SOUTHWESTERN SECTION NEWSLETTER

Volume 17 Number 2, February 2004 (Word Edition)

Editor: Thomas Gruszka, WNMU

Contents:

1. **SPRING MEETING, April 2-3, 2004, Northern Arizona University**
2. **GOVERNOR'S REPORT**
3. **SECTIONAL NEWS**
4. **NMMATYC 2004 CONFERENCE**
5. **GRANTS FOR GRADUATE STUDENT ACTIVITIES AT SECTION MEETINGS**
6. **THE 2004 SPRING MEETING – REGISTRATION FORM**
7. **HOTEL/MOTEL INFORMATION**

---

1. **SPRING MEETING, April 2-3, 2004, Northern Arizona University**

The annual meeting of the Southwestern Section of the MAA will be held jointly with ArizMATYC on April 2-3, 2004 at Northern Arizona University in Flagstaff. Invited talks include "Alternating Sign Matrices," by David Bressoud, MAA Pólya Lecturer, Macalester College, and "Angle Trisectors," by Underwood Dudley, DePauw University. A pre-conference event will be held on Thursday evening, April 1, as part of the Department Honors Recognition Program. Underwood Dudley will speak on "Formulas for Primes." Also, at the Friday banquet, April 2, game and puzzle master, Steve Wilson, Northern Arizona University, will make a presentation. Registration and general information is included in this newsletter. The conference web page is at http://odin.math.nau.edu/~jwh/maa2004.html.

Call for proposals
Proposals for 20-25 minute talks, minicourses, workshops, and special sessions are being solicited. Please include a title, a brief abstract or description, and specify any special equipment needed. Submissions should be made as soon as possible, but no later than March 12, 2004 to John Hagood (John.Hagood@nau.edu, (928) 523-6879) or Janet McShane (Janet.McShane@nau.edu, (928) 523-1252), Department of Mathematics and Statistics, Northern Arizona University, PO Box 5717, Flagstaff, AZ 86011-5717.

2. **GOVERNOR'S REPORT, Bill Stone <wdstone@nmt.edu>**

[The first of the two reports given below should have appeared in the Fall 2003 newsletter, but because of miscommunication it was not submitted in time for publication. The editor apologizes to Bill Stone for the mix-up - ed.]

Attending my first meeting of the Board of Governors of the MAA, at the summer MathFest, was an interesting experience. Much of the business was, of course, routine: announcements of appointments, reports from the officers, reports from the staff. Although there has been some turn-over in the staff, particularly in the financial office, the MAA seems to be in good shape. The conversion of the Carriage House into a conference center is proceeding and should be quite an addition to the Washington facilities.

Sites for MathFest were approved for 2006-2008. The dates and locations are: 2004 - Providence, RI, Aug 12-14; 2005 - Albuquerque, NM, Aug 4-6; 2006 - Knoxville, TN, Aug 10-12; 2007 - San Jose, CA, Aug 3-5; and 2008 - Madison, WI, July 31-Aug 2. Most of these dates are the usual Thursday through Saturday schedule; San Jose will be a Friday through Sunday schedule.

The Board also approves the nominations for the various prizes and lectureships. We have many distinguished colleagues. The editors of the five MAA journals reported, as did several committees. One committee report was of particular interest. The Coordinating Council on Education gave an update on the CUPM (Committee on the Under graduate Program in Mathematics) curriculum guide. The Board formally endorsed the six recommendations found in the Executive Summary. The full report can now be found at http://www.maa.org/cupm.

I enjoyed the experience, although I must say I ended up spending more time in meetings than in giving or listening to talks.

———————————————

As usual, the Board of Governors of the MAA met at the beginning of the Joint Mathematical Meetings in January.

There was a certain amount of routine business – approving minutes, reports on electronic votes, committee appointments. The locations for the JMM have been decided for the next several years: 2005 - Atlanta, GA, Jan 5-8; 2006 - San Antonio, TX, Jan 12-15; 2007 - New Orleans, LA, Jan 4-7; 2008 - San Diego, CA, Jan 6-9; and 2009 - Washington, DC, Jan 7-10.

