

MAA Southwestern Section Fall Newsletter

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Governor's Report By Janet McShane

Governor (06-09)

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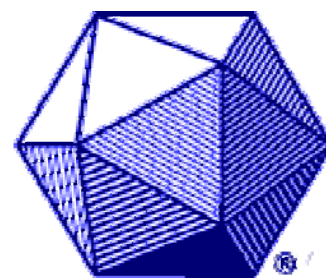
The MAA Board of Governor's meeting was held in San Jose, CA on August 2, 2007 on the day preceding MathFest. As usual, there was lots of information relayed to the Governor's as well as numerous discussions. The main idea I came away with from this meeting is that the MAA is a very vibrant and active organization. They are involved in lots of projects and have something to offer everyone.

Here are some of the highlights of the meeting:

John Kenelly continues to serve as the MAA Treasurer as well as the Chair of the Investment Committee. Under his guidance, our financial situation is looking very good. The MAA tends to budget on the conservative side and with that philosophy

and a good staff, they have seen a positive bottom line finish over the last several years enabling them to move about \$600,000 into their investments this year. The MAA's assets increased by almost \$1 million and are now at the \$17 million level.

Tina Straley, Executive Director of the MAA, gave an overview of activities since our last meeting. Some of these were: launching the Carriage House with a full array of events (including the Grand Opening in April and a New Governor's Orientation in June), starting implementation of the recommendations of Cycle I Strategic Planning reports, moving forward on Cycle II Strategic Planning, filling the position of Director of Publications for Journals and Communica-



tions (Ivars Peterson), redesigning the website, filling several open staff positions, expanding marketing efforts, implementing the new Tensor – SUMMA program, and concluding searches for editors for CMJ and Horizons.

Three groups are currently active in the Cycle II part of the Strategic Planning process: Students, Governance, and Membership. The Working Group on Students launched a collection of surveys aimed at various student populations. The Working Group on Governance has surveyed Committee

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Governor's Report (continued)

By Janet McShane

Chairs, Editors, Council Chairs, and Board of Governor members and is reviewing the feedback from those surveys. The Working Group on Membership is focusing on developing a better understanding of the MAA membership. The topics for the Cycle III part of the Strategic Planning process are: STEM Issues, Sections, and Meetings. If you have thoughts or suggestions on any of the Cycle II or Cycle III topics let me know and I will pass them on to the appropriate person.

Michael Pearson, Director of Programs and Services (including Meetings), gave an update on some of the many funded projects that the MAA is involved with. These include Distinguished lecture Series (NSA funding), Regional Undergraduate Mathematics Conferences (NSF-DMS), SUMMA Research Experiences for Undergraduates (NSA, NSF, Mody's Foundation), Professional Enhancement Program (NSF), and Project Access (Exxon Mobile). For more information about any of these programs visit the MAA website (www.maa.org).

Project NExT welcomed the fourteenth group of Project NExT Fellows into the profession at MathFest. This year Project NExT had 85 new Fellows which brings the total number of national Fellows to more than a

thousand. This is quite a milestone and not something the initiators of this program ever dreamed of back in 1994. This year is the first year in which there are Fellows from all twenty nine MAA Sections. We have one new Fellow in our section – Liana Dawson from the University of Arizona.

The MAA's publication program continues to be very successful with seven new books appearing at MathFest. The entire collection of five books in the MAA Tercentenary Euler Celebration was available at the meeting.

If you haven't visited the MAA website recently I would encourage you to do so. The recent redesign of the MAA website - MAA Online - produced an attractive, new look. The new design allows the MAA to highlight news, events, and other special features associated with the MAA in a timely manner. In an effort to make MAA Online the place to go for news and other items of interest to the mathematical community and beyond, the website now provides summaries of important news and other articles of interest every week. Check out the "Math in the News" column for articles that could be used in many different courses.

I would also suggest that you check out the new report: Algebra, Gateway to a Technological

Future. Funded by the NSF, this report is the result of an MAA-sponsored conference that brought together about 50 representatives from the mathematics and mathematics education communities. Their aim was to gather information about what has been learned about the teaching of algebra and to identify common principles that can lead to improved algebra instruction.

