Committee on the Profession September 24 - 25, 2011 Hilton Chicago O'Hare Airport Hotel

The Committee on the Profession (CoProf) held its annual meeting on September 24-25, 2011, at the Hilton Chicago O'Hare Airport Hotel. Highlights of that meeting are provided below.

Regular Agenda Items:

- Annual review: CoProf's annual review, conducted by a subcommittee, was on the topic of the Society's activities related to Membership and Member Benefits. Committee members discussed various ideas for new member benefits and also for AMS branding of current services that are offered to members. These ideas will be shared with AMS staff. There will be a standing CoProf subcommittee on membership, an idea that was first proposed by the Task Force on Membership in its report submitted in December 1999. The current members of this subcommittee will be the individuals who served on the annual review subcommittee.
- 2011 Information Statement on the Culture of Research and Scholarship in Mathematics: The Committee on the Profession has been making a series of statements that highlight ways in which the traditions of mathematics differ from those in other disciplines, especially other sciences and engineering. This year, CoProf continued to consider a statement concerning teaching loads. The statement was approved and will be posted on the AMS web site. The 2011 statement is included at the end of this report.
- **Programs that Make a Difference**: Each year, CoProf recognizes at most two programs that: (1) aim to bring more persons from underrepresented backgrounds into some portion of the pipeline beginning at the undergraduate level and leading to an advanced degree in mathematics, or retain them in the pipeline; (2) have achieved documentable success in doing so; and (3) are replicable models. The deadline for nominations was September 15, 2011, for programs to be considered for the 2012 recognition. The subcommittee will make its decision and request that it be approved by CoProf before December 1. Five nominations were continued from last year; we received a revision of one of these nominations. An additional nomination was also received. The one or two programs that are chosen will be featured in the May 2011 issue of the *Notices* and will be presented on a web site linked to the AMS home page. The two programs recognized in 2011 were the Department of Mathematics at North Carolina State University and the Center for Women in Mathematics and the Center's Post-baccalaureate Program at Smith College.
- **CoProf Panel at the 2012 JMM**: CoProf will have a panel at the 2012 Joint Mathematics Meeting in Boston. The panel will be: *Supply, Demand and the*

Math Ph.D. Program, moderated by Julius Zelmanowitz, professor emeritus of the University of Santa Barbara.

Panel description: Is there an oversupply of Ph.D. mathematicians? What effect should hiring patterns have on Ph.D. programs in term of size, curriculum or advising? These and other contentious questions will be addressed during this panel discussion with audience participation.

• Discussion topic: *Math Emergencies and Possible AMS Responses*: During the spring of 2011, members of CoProf learned of four mathematics departments and institutions that were facing extreme cutbacks or closures, including the Feza Gursey Institute in Turkey, the Schrodinger Institute in Vienna and the mathematics departments at the VU Amsterdam and the University of Nevada-Reno. CoProf discussed whether it should take the lead in establishing when and how the AMS should respond to similar situations. CoProf members realized that the connections of its members to mathematicians and institutions all over the world help inform the AMS about these situations. CoProf agreed that the AMS President, Secretary or Executive Director should share such news with CoProf and that CoProf should participate in the discussion of how the AMS should address the problem.

Agenda Items to be taken to the Council:

- Proposal for Student Chapters: In February 2011, AMS President Eric Friedlander appointed members to the Graduate Working Group, whose purpose is to search for ways that the American Mathematical Society can make meaningful contributions to the professional development of graduate students in the mathematical sciences and for ways to encourage graduate students to participate in the Society. CoProf discussed the preliminary draft from the Graduate Working Group to create AMS Student Chapters. CoProf endorsed in principle the idea of having Student Chapters, and proposed that the chapters receive \$1000 per year for support from the AMS. Committee members also suggested that the application for becoming a chapter be as flexible as possible and that chapters should be located at institutional members. A new draft of the proposal for Student Chapters will be written after the Committee on Education meeting at the end of October 2011, and will be submitted for consideration by the ECBT and the Council.
- Book & Journal Donation Program: This program was begun about 10 years ago with a donation from the Alan and Katherine Strook Fund in order to provide books and journals to institutions with active mathematics research in developing countries. Over the past few years, AMS staff have observed that book donations are regularly requested by institutions but journal donations are not being requested. CoProf approved the proposal that the program move toward a program of book donations only. This change will not violate the original

- intention of the donor. The AMS already provides support for developing countries to obtain electronic access to journal content.
- Charge to the MRC Advisory Board: The Advisory Board for the Mathematics Research Communities (MRC) program advises the AMS staff on various aspects of the program. Now that the program has been operating for a few years, it has become apparent that the organizers and topics need to be determined earlier than the summer before the conferences. CoProf approved that proposed change to the charge of the Advisory Board and will take this proposed change to the Council in January 2012.