We heard reports from the staff and officers. Basically the organization is in good shape. About the only problems we are having are those of success. The MAA has become very successful at bringing in grant money. Since the federal government is not always quick about paying, this can present a cash-flow problem.

As part of the preparations for the MAA Centennial (2015), the staff has been working

with Kristy Sorenson at the Archives of American Mathematics at the University of Texas at Austin (see http://www.cah.utexas.edu/collectioncomponents/math.html). They are interested in anything the sections might have to offer, as well.

Finally, the MAA is always looking for people interested in helping. If you have an interest in serving on an MAA committee, let me know (wdstone@nmt.edu). I will need a description of your interests and activities, and then I can suggest your name.

3. SECTIONAL NEWS

Arizona State University (by Matt Isom <isom@asu.edu>)

ASU would like to announce the retirement of long time faculty member and teacher of mathematics Philip Leonard.

The first ever Arizona Mathematics Undergraduate Conference (AMUC) was held at Arizona State University, February 27-29. In attendance were 80 students and 20 faculty from Arizona State University, University of Arizona, Northern Arizona University, Mesa Community College, Western New Mexico University, New Mexico State University, University of Texas at El Paso, Harvey Mudd College, Claremont McKenna College, and University of California at Berkeley. The conference was supported in part by a grant from the NSF, administered through the MAA, as well as the SUMS Institute,the Western Alliance to Expand Student Opportunities, and the Rocky Mountain Mathematics Consortium.

ASU's Anne Gelb opened the conference Friday evening with an after dinner talk entitled, "Shaq and the Gibbs phenomenon," during which she explained the difficulty in getting uniformly clear MRI scans and the mathematics used to overcome such a challenge. Keynote speaker David Pengelley from NMSU spoke on Saturday morning, delivering "Voici ce que j'ai trouve (Here is what I have found): Sophie Germain's rediscovered manuscripts on Fermat's Last Theorem." Barbara Deuink of the National Security Agency spoke on Sunday morning on "The many roles enjoyed by mathematicians at NSA." Saturday afternoon included a panel discussion with mathematicians from local industry to answer student questions about opportunities and such. In all, 40 talks were presented on subjects ranging from Graph Theory, Statistics, and Mathematics Education to applications in Management, Astronomy, and Biology.

Some of the social highlights enjoyed by all included the Saturday night banquet held at the world famous Improv and the sendoff barbeque and volleyball party at the Tempe Town Lake on Sunday. Next year's conference will be hosted by either UA or NAU, as the three universities will take turns running AMUC in the future.

Glendale Community College (by Anne Dudley <anne.dudley@gcmail.maricopa.edu>)

We are in the process of hiring someone to coordinate our Developmental Algebra Courses. We continue to grow and need classroom space. Our most recent retiree is Lynette Goff, who worked here from 1963 to 2004, over 40 years. She plans to move to North Carolina upon her retirement to be near family.

New Mexico Tech (by Bill Stone <wdstone@nmt.edu>)

This is an exciting year for New Mexico Tech. We have three new faculty members: Tae-Chang Jo, numerical fluid analysis; Oleg Makhnin, stochastic processes; and John Starrett, dynamical systems. Also, Professor Emeritus Alan Sharples is back full-time for a year (or two) as Art Bukowski is in Kuwait, helping to start a new university. This past October, we finally got the final approval (from the Governor), and we officially have a Ph.D. program in Applied & Industrial Mathematics. Many thanks to the departments at both UNM and NMSU, who gave us their support!

