

SOUTHWESTERN SECTION NEWSLETTER

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Editor: Thomas Gruszka, WNMU

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1. SPRING MEETING, April 7-8, 2006, Tucson, AZ

The annual meeting of the Southwestern Section of the MAA and ArizMATYC will be held on April 7-8, 2006 at the FOUR POINTS BY SHERATON, TUCSON UNIVERSITY PLAZA, 1900 E. SPEEDWAY BLVD., TUCSON, AZ. The Friday night banquet, as well as the meetings will be held at the facilities of this hotel. There will be three meeting rooms available, allowing us to hold three concurrent sessions. There is also ample space in the halls outside the meeting rooms for exhibitors.

Two one-hour talks are scheduled by the following invited speakers:

1. Dr. Lesley Ward, Dept. of Mathematics, Harvey Mudd College: *The Harvey Mudd College Mathematics Clinic.*

In 2006, the American Mathematical Society (AMS) presented its first Award for an Exemplary Program or Achievement in a Mathematics Department to Harvey Mudd College in Claremont, California. The Mathematics Department at Harvey Mudd College excels in numerous dimensions. Its exciting programs have led to a doubling of the number of math majors over the last decade. Currently more than one out of every six graduating seniors at Harvey Mudd College majors in mathematics or in new joint majors of mathematics with computer science or mathematical biology. Furthermore, about 60% of these math majors continue their education at the graduate level.

The Harvey Mudd College Mathematics Clinic has served as a trailblazer and a model for

other programs for more than thirty years. This innovative program connects teams of math majors with real-world problems, giving students a terrific research experience as well as a glimpse at possible future careers. Undergraduate research is a theme throughout the mathematics program at Harvey Mudd College, as exemplified by the over twenty papers published in the last three years by Harvey Mudd College mathematics faculty with student co-authors. The presentation will describe the many facets of the mathematics clinic.

2. Steve Dunbar, Department of Mathematics, University of Nebraska-Lincoln: *The MAA American Mathematics Competitions: Easy Problems, Hard Problems, History and Outcomes*.

The MAA has continuously sponsored nationwide high-school level math contests since 1952. The sequence of contests now spans 5 different contests at increasing levels of mathematical sophistication. Students who succeed at the top level on these contests become the team representing the U.S. at the annual International Mathematical Olympiad. The history and organization of the contests will be surveyed, along with the outcomes and some notable mathematicians whose early indications of talent came on these contests. Comments about the intersection of these contests with the school mathematics curriculum will be made, and some interesting, easy, and hard mathematical problems from these contests will be showcased.

Call for Papers:

Proposals for 20-25 minute talks, mini-courses, workshops, panel discussions, and the like are invited. Please e-mail titles and abstracts or other proposals to: Dr. William Yslas Vélez, velez@math.arizona.edu. Overhead projectors and screens as well as projectors for your laptops will be available. **No** laptops will be provided, **nor** will blackboards be available.

Registration and Accommodations:

The registration form is included in this newsletter. A block of rooms has been reserved at the Four Points for the MAA meeting. The daily rate for the hotel is \$104.00 (single or double) plus taxes. Reservations should be made by calling the hotel directly (1-800-325-3535, 520-327-7341). Please mention that you are with the MAA group to receive this rate. The block of rooms will be held until March 23rd.

Other possible accommodations include:

1. Days Inn (I-10 and Congress), 222 S. Freeway, 85745, 520-791-7511 or 1-800-325-2525, daily rate is \$39.95 plus tax (queen bed) - \$49.95 plus tax (two double beds);
2. Howard Johnson (22nd and Starr Pass), 1010 S. Freeway, 85745, 520-622-5871, daily rate is \$42.99 plus tax (king bed); and

3. Best Western, 1015 N. Stone, 520-622-8871, daily rate is \$78.00 plus tax (king, queen, or two double beds), this includes breakfast (cooked to order not continental).

Deadlines:

Proposals for mini-courses, workshops, panel discussions, and contributed papers (20-25 minutes) need to be submitted by **March 15, 2006**. Banquet reservations and fees need to be submitted by **March 23, 2006**.