The next Joint Mathematics Meetings will be in San Diego, CA, January 6-9, 2008 and the next MathFest will be held in Madison, Wisconsin, July 31-August 2, 2008. Hope to see you there!

New Liaison Coordinator for SW Section

By Joanne Peeples

Over the past year or so I have asked several people if they would be willing to be the SW Section Liaison Coordinator – most just said they would think about it. At MathFest this summer Shannon Guerrero from Northern Arizona University (Shannon.Guerrero@nau.edu) has said she would take over the position. Thank you Shannon!

Congratulations to MAA 2007 Distinguished Teaching Awardee Glenn Hurlbert



When Andrew Bremner nominated Glenn he said:

“Glenn Hurlbert is a superb teacher of both undergraduate and graduate mathematics, recognized by colleagues and students as one of the best on our faculty. He delivers first rate instruction, and his students are uniform in praising his care and devotion to his classes. Students in his charge have gone on to win major scholarships, e.g. Collin Raymond, Marshall Scholar, and named to the USA

Today 2003 All-USA Collegiate Academic First Team, placing him among the top 20 undergraduates in the nation.

Glenn served as Undergraduate Chair from 2002 – 2004 and statistics show a marked increase in math majors over this time, which I ascribe essentially to Glenn’s presence and actions (I was Department Chair during this period). He was the driving force behind what is now a very successful Math Club, and almost single-handedly arranged the first of the AMUC conferences (Arizona Math Undergrad Consortium) which now is a rotating annual conference between the three Arizona univer-

sities, but which attracts students from across the Southwest to participate in an undergraduate research conference.”

Dr. Hurlbert works in several areas of combinatorics and graph theory, primarily Universal Cycles (minimal length listings of combinatorial objects), Graph Pebbling (a network model for resource allocation), and Extremal Set Theory (maximum-sized families of sets under certain restrictions). Secondary interests include Combinatorial Bijections (matching equal size sets together), Linear and Combinatorial Optimization (maximizing linear functions over linear constraints), and Partially Ordered Set Dimension (embedding ordered structures in Euclidean space).

Nominate a colleague for the MAA 2008 Distinguished Teaching Award

Each year our section chooses a person to receive the section’s distinguished teaching award. This nominee’s name is forwarded to the MAA and becomes the official Section nominee for the MAA Deborah and Franklin Tepper Haimo Award for distinguished College or University Teaching of Mathematics.

The nominee must be a member of MAA; have at least five years teaching experience in mathematical science; and be a college

or university teacher assigned at least half time during the academic year. Complete information and nomination forms can be found at <http://www.maa.org/Awards/haimo.html>.

Completed nomination packets for the section award should be sent to Joanne Peeples, 6917 Orizaba, El Paso, TX 79912 **no later than January 31, 2008**. Please let Joanne know as soon as possible if you are planning to nominate a person (joannep@epcc.edu) or contact

A teacher affects eternity; he can never tell where his influence stops." - Henry Brooks Adams

her if you have any questions.

There are many good teachers in our section – lets nominate them for the award!!!!



Southwestern Section College News

New Mexico State University

Submitted by Robert Smits

The 10th New Mexico Analysis Seminar which alternates between NMSU and the University of New Mexico will be the October 11th and 12th in Albuquerque. The main activities are two minicourses by Rodrigo Banelos of Purdue University and Andrea Nahmod of UMASS- Amherst, together with their invited speakers Oliver Dragicevic and Rodolfo Torres. In addition to his research, Rodrigo Banelos is a recent recipient of the Blackwell-Tapia prize recognizing his efforts in minority outreach and recruitment. The seminar is organized by Cristina Pereyra (UNM) Joe Lakey (NMSU) Tiziana Giorgi (NMSU) Adam Sikora (NMSU) and Robert Smits (NMSU).

Several faculty are organizing special sessions at the AMS sectional meeting also in Albuquerque, from October 13-14th 2007. Tiziana Giorgi is the coorganizer with Professor Lia Bronsard from McMaster University in Canada of the special section "Variational Problems in Condensed Matter". David Finston is organizing a special session on "Affine Algebraic Geometry" at the meeting. The session will include speakers from

the US, Japan, Netherlands, and France. One of the Dutch visitors, Arno van den Essen, from University of Nijmegen, will deliver a public lecture at NMSU at 5 PM on October 11 on Benjamin Franklin's magic squares. Professor van den Essen published a book in 2006 about this topic to commemorate the 300th anniversary of Franklin's birth! The talk is sponsored by The NMSU Department of Mathematical Sciences, The College of Art and Sciences, The Vice President for Research, and the US Dept. of Education through the MESH grant.