Northern Arizona University (by John Hagood <John.Hagood@NAU.EDU>)

Our undergraduates have been very active this year. Three participated in the Nebraska Conference for Undergraduate Women in Mathematics in early February, two displayed the results of their research in a poster session at the joint mathematics meetings in Phoenix, and several will participate in the first Arizona Mathematics Undergraduate Conference (AMUC) in Tempe in late February. Once again, we will host an REU program (http://odin.math.nau.edu/reu.html) this coming summer. This year's projects are Semi-transitive and Bi-transitive Graphs, Arrangements, and Applications of Differential Equations to Image Retrieval and Visualization in two and three dimensions. Considerable effort has gone into restructuring our computerized college algebra course to achieve a higher level of student success. A report of the results will follow next issue! Work is just beginning on a project to experiment with WebWorK in calculus classes, funded by a grant from our board of regents. Fulbright Scholar Professor Primoz Potocnik of Slovenia will visit NAU to work with Steve Wilson most of the spring term.

University of New Mexico (by Alex Stone <astone@math.unm.edu>)

The department will be hosting a regional meeting of the AMS on October 16-17, 2004. The deadline for organizers of special sessions is March 16, 2004, while June 29th and August 24th are deadlines for contributed papers in special sessions and for abstracts. Details appear in the January issue of the Notices of the AMS.

The 7th New Mexico Analysis Seminar will take place at UNM on October 14-15, prior to the AMS meeting. It will feature minicourses by Patricia Bauman from Purdue University and Luca Capogna from the University of Arkansas. The organizers are Cristina Pereyra (UNM), Tiziana Giorgi, R. Smits, J. Lakey, and A. Sikora, all from NMSU. Interested participants should contact C. Pereyra at crisp@math.unm.edu.

The 2004 WNAR/IMS Western Regional Meeting, a conference in statistics and biometrics, will take place at UNM on June 27-30. The conference is organized by UNM professors Ed Bedrick and Gabriel Huerta, and by David Higdon (LANL) and Jason Fine (Wisconsin). Additional information is available at www.wnar.org. Interested parties may also contact E. Bedrick <bedrick@math.unm.edu> or G. Huerta ghuerta@math.unm.edu for more details.

Professor Cristina Pereyra will also teach an undergraduate course at the Program for Women in Mathematics to be held at the Institute for Advanced Study at Princeton, on May 17-27, 2004. Application forms and additional information can be found at www.math.ias/womensprogram.

Finally, it is with much sadness that we inform the membership of the death of Abraham P. Hillman, professor emeritus of mathematics at the University of New Mexico, after an extended illness. Before coming to New Mexico in 1965, Professor Hillman was on the faculties of Washington State University and Santa Clara University. He is perhaps best known for his lifelong involvement in the Putnam Mathematical competition, first as a Putnam Fellow at Brooklyn College in 1938 and continuing through his appointment as Director of the Putnam Competition in 1973. At Santa Clara he established a high school math contest that will be celebrating its 50th anniversary, and at the University of New Mexico he established a statewide mathematics contest in the high schools which is now in its 39th year. Professor Hillman's research was in the area of differential algebra and he was a coauthor of textbooks in Algebra, Trigonometry, Discrete mathematics, and Abstract Algebra.

Western New Mexico University (by Tom Gruszka <tpeter@cs.wnmu.edu>)

Starting with the 2004-2005 academic year students at WNMU preparing to be secondary school mathematics teachers will be required to major in mathematics. This is one of the recommendations in the CUPM Curriculum Guide 2004 published by the MAA.

4. NMMATYC 2004 CONFERENCE

You are invited to SanteFe Community College for the NMMATYC 2004 Conference on May 20-22, 2004. The Conference is titled "Interaction and Interdiscipline". Featured speakers will be James Taylor (not the rock star) and Stuart Kauffman of the Santa Fe Institute. Calls for proposals will be coming out soon. Participants will want to apply to their institutions for travel compensation early, before revenues become overapportioned. Eighty-five rooms have been reserved at conveniently located hotels. The hotel reservation deadline will be May 1. Participants will want to make sure they get their rooms reserved early, as it will be the beginning of tourist season in Santa Fe, and rooms may be hard to come by.