Information can also be found at the website <http://oak.ucc.nau.edu/hagood/MAASW/SWSection.htm>.

2. Governor's Report, by Bill Stone <wdstone@nmt.edu>

The Board of Governor's of the MAA met, as usual, at the annual Joint Mathematics meeting, held this year in San Antonio. This was the final meeting of my three-year term as Governor, and first of all I want to thank you for the opportunity to serve.

The MAA is in good shape. Grant activity is up, with around a dozen active projects. Last year we had a \$600k operating surplus, and a clean audit. Publication income continues to be strong, with sales through Amazon up quite a bit. Don Albers will be retiring this year as Director of Publications, so the search for a replacement has started.

The Carriage House renovation at headquarters is finally proceeding. Demolition has been completed. Pictures are available at http://www.maa.org/maahq_construction/index.html.

The MAA is working on a new Strategic Plan. In the first phase, committees looked at revenue, the American Math Competitions, and professional development. These committees are preparing their reports, while the next group of committees starts looking at membership, governance, and students. Also, the revised curriculum guide from the Committee on the Undergraduate Program in Mathematics (CUPM) is on-line at http://www.maa.org/cupm/curr_guide.html.

The Joint Meetings were a big success, with many interesting talks, workshops, and activities sponsored by the various Special Interest Groups (SIGMAAs). This summer MathFest is in Knoxville, Tennessee, August 10-12, and the next JMM will be in New Orleans, January 5-8, 2007. Hope to see you there!

3. SECTIONAL NEWS

Albuquerque TVI (by Bill Pletsch <bpletsch@tvi.edu>)

The big news at Albuquerque TVI is the controversial sundering of the old Department of Arts and Sciences into two smaller, purportedly more manageable pieces. One of the pieces is the new Division of Math, Science, and Engineering. (The other piece has initials CHSS, pronounced 'Chess', but your correspondent can not for the life of him remember what the letters stand for. Chess took the rest of the old Arts and Sciences except for computer science which for various arcane reasons was sent over to the old Business Occupations along with a new name for that department.)

The controversy itself centered upon the question "Why?"

As for the math faculty themselves: the higher profile of the Math department pleases some, while others insist there was no earthly reason for said sundering. It is too early to tell of any efficacy to the new division.

Arizona Western College (by Dan Russow <daniel.russow@azwestern.edu>)

The Mathematics Department is advertising for a full-time position to begin in Fall, 2006. Most of our math classes are now offered online as an alternative to the traditional in-class lecture. Research has shown that at our college, students do not perform as well in Interactive Television classes as they do in traditional classrooms. We are therefore reducing the number of classes offered via interactive television and are striving to have "live" instructors to teach at our remote sites. Lastly, our department is currently investigating the possibility of offering modular, competency-based, developmental math courses/concepts.

Eastern New Mexico University (by Kathleen Salter <Kathleen.Salter@enmu.edu>)

Ms. Joan Brown joined the department in Fall 2005 to replace Lila Pendergraft who retired. Ms. Brown presented a talk on The Effects of Exam Retakes on Mathematics Anxiety at the Joint Mathematics Meetings in San Antonio.

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

NAU is hosting the 2006 meeting of WNAR (www.wnar.org), the Western North American Region of The International Biometric Society, June 27–30.

We have five visitors this semester. First, Slovenian mathematicians Primož Potocnik of the University of Ljubljana and Steško Miklavic of Univerza na Primorskem will be visiting 1-10 Feb. Prof. Miklavic will offer a talk at the department's Combinatorics seminar on Tuesday 7 Feb. at 12:45 for those nearby who wish to attend. From the Peoples Republic of China, Fujian Normal University faculty members Wang Xiaozhen and Yaun Zhanquiang will visit for the entire semester, in on several of our graduate and undergraduate courses to observe the nature of university education in the USA. Also, Peng Xiao, a student at North Texas University who will soon complete his PhD, is a visiting assistant professor in statistics.

Our WeBWorK project has produced a library of problems now available on the national WeBWorK site at the University of Rochester (<http://webwork.math.rochester.edu/docs/>).

