Materials for the Spring 2003 Section Meeting at New Mexico Tech, April 5-6, 2003. Originally posted at

 $\underline{http://infohost.nmt.edu/\!\!\sim\!\!wdstone/www/MAAmeeting/CoverPage.htm}$





Southwest Region Section meeting

Saturday – Sunday April 5 - 6, 2003

New Mexico Tech Socorro, New Mexico

For more information contact

Wm. D. Stone

505-835-5786

Program

Section Officers

Distinguished Teaching Award

Registration

(.doc or .pdf format)

Call for papers

Vendor registration
(.doc or .pdf format)

Hotel Information

Things to do in Socorro!

Keynote Speaker: Professor Martha Siegel, Towson University

Schedule of talks

Student paper session

Teaching innovations session

Research reports

Business meeting

Saturday 5-Apr-03

Weir 102

9:00 Welcome to Tech Peter Gerity

> Weir 102 Teaching Innovations I

9:30 Helmut Knaust That student is taught the best who is told the least

Mathematical Modeling as a Capstone Course at New Mexico Tech 10:00 Bill Stone

10:30 Hamide Dogan-Dunlap An Activity to Enhance Understanding of Sets

Finding Your Mathematical Voice 11:00 Reid Mowrer

11:00 Janet McShane (with Michael Ratliff)

Weir 128

9:30 Curt

10:30 John

Weir 128

Research I

Barefoot

Hagood

Perfect Bc-Matchings

Tagged partitions in Analysis

Fibonacci-like sequences of Apollonian circle packings

Lunch on your own

Weir 102

1:00 Keynote Address Martha Siegel

2:00 Business meeting

Weir 102

Teaching Innovations II Student papers

3:00 Matt Introduction to WebWork 3:00 Juana R. de Smet Concept maps in mathematics: with emphasis on slope Isom

3:30 Helmut Placing more freshmen into college-level Mathematics courses Knaust 3:30 Todd Wolford Pendant Water Drops on the Outside of a Cylinder Technology Illustrations of Five Solutions to the Problem of Appollonius Computationally Tractable Gene Selection Methods for cancer classification 4:00 Michael Ratliff 4:00 Eric Andries

Number Theoretic Properties of Pascal's Triangle

(with Janet McShane) 4:30 Matt Miller

Sunday 6-Apr-03

> Weir 102 Weir 128

Teaching Innovations III Research II

Knowledge Content Indicators and Connectedness Indicators as Predictors of Proble 9:30 Sharon Yu-Shattuck 9:30 Ivan Avramidi

10:30 Mir Do students learn as much from a distance learning course (statistically speaking)? 10:30 Brian An introduction to semidefinite programming Mortazavi Borchers

11:00 Jeff Rushall Why we hate watching cooking shows on television

Extensions of the Semidefinite Coordinate Direction Algorithm for Detecting Necessary Con-(with Kurt Herzinger) 11:30 Shafiu Jibrin

Student Papers

Erik Andries UNM

"Computationally Tractable Gene Selection Methods for Cancer Classification"

Juana R. de Smet UTEP

Concept Maps in Mathematics: With Emphasis on Slope

<u>Matt Miller</u>, Northern Arizona University <u>Number Theoretic Properties of Pascal's Triangle</u>

<u>Todd Wolford</u>, New Mexico Tech Pendant Water Drops on the Outside of a Cylinder

Teaching Innovations

<u>Matt Isom</u>, Associate Professor of Mathematics, Arizona State University <u>Introduction to WeBWorK</u>

<u>Helmut Knaust</u>, Ph.D., Associate Professor, Department of Mathematical Sciences, University of Texas at El Paso

Placing More Freshmen Into College-level Mathematics Courses

<u>Helmut Knaust</u>, Ph.D., Associate Professor, Department of Mathematical Sciences, University of Texas at El Paso

That Student Is Taught the Best Who Is Told the Least

<u>Hamide Dogan-Dunlap</u>, Assistant Professor, Mathematical Sciences, University of Texas at El Paso An Activity to Enhance Understanding of Sets

<u>Dr. Mir Mortazavi</u>, Department of Mathematical Sciences, Eastern New Mexico University <u>Do students learn as much from a distance learning course (statistically speaking)?</u>

<u>Jeff Rushall</u>, Northern Arizona University Kurt Herzinger, United States Air Force Academy Why We Hate Watching Cooking Shows on Television

Michael Ratliff and <u>Janet McShane</u>, Northern Arizona University, <u>Technology Illustrations of Five Solutions to the *Problem of Apollonius*</u>

<u>Terence Blows</u>, Northern Arizona University <u>It's still Diff Eq. to me</u>

Reid Mowrer UNM-Valencia Finding Your Mathematical Voice

William D. Stone, New Mexico Tech Mathematical Modeling as a Capstone Course at New Mexico Tech

<u>Sharon Yu-Shattuck</u>, El Paso Community College <u>Knowledge Content Indicators and Connectedness Indicators as Predictors of Problem Solving Success</u>

Research talks

<u>Brian Borchers</u>, Chair and Associate Professor of Mathematics, New Mexico Tech <u>An Introduction to Semidefinite Programming</u>

<u>Janet McShane</u> and Michael Ratliff, Northern Arizona University <u>Fibonacci-Like Sequences of Apollonian Circle Packings</u>

John Hagood, Northern Arizona University Tagged Partitions in Analysis

Shafiu Jibrin, Northern Arizona University and Susan Perrone, Clemson University

Extensions of the Semidefinite Coordinate Direction Algorithm for Detecting Necessary Constraints to Unbounded Regions

