



Southern California–Nevada Section  
Mathematical Association of America  
**NEWSLETTER**



Volume LII, Number 2

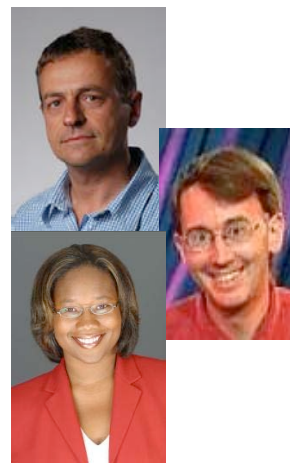
March 2011

**Southern California-Nevada Section to Meet  
Saturday, April 16, 2011, in San Diego**

The Spring Meeting of the Southern California-Nevada Section of the MAA will be held on the beautiful campus of Point Loma Nazarene University. The meeting will feature three exceptional speakers on three exciting areas of mathematics:

- ❖ **Bernd Sturmfels** of UC Berkeley on convex algebraic geometry;
- ❖ **Michael Krebs** of Cal State LA on communications networks; &
- ❖ **Talithia Williams** of Harvey Mudd College on lies and statistics.

The meeting also will feature the popular Student Poster Session and MAA Book Sale. Section NExT will have parallel activities for its members, including a Career Panel open to all meeting attendees.



*Clockwise from upper  
left: Sturmfels, Krebs,  
and Williams*

***Deadlines for 2011 Spring Section Meeting:***

Title and abstract for Student Poster Session: Tuesday, April 5  
(see page 10)

Section NExT application: Friday, April 8 (see page 3)

Mail-in registration for Spring Meeting: Monday, April 11 (see pages 8-9)

Online registration for Spring Meeting: Tuesday, April 12, 5 p.m. (see pages 8-9)

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**Pre-register online  
for the MAA So Cal-  
Nevada Section  
Saturday, April 16  
Spring Meeting at  
the section website:**

<http://sections.maa.org/socalnv/>

## Greetings from the 2010-2011 MAA Southern California-Nevada Section Chair

*Ivona Grzegorzczuk, California State University, Channel Islands*



*Our Section Chair, Ivona Grzegorzczuk, is Chair of the Mathematics Department and Professor of Mathematics at Cal State Channel Islands.*

Welcome to the spring with all the flowers in full bloom already. I hope to meet everyone in beautiful San Diego on Saturday, April 16, 2011. Point Loma Nazarene University is going to be the host of our section meeting on their scenic campus. Our invited speakers include Talithia Williams talking on media and statistics, Bernd Sturmfels introducing us to convex algebraic geometry, and Michael Krebs sharing secrets of communication networks. You should also visit the poster session where our students will present their research projects: share your comments and suggestions with them, and encourage their continued interest in mathematics. We will all have interesting conversations over lunch. You will also find new and discounted books and information about other mathematical events in our region.

Many of our section members have attended the Joint Meetings in New Orleans this January and enjoyed the French quarter, music, good food and excellent

mathematics. From massive prediction models to self-organization in natural and artificial systems, from zeta-function to solitons – the talks included interesting applications as well as new ideas in pure mathematics. Educational talks included turning theorems into plays, sea battles, Benjamin Franklin's oil lamp, and jelly bellies. A truly comprehensive and rich program included presentations for all ages and levels of expertise, the Graduate School Fair, and the poster sessions for young mathematicians and undergraduate students. It was busy and it was lots of fun! MAA section chairs discussion revolved about current budgetary issues and section management. Our section board is discussing a few new ideas to be implemented in our section in the nearest future.



*Erica Flapan of Pomona College receives the Haimo Distinguished Teaching Award from MAA President David Bressoud at the January 2011 Joint Mathematics Meetings in New Orleans. Photo by Laura McHugh, MAA.*

Please do not forget to mark your calendars for the Fall Meeting, to be held most likely in Orange County. We have another great lineup of speakers planned for that event. Note the registration and abstract submission has opened for the MathFest to be held in Lexington, Kentucky August 4-6, 2011. See you all at our events!

## **New Faculty: Join Southern California-Nevada Section NExT!**

*Magnhild Lien, CSU Northridge*

Project NExT (New Experiences in Teaching) is an MAA program for new and recent PhDs in the mathematical sciences that addresses the full range of faculty responsibilities, including teaching, scholarly activities, and service. Since its inception in 1994, the national Project NExT program has grown tremendously, and sections of the MAA have been encouraged to organize regional NExT programs.

The SoCalNev Section NExT program is in its 9<sup>th</sup> year and has sponsored dynamic cohorts of participants at the MAA Southern California-Nevada Section meetings. SoCalNev Section NExT Fellows attend the meetings of the MAA Section and participate in special activities. These activities involve practical information about implementing effective pedagogical and professional strategies, including topics such as teaching methods, directing undergraduate research, and writing grant proposals. In addition, SoCalNev NExT provides a venue in which its participants can meet informally and discuss issues relevant to new faculty. Unlike the national Project NExT program, Section NExT includes community college faculty.

SoCalNev NExT is now recruiting applicants to participate in activities at the Spring 2011 MAA Southern California-Nevada Section Meeting on April 16 at Point Loma Nazarene University in San Diego. Section NExT will accept applications from faculty with Master's degrees or PhDs who are within the first three years of beginning full-time employment with significant teaching responsibilities at the community college or university level. Project NExT Fellows within their first three years of full-time employment are encouraged to register and become members of Section NExT.

For more information, including a link to the on-line application form, please visit <http://www.csun.edu/~vcmth00s/SectionNExT.htm>. To join Section NExT in time for the Spring Section Meeting at Point Loma Nazarene University, please complete an application form by **Friday April 8, 2011**.