Our online M.A.T. program will complete one full cycle of courses this coming summer. We currently have 18 students in the program, most from Arizona but some from Colorado, Massachusetts, Alabama and other states.

4. Bill Vélez Receives Award at JMM



The Joint Math Meetings Prize Session was held on Friday, January 13, 2006. Among

the many prizes given by MAA, AMS, SIAM and AWM were the MAA Certificates for Meritorious Service. Once every five years the Southwestern Section has the opportunity to nominate a person to receive this award. This year William (Bill) Vélez was nominated by our section (see the section's Fall Newsletter). The above picture was taken just after Bill received the award, and he was allowed a few minutes to address the Prize Session. There was a reception after the Prize Session honoring all the prize recipients.

Past Southwestern Section recipients of the Meritorious Service Award are: Everett Walter, Alvin Swimmer and Joanne Peeples.

5. NMMATYC Conference, May 19-20, 2006, Las Cruces, NM

This year's NMMATYC conference will be held at Dona Ana Community College in Las Cruces, NM on May 19 and 20, 2006 (with a preconference workshop on the 18th). For more information contact Rene Sierra (conference chair) at rsierra@nmsu.edu or check the NMMATYC web site (NMMATYC.org).

Next year the Southwestern Section will have a joint conference with NMMATYC. The conference will be in April at the UNM-Valencia Campus.

6. FEMTEC Conference, December 11-15, 2006, The University of Texas at El Paso, El Paso, TX

The 2006 Finite Element Methods in Engineering and Science (FEMTEC) Conference will be held at UTEP in El Paso, TX from December 11-15, 2006. Conference topics include reliability, uncertainty, interval FEM, adaptive higher-order FEM, enriched and X-FEM as well as advanced applications. Invited speakers include: Ivo Babuska (ICES, UT Austin), Ted Belytschko (Northwestern University), Pavel Bochev (Sandia National Labs), Roland Glowinski (University of Houston), Weimin Han (University of Iowa), George Karniadakis (Brown University), and Rafi Muhanna (Georgia Tech). Registration and abstract deadline is April 30, 2006. Information can be obtained from the website: http://servac.math.utep.edu/femtec_2006, by email: femtec@math.utep.edu, or by phone: (915) 747-6770.

7. THE 2006 SPRING MEETING – REGISTRATION FORM

Registration Southwestern Section of the MAA and ArizMATYC Tucson, Arizona, April 7-8, 2006

The meeting will be held at the **FOUR POINTS BY SHERATON, TUCSON UNIVERSITY PLAZA, 1900 E. SPEEDWAY BLVD, TUCSON, AZ 85719.**

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<http://oak.ucc.nau.edu/hagood/MAASW/SWSection.htm>

Please submit the form below before March 23, 2006. This will help us to have a reasonable count for rooms, supplies and meals. After that date, meeting registration will still be accepted. Banquet seating is limited, so although you may request banquet tickets later than March 23, 2006, there is no guarantee that seats will be available.

Name (as you want it on name tag): _____

Professional Affiliation: _____

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 ___

AATM ___ AMS ___ SIAM ___ AWM ___ Other _____

Mailing Address: _____

Telephone: _____ Fax: _____

e-mail: _____

Registration Fee: General Registration: \$15 ___ Retirees and Students \$5 ___

Friday Night Banquet (number) _____ at \$25 each* Total Enclosed _____

***Banquet fees should arrive by March 23, 2006. It may not be possible to honor later requests. Make checks payable to: MAA SW-Section**

Send to:

William Yslas Vélez
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P.O. Box 210089
The University of Arizona
Tucson, Arizona 85721-0089

Proposal for talks should be sent in by March 15, 2006 to allow time to create a schedule. Please send title and abstract to W. Y. Vélez at the address above, or by email (velez@math.arizona.edu). If you would like to organize a panel then please contact W. Y. Vélez as soon as possible to make arrangements. Overhead projectors and screens, projectors for your laptops will be available. No laptops will be provided. Blackboards will not be available.