<u>Ivan Avramidi</u>, New Mexico Tech TBA

<u>Curtis Barefoot</u>, New Mexico Tech <u>Perfect Bc-Matchings</u>

<u>Ivan Avramidi</u>, New Mexico Tech <u>Singular Asymptotics of Partial Differential Operators</u>

MAA SOUTHWESTERN SECTION AGENDA FOR SPING MEETING APRIL, 2003

- 1. Call to Order Bill Stone
- 2. Approval of minutes of 2002 meeting Joanne Peeples
- 3. Treasurer's Report Joanne Peeples
 Request to reimburse Governor and Section Chair \$100 each for MathFest.
 Other requests of Treasurer
- 4. Governor's Report John Hagood
- 5. AMC Report ???
- 6. Student Chapters NAU ?/ UTEP ?/ other?
- 7. Newsletter Tom Gruszka
- 8. Old Business Web Page?
- 9. New Business

MathFest 2003 in Boulder, CO MathFest 2005 in Albuquerque NMMATYC Conference in Farmington, NM (May 30 – 31, 2003)

- 10. Election of Officers for 2003-2004: Chair (NAU), Vice-Chair (UTEP)
- 11. 2004 Spring Meeting to be held at NAU, Flagstaff, AZ





Southwestern Region Section meeting

Saturday – Sunday April 5 - 6, 2003

New Mexico Tech Socorro, New Mexico

REGISTRATION

Return to: MAA Conference c/o Dept of Math New Mexico Tech Socorro NM 87801

Name:	MAA member? Yes No
College or University:	Student? Yes No
Address:	
Telephone: f	ax:
e-mail:	
Registration fee \$10	
Banquet: #*\$20 =	-
Guest (name)	
Entrée selections: Beef Wellington	
Foonlant Parmesan	

Call for Papers

The annual MAA Southwestern Section meeting is being held April 5-6, 2003 at New Mexico Tech in Socorro, NM. You are invited to present a paper.

We will have presentations in three areas:

Student papers

Either graduate or undergraduate presenters are welcome. This is a nice, friendly venue to present thesis work, preliminary work, senior projects and the like.

Teaching innovations

Have you tried something new that worked? We welcome presentations on new methods, ideas, assessment strategies, projects, etc. Let's share our ideas so we can all have even better success!

Research reports

What are the members of the Southwestern section doing? Surveys of your field, new problems, and results - either final or preliminary - all are welcome.

We will have 20 minute and 50 minute time slots available; let us know which you would like. To propose a talk, send title and abstract to wdstone@nmt.edu. Let us know any equipment you will be needing, and any preference for scheduling.



February 2003

Dear Sir or Madam:

The Mathematical Association of America (MAA) Southwest Section is having their spring meeting at the New Mexico Tech campus in Socorro, NM on April 5-6, 2003. As part of this conference, we usually have some vendor exhibits of textbooks and other classroom materials. You are invited to come to Socorro and exhibit at the April 5-6 conference.

The MAA is a professional organization of teachers of mathematics at both the two- and four-year levels. The Southwest section includes New Mexico, Arizona, and the El Paso area. Usually our section meeting has 40-50 participants.

To help defray the costs of the meeting, there is a \$25 commercial registration which is payable to MAA using the attached form below. You may choose, instead, to sponsor a 'refreshment break'.

If you wish to attend the banquet on Saturday night (\$20), please fill out a registration form, including choice of entrée. (Of course, you need not pay an additional registration fee.)

The conference web page is at

http://www.nmt.edu/~wdstone/www/MAAmeeting/CoverPage.htm for more information.

Company Name	
Representative	
Address:	Phone Number
	Fax Number
Paid by Check No.	Purchase Order No
Credit Card Type Number	
Expires	

For information about Socorro and what our community has to offer, see http://www.socorro-nm.com/

Hotel Information

Socorro Super 8 (505-835-4626) North Frontage Road (immediately when you come

into Socorro on the right side. Tell them you are here for the New Mexico Tech Math conference.

Conference price should be 1 bed room 49.88 + tax for 2 bed room 56.88 + tax

Holiday Inn Express (505) 838-0556 is offering \$65.00 for the conference. Mention NM Tech for conference rate.

Things to do in Socorro

Things to do on Friday, April 4:

NRAO Colloquium: 11 a.m., AOC. Andrew MacFadyen, Caltech

Bosque del Apache (closes at dusk)) http://www.friendsofthebosque.org/

New Mexico Mineral Symposium http://geoinfo.nmt.edu/education/museum/home.html#top
200 W – Workman Addition
NMT Campus
8-5 Friday, 10-3 Saturday

Things to do on Saturday, April 5:

April 5 Trinity Site Open to Public

Bosque del Apache (opens at dawn) http://www.friendsofthebosque.org/

Very Large Array visit http://www.aoc.nrao.edu/

New Mexico Mineral Symposium http://geoinfo.nmt.edu/education/museum/home.html#top 200 W – Workman Addition
NMT Campus
8-5 Friday, 10-3 Saturday

Things to do on Sunday, April 6:

Very Large Array (VLA) Guided Tour: Guided tours for the general public. A tour will leave from the Visitor Center every half hour beginning at 10 a.m., with the last tour leaving the center at 2:00 p.m. Tours are free and no reservations are needed.

Other links by the Socorro Chamber of Commerce

http://www.socorro-nm.com/main/links.html

Other links by NMT's Outdoor fun page http://www.nmt.edu/stu_life/outdoors.htm

Socorro Area Lodging and Eating http://www.socorro-nm.com/main/vtable.html

Maps:

http://infohost.nmt.edu/mainpage/map/colormap.html

http://infohost.nmt.edu/mainpage/map/nmstate.html http://www.friendsofthebosque.org/map.html