellow. The model done by the SIAM committee regards fellowship in large part as conferring duties together with honor. The committee said that the balance of service versus honor was a point of minor tension in its deliberations. There also was the fear that designating fellow members would destabilize the mostly harmonious and smoothly functioning SIAM by creating classes.

The report from the committee also contained a “statement for” a fellow program and a “statement opposed” as follows:

***Summarizing statement for:*** SIAM is the primary professional society for many applied mathematicians in the United States and other countries, and, therefore, SIAM should offer the opportunity for visibility that is traditionally associated with a Fellow grade of membership in similar professional societies. Many other professional societies recognize their most esteemed members as Fellows (sometimes through a hierarchical system that includes Associate, Regular, and Distinguished Fellows), which confers a mutually beneficial association between these distinguished individuals and the organization. A Fellow grade may enhance a Congressional testimony, a case for allocation of resources within a for-profit company, a nomination for a chaired professorship, a case for immigration, etc. To the extent that biologists, chemists, engineers, and physicists have fellow and mathematicians do not, there are fewer effective spokespersons for mathematics.

***Summarizing statement opposed:*** SIAM is a small society (less than 1/30 the size of IEEE, for example) that is characterized today by a collegial, democratic, and highly voluntary spirit in its membership. A Fellows program, perhaps beneficial in larger professional societies with less well-integrated members in general, is potentially capable of politicizing SIAM and creating a detrimental hierarchical atmosphere. Although mathematicians are underrepresented in public spheres, the presence or absence of a Fellows program within a



small mathematical professional society will not measurably improve external influence. It might actually have a detrimental internal effect, costing the valuable time of members in peer evaluation and in the production of cliques and networks that cripple rather than empower the society.

A member of the committee said he sees the model presented today as a first cut of a full draft. He said that no vote was expected at today's meeting, but he inquired if the Council wants to go to the next step. The committee needs feedback.

A Council member thanked the committee for putting the report together. He said the committee put a lot of thought and care into the report. He said he would vote against going forward. He said there are many industrial members who cannot do what is called for (in the model) to meet the criteria. They would never have the opportunity to be Fellows.

Another Council member questioned how much a Fellow member category would create a second class citizen membership. He said that while the committee's report was thorough and well done, he was disappointed in the report. He said when the charge went to the committee, it was for a report on the pros and cons of such a membership. He said the Council did not want to see a strawman. He said he likes the society the way it is now. SIAM puts authors' names alphabetically and he said he would like to think that SIAM members could be taken seriously without having Fellow after their names. He does not think the benefits will outweigh the cost, which would be a division within the society. He is proud that SIAM is an egalitarian society. A Fellow membership would stratify SIAM. If funding agencies do not understand, then they have a problem.

Another Council member said that he is confused. He said this is the third time this subject has come before the Council. It has become a divisive issue even within the Council and yet it keeps getting bounced around. He said that when he thinks of creating a committee to select Fellows, the committee would be grabbing from the same bag of names we grab from now. There is some feeling in the community that SIAM is insular. It awards itself prizes. The Council chooses a SIAM member to serve on the SIAM Nominating Committee, which then picks people to run for the Council, which again picks someone for the Nominating Committee and so forth. The same people are nominated over and over. He said he is not convinced this program would work. He also said he did not think SIAM members were being hurt. Either important panels and committees want a mathematician involved in their work, or they don't. The Fellow designation is not going to change that.

He went on to say that he does not know what "next step" means (as noted above). He asked if there exists today a Fellow program that the Council would vote for. This is the third time it has come before Council and no one has come up with a proposal for a program that we would accept. Yet, he said, the Council keeps the door open and, hence, we are being asked for the third time to make a decision when there is not a program that makes sense yet.

Someone else noted that there appears to be attention focused in a direction that is not SIAM's priority at the moment. She said she has enjoyed and benefited from being a Fellow of the AAAS. There are fewer than 1,000 members. In looking over the list of

AAAS Fellows, she said they are basically people who were elected by other Fellows. Some people have taken advantage and have nominated their buddies for Fellow.

Another Council member wondered if it (the AAAS Fellows program) is so stochastic, how could it be a benefit, and he questioned why it is perceived (by the outside world) as something different than it is.

One member said that he works in a lab of about 60 people. Everyone in the lab could have become a fellow of the ACM, but no one cared. He said he is opposed to the Fellow member category for SIAM.

After discussion, the Council adopted the following resolution:

RESOLVED, that the SIAM Council agrees there is not the kind of support necessary to go forward with a Fellows member designation and requests that the subject be put aside for five years.

The vote to pass this resolution was 15 for and four abstentions.

One Council member explained to the Council the background on the current go-round about Fellows membership. In 1999, he was approached by two DOD agencies asking that SIAM revisit the possibility of creating a Fellow membership category. He said that the agency representatives reported that there had been several announcements from various laboratories seeking senior technical people (STs) to head up projects. One of the criteria for being selected an ST, according to the agency representatives, was the distinction of being a Fellow in some professional organization. The professional societies that serve the mathematical community do not have Fellow members. He said he sees all the arguments and thinks it would not be feasible to pursue or argue for such a member category at this time. He agreed that SIAM has different priorities – mainly getting young members.

He said he has given a great deal of thought to this subject. Someday, he would like to see some type of intelligent vote from the membership, but he does not think he could make an argument for having Fellows without the risk of splintering the SIAM membership.