For additional info, visit the website <http://www.unm.edu/~nmmatyc/> or contact Dane Reese at dreese@sfccnm.edu or (505) 428- 1408.

5. GRANTS FOR GRADUATE STUDENT ACTIVITIES AT SECTION MEETINGS

The MAA recently approved funding to support increased graduate student participation at section meetings. Proposals are still being solicited by the Committee on Graduate Students to support pilot projects during calendar year 2004. Six Section Grants of a maximum of $400 have already been awarded to fund innovative programs to attract graduate students to attend and participate in Section meetings. There are still four remaining $400 grants that have yet to be awarded. The Committee plans to review proposals for activities at fall 2004 or spring 2005 section meetings this spring and will announce awards by the end of May. The Committee expects to fund a variety of prototypes and plans to evaluate the success of different models and communicate ideas for increasing graduate student participation to all sections at the conclusion of the pilot project. The deadline for proposals is April 30, 2004. For further details and guidelines, see http://www.maa.org/students/grad-comm-grants.html.

6. THE 2004 SPRING MEETING – REGISTRATION FORM

The Spring meeting of the Southwestern Section will be held on the campus of Northern Arizona University. Conference registration in the Adel Mathematics Building (#26) will begin at **8:00 a. m., Friday, April 2, 2004**, and the conference will end at **noon, April 3, 2004**.

REGISTRATION: Send the following information by **Friday, March 19, 2004** to John Hagood, Department of Mathematics and Statistics, PO Box 5717, Northern Arizona University, Flagstaff, AZ 86011. Email: John.Hagood@nau.edu; Phone (928) 523-6879; Fax (928) 523-5847

Name(as you want it to appear on your name tag):
_____
Affiliation:

_____
Nature: 4 yr college/university __ 2 yr college __ school __ business/government __
Position: Faculty __ Undergraduate Student __ Graduate Student __ Other (specify) ___
Memberships (check all that apply): MAA __ AMATYC __ ArizMATYC __ NCTM __
Mailing Address:

_____
_____
_____
_____
_____
Telephone: _____ Fax:

_____
e-mail: _____

Conference Registration Fee: $10
Banquet (optional), evening of April 2nd: $20 per person.
(Note: Banquet fees should arrive by March 19, 2004. It may not be possible to honor later requests.)

Total Amount Enclosed:_____. Make checks payable to MAA Southwestern Section.

7. HOTEL/MOTEL INFORMATION:
The following room rates were current as of January, 2004. Please mention the MAA meeting at NAU and ask for the government rate. Days Inn and Embassy Suites have set aside blocks of rooms at the listed rates until March 11 and March 1, respectively.   When two rates are given, the second is the rate for double occupancy.

Lodging	Address	Phone No.	Rate(s)
Days Inn	1000 W. Route 66	928-774-5221	$39.95
Embassy Suites	706 S. Milton Rd	928-774-4333	$79.00
AmeriSuites	2455 S. Beulah Blvd	928-774-8042	$69.00
Econo Lodge	914 S. Milton Rd	928-774-7326	$36.95
Fairfield Inn (Marriott)	2005 S. Milton Rd	928-773-1300	$59.00
Hampton Inn & Suites	2400 S. Beulah Blvd	928-913-0900	$79.00
Hilton Garden Inn	350 W. Forest Meadows St	928-226-8888	$81.99
La Quinta Inn & Suites	2015 S. Beulah Blvd	928-556-8666	$50.00
Motel 6	2745 S. Woodlands Village Blvd	928-779-3757	$32.99-$38.99
Quality Inn	2000 S. Milton Rd	928-774-8771	$55.00
Radisson Woodlands	1175 W. Route 66	928-773-8888	$69.00
Sleep Inn	2765 S. Woodlands Village Blvd	928-556-3000	$51.99-$56.99
Comfort Inn	2355 S. Beulah Blvd	928-774-2225	$79.95