John Selden, Annie Selden, and Kerry McKee were awarded a grant from the Educational Advancement Foundation for a 4-year project to develop and study a course, Understanding and Constructing Proofs. The purpose of the course is to help entering graduate students improve their proving skills. Kerry plans to collect and analyze data from the project for her mathematics Ph.D. dissertation.

Dr. Giorgi was invited to organize a minisymposium at the 2007 SIAM Conference on Analysis of Partial

Differential Equation. This is a highly respected annual conference organized by the SIAM Activity Group (SIAG) on Analysis of Partial Differential Equations (SIAG/APDE), and this year will be held on December 10-12th in Mesa, Arizona. The title of the minisymposium is "Critical Behaviors of Superconducting System".

New Mexico State University faculty are pioneering the enrichment of student learning in mathematics and computer science via primary historical texts. After an initial development of the historical approach by NMSU mathematics faculty, and an interdisciplinary pilot program by faculty in mathematics and computer science funded by the US National Science Foundation, the Foundation has recently awarded a four-year expansion grant for NMSU professors Guram Bezhanishvili, Hing Leung, Jerry Lodder, David Pengelley, Inna Pivkina, and Desh Ranjan to lead expansion into 20 other colleges and universities, in collaboration with professor Janet Barnett at Colorado State University, Pueblo. The project has also received graduate assistant support from NMSU's Vice President for Research. The total monetary commitment to the project is \$500,000.

Arizona Western College

Submitted by Dan Russow

Arizona Western College would like to welcome Weicheng Xuan to the Mathematics Department. Weicheng's assignment is primarily in South Yuma County.

Theresa Tincher has moved from South Yuma to the main campus to help fill the void left by Phong Chau's departure to Glendale Community College. We have

added a Maple lab component to all of our Calculus 2 classes so now both Calculus 1 and Calculus 2 are 5 hour classes with Maple labs. Additionally, all of our liberal arts mathematics classes are now using Excel to assist them in statistical analysis and modeling.

UTEP

Submitted by Larry Lesser

UTEP Hosted Conferences Make History!

UTEP hosted the NSF-supported first-ever international conference on Finite Element Methods in Engineering and Science December 11 - 15, 2006. The 50 attendees spanned 4 continents and research presenters included several UTEP engineering and science faculty and graduate students. The biennial conference (which UTEP plans to host again in 2008) reflects UTEP's strong presence in the field of Computational Science, where the College of Science has pending interdisciplinary M.S. and Ph.D. programs. Information and photos are available at: (servac.math.utep.edu/femtec_2006/).

On November 18, 2006, UTEP became the first Hispanic Serving Institution ever to host StatFest, an annual conference aimed at encouraging undergraduate minority students to pursue careers and graduate studies in the statistical sciences. Since 2001, StatFest has been an ongoing initiative of the Committee on Minorities in Statistics (CMS) of the American Statistical Association (see <http://www.statfest.com/>).

StatFest 2006 was sponsored by CMS and the UTEP Statistical Consulting Lab and was chaired by UTEP assistant professor Najjun Sha and by Spelman College professor Nagambal Shah, and is written up in the January 2007 Amstat News (p.12). The 100+

student attendees learned about the role of statistics in academia, industry, and government, graduate studies in the statistical sciences, summer internships, and undergraduate student research. The keynote speaker was Robert Santos from the Urban Institute in Washington, D.C. StatFest 2006's other presenters spanned many institutions and included UTEP faculty (Ori Rosen, Melchor Ortiz, Joan Staniswalis), UTEP graduates (Brisa Sanchez, Yolanda Munoz), and UTEP graduate students (Bereket Weldelessie and Charles Rogers).

MAA Southwestern Section.