Agenda Items Relating to Prizes:

- AWIS-AWARDS Project: The AMS has been asked to participate in a program designed by the Association for Women in Science and funded by the National Science Foundation to explore how societies in the sciences can award more prizes to women. In June, 2010, three representatives of the AMS attended a workshop for this program; these representatives wrote up a set of recommendations for the AMS. A CoProf subcommittee discussed these recommendations, and decided that the AMS needs to do several things: have more information about nominations for AMS prizes on the AMS web site and establish a canvassing committee to help generate additional nominations for prizes. A prize oversight committee was established as a subcommittee of CoProf to consider implementing these recommendations and others from the Task Force on Prizes.
- Joint Prize Session at the JMM: A joint subcommittee of CoProf and the Committee on Meetings and Conferences (CoMC) will discuss possible recommendations to the Joint Meetings Committee (JMC) for changes to the Joint Prize Session at the Joint Mathematics Meetings. CoProf made several suggestions on how to streamline the session, including having photographs on the overhead screen and not allowing responses to the award from the awardees.

Other Agenda Items:

- Assistantships & Graduate Fellowships: The AMS has published this booklet for many years and sent a copy to each institutional member. AMS staff have determined that this format is obsolete and intend to discontinue the publication of this booklet in 2012. Instead, the information collected from departments with graduate programs will be entered into a searchable database and will be accessible through the AMS web site. CoProf discussed various ideas of what information would be useful for students who are considering graduate programs.
- Young Scholars Awards Committee Report: The Young Scholars Program provides funding for summer math camps for middle and high school students.

The committee that made the decisions for funding for the summer of 2011 raised some concerns about the program in a report submitted to CoProf. CoProf has asked staff members to survey math camps who have applied for funding to determine if the AMS should move forward on the suggestions of the committee. This topic will be revisited at the 2012 CoProf meeting.

- NRC Rankings: In 2010, the National Research Council released its Data-Based Assessment of Research-Doctorate Programs. These assessments are significantly different than the earlier rankings done by the NRC. The AMS asked CoProf to make a recommendation to the Joint Data Committee concerning whether these rankings should be used to create new groupings for the Annual Survey of the Mathematical Sciences. CoProf voted to recommend to the Joint Data Committee that the rankings not be used for the Annual Survey.
- AMS Committee on the Status of Women: President Eric Friedlander has asked the AMS to consider forming a committee on the status of women in the mathematical sciences. CoProf will recommend this to the Council and a subcommittee of CoProf will write the charge.
- **Proposal for a Program of Internships**: Philippe Tondeur has written a proposal for a national network of internships in business, industry and government for graduate students and postdoctoral fellows in the mathematical sciences, based on several successful models. Although CoProf discussed the proposal and whether the AMS should take a leading role, CoProf did not make a specific recommendation.

Next meeting: The Committee on the Profession will hold its next meeting on September 29 - 30, 2012, at the Hilton Chicago O'Hare Airport Hotel. The Committee selected the Society's activities in the area of Employment Issues and Opportunities as the topic of the next year's annual review. This topic was last reviewed in 2004. The 2012 information statement on the culture of mathematics will be on the structure of graduate programs.

Ellen J. Maycock Associate Executive Director November 30, 2011



The Culture of Research and Scholarship in Mathematics: Teaching Loads in Mathematics

While often grouped with the physical sciences, mathematics differs from sciences in the ways in which research and scholarship are conducted, and in the ways in which research and teaching missions are combined. These differences manifest themselves in the typical classroom teaching loads encountered in the different disciplines. Teaching loads also vary within the discipline of mathematics, depending on the mission of the department and the institution.

In May 2011, the AMS conducted a survey of Group I¹ mathematics department chairs regarding teaching loads. Responses were received from 41 of the 48 departments that comprise Group I. The responses showed remarkable consistency. For departments on the semester system (31 of the 41 departments), the average teaching load for research-active faculty is 3 courses per year representing 4.5 contact hours of instruction per week. Only one of these departments reported a higher than average teaching load (3.4 courses per year) and only one reported a lower than average teaching load (2 courses per year). The teaching load for research active faculty in departments on the quarter system ranges from 3 courses per year to 4.5 courses per year, with an average of 3.9 courses per year representing 4.2 contact hours of instruction per week.

Group II² and Group III³ mathematics departments were not included in the AMS survey. However, according to the 2005 Delaware Study of Instructional Productivity, the average teaching load for tenure/tenure track faculty in mathematics departments with a doctoral program is 2 courses per term. The 2005 Delaware Study also indicated that mathematics departments whose highest degree is a masters degree had an average teaching load of 2.8 courses per term; and those whose highest degree is a bachelors degree had an average teaching load of 3.4 courses per term.

Proper balance between research and teaching is essential for maintaining research productivity and teaching effectiveness.

¹Mathematics departments ranked between 3.00 and 5.00 for scholarly quality of faculty by the 1995 NRC Study; see http://www.ams.org/profession/data/annual-survey/group i.

²Mathematics departments ranked between 2.00 and 2.99 by the 1995 NRC Study; see

http://www.ams.org/profession/data/annual-survey/group ii.

³Mathematics departments ranked below 2.00 or not ranked by the 1995 NRC Study; see http://www.ams.org/profession/data/annual-survey/group iii.