[http://oak.ucc.nau.edu/hagood/
MAASW/SWSection.htm](http://oak.ucc.nau.edu/hagood/MAASW/SWSection.htm)

Check the MAA Southwestern Section Web Site at the above URL (or MAA.org has a link on it's web site to each section). The minutes and treasurer's report of last April's meeting are posted, along with other information about our section. John Hagood has been working on the site.

Spring 2008 MAA Southwestern Section Meeting Tempe, Arizona April 18-19

The 2008 Meeting of the Southwestern Section of the MAA will be held in Tempe, Arizona on April 18-19. Sessions will begin at 8:00 am on Friday the 18th and conclude at noon on Saturday the 19th. The program on Friday evening will include a banquet and presentation of section awards.

Dr. Lowell Beineke, professor of mathematics at Indiana-Purdue University Fort Wayne and editor of the College Mathematics Journal, will give the Keynote address at the banquet. Further program, travel, and proposal submission information is available at the conference website, <http://math.asu.edu/SWSection2008>.

Southwestern Section, MAA
Minutes of the April 14, 2007, Business Meeting
H.S.Lecture Hall, UNM-Valencia, Los Lunas, New Mexico
Submitted by Joanne Peeples

1. The meeting was called to order by our chair, Mary Robinson. There were 9 people in attendance. This was our second joint meeting with NMMATYC (the first one was in 1991).
2. Joanne Peeples passed out the minutes of the 2006 meeting in Tucson, AZ, they were approved.
3. The treasurer's report by Joanne Peeples was passed out. There was an error (the balance as of March 25, 2006 should have read - \$3,654.26; the balance listed as of March 31, 2007 of \$4,242.34 was correct). The corrected report will be posted on the section web site.

It has become traditional to reimburse the Governor and Section Chair for some of their nation meeting expenses. Joanne moved that we approve \$200 for each person to attend MathFest and \$200 to attend the Joint Math Meetings. This was seconded by Bill Stone. Tom Gruszka made a new motion to increase this amount to \$250, Tom's motion was defeated. Joanne's motion passed.

4. Janet McShane, our Governor, was unable to attend this meeting so there was no Governor's report.
5. There was no AMC report. Bill Stone noted that NMT was in the top 100 for the Putnam exam.
6. It is not known if NAU has a student chapter. Bill Stone said that NMT was talking about starting a student chapter, and that as soon as John Starrett earns tenure he hopes John will be in charge. At this point it was mentioned that the MAA's Math Digital Library has many resources for math teachers (and students).
7. Tom Gruszka, our newsletter editor for the last 10 years, is stepping down. We thanked him for his years of service.

Tom said that he sends out between 550 and 600 newsletters each fall and spring; only about 20 people have requested an e-mail copy of the newsletter. Tom also suggested that the former newsletter editors receive an electronic version of the newsletter (Ed Gaughan, Sharon McKendrick, John Hagood, - are there others?)

Sharon McKendrick moved that the newsletter should be posted on the section's web page; there was a friendly amendment that the webmaster do this. The motion passed.

8. Our next meeting will be in April, 2008 in Arizona – we are not quite sure where, at this time.

We were reminded that MathFest is in San Jose, CA, August 3 – 5, 2007, and JMM will be in San Diego, CA, January 6 – 9, 2008.

Nancy Hagelgans, our key note speaker from MAA, suggested that our section might want to try some NEXTERS activities, special student paper sessions (or poster sessions for undergraduates), some 15 – 30 minute sessions (for expository papers), and maybe even a carrier fair.

9. The election of our Chair and Vice-Chair were postponed, until we know where we will be meeting for the next two years.

Additions:

Glenn Hurlbert, Arizona State University is the Southwestern Section's nomination for the MAA 2008 Award for Distinguished College or University Teaching of Mathematics.

Mary Robinson, University of New Mexico – Valencia Campus, has volunteered to become our next newsletter editor (for 2 years). Tom will help Mary with the Fall 2007 issue.

Mike Oehrtman and Terry Turner, Arizona State University, have agreed to become co-chairs for the April 2008 meeting. The date of the meeting has not yet been set.

Tom Gruszka, Western New Mexico University, has agreed to host the 2009 meeting. The meeting will be in either April or May, and if held in conjunction with NMMATYC he has asked that a NMMATYC person be a co-chair.

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