### **Great Books, Great Bargains at MAA Book Sale!**

The 2011 Spring Meeting at Point Loma University in San Diego will include the ever-popular MAA Book Sale. Book prices at the meeting will be about 10% less than the already discounted MAA member prices in the MAA Catalog. Almost all of the books in the MAA Catalog will be available to order, including a number of brand new titles. Recent titles by MAA Southern California–Nevada Section members include:

- *A Historian Looks Back: The Calculus as Algebra and Selected Writings*, by **Judy Grabiner** of Pitzer College, and
- *Biscuits of Number Theory*, co-edited by **Art Benjamin** of Harvey Mudd College and **Ezra Brown** of Virginia Polytechnic University.

Book Sale organizers are **Michael Hoffman** and **Richard Katz** of California State University, Los Angeles.

# Spring Meeting Schedule

Saturday, April 16, 2011

Cooper Music Center, Point Loma Nazarene University, San Diego

- 8:15 – 12:00      **Registration** – Crill Patio, Cooper Music Center
- 8:15 – 10:30      **Refreshments** – Cooper Music Center Parlor
- 8:30 – 2:30      **MAA Book Sale** – Cooper Music Center Parlor  
Organized by Michael Hoffman, Richard Katz, Cal State Los Angeles
- 9:00 – 10:00      **Invited Address by Michael Krebs**, Cal State Los Angeles  
Crill Auditorium, Cooper Music Center

***How to Build Fast, Reliable Communications Networks: A Brief Introduction to Expanders and Ramanujan Graphs***

Think of a graph as a communications network. Putting in edges (e.g., fiber optic cables, telephone lines) is expensive, so we wish to limit the number of edges in the graph. At the same time, we would like the communications network to be as fast and reliable as possible. We will see that the quality of the network is closely related to the eigenvalues of the graph's adjacency matrix. Essentially, the smaller the eigenvalues are, the better the communications network is. It turns out that there is a bound, due to Alon, Serre, and others, on how small the eigenvalues can be. This gives us a rough sense of what it means for graphs to represent "optimal" communications networks; we call these Ramanujan graphs. Families of  $k$ -regular Ramanujan graphs have been constructed in this manner by Lubotzky, Sarnak, and others whenever  $k$  minus one equals a power of a prime number. No one knows whether families of  $k$ -regular Ramanujan graphs exist for all  $k$ .

- 10:00 – 10:15      **Section Business Meeting** – Crill Auditorium, Cooper Music Center  
Presentation of Section Distinguished Teaching Award  
Recognition of 25- and 50-year MAA members
- 10:20 – 11:20      **Student Poster Session** – Crill Patio, Cooper Music Center  
Organized by Cynthia Wyels, Cal State Channel Islands
- 11:20 – 12:20      **Invited Address by Bernd Sturmfels**, UC Berkeley  
Crill Auditorium, Cooper Music Center

***Convex Algebraic Geometry***

Spring Meeting Schedule continued on page 5 ...

## Spring Meeting Schedule, continued from page 4

- 11:20 – 12:20     **Invited Address by Bernd Sturmfels**, UC Berkeley  
Crill Auditorium, Cooper Music Center
- Convex Algebraic Geometry*
- Convex algebraic geometry is an emerging field at the interface of convex optimization and algebraic geometry. A primary focus lies on the mathematical underpinnings of semidefinite programming. This lecture offers an introduction with many pictures. Starting with questions concerning multifocal ellipses in the plane we move on to discuss spectrahedra and convex hulls of space curves.
- 12:20 – 1:35     **Luncheon** – Golden Gymnasium
- 1:35 – 2:35     **Invited Address by Talithia Williams**, Harvey Mudd College  
Crill Auditorium, Cooper Music Center
- Lies, Damned Lies, and Statistics: The Misapplication of Statistics in American Life*
- H. G. Wells once said, “Statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write.” The widespread use of statistics plays an influential role in persuading public opinion. As such, statistical literacy is necessary for members of society to critically evaluate the bombardment of charts, polls, graphs, and data that are presented on a daily basis. However, what often passes for “statistical” calculations and discoveries needs to be taken with a grain of salt. This talk will examine the applications of statistics in American media and give examples of where statistics has been grossly misused.
- 2:35 – 3:00     **Refreshments** – Cooper Music Center Parlor
- 3:00 – 4:00     **Section NExT Career Panel**—Crill Auditorium, Cooper Music Center  
Panelists to be announced; open to all meeting attendees

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## Directions to Point Loma Nazarene University, San Diego

For directions to the Point Loma Nazarene University campus and to download a campus map, please see the campus website at <http://www.pointloma.edu/maps-directions>

**Parking:** Stop at the campus entrance Welcome Center for a one-day parking permit and directions to the best parking lots serving our meeting location, the Cooper Music Center. Registration for our meeting will be on the Crill Patio, outside the Cooper Music Center.

**Hotels:** Information about a variety of hotels is available at <http://plnupartnership.com/>

## Mathematical Connections to be Featured at MAA Spring Section Meeting Saturday, April 16, in San Diego

The Spring Meeting of the Southern California-Nevada Section of the MAA will feature three exceptional speakers on three exciting connections in mathematics:

- ❖ Michael Krebs of Cal State Los Angeles on the connection between graphs and communications networks;
- ❖ Bernd Sturmfels of UC Berkeley on the connection between convex optimization and algebraic geometry; and
- ❖ Talithia Williams of Harvey Mudd College on the connection between statistics and real life.

The meeting also will feature the popular Student Poster Session, organized by Cindy Wyels of California State University, Channel Islands, and a Career Panel, organized by Magnhild Lien of California State University, Northridge. The MAA Book Sale, offered throughout the day by Michael Hoffman and Richard Katz of Cal State Los Angeles, will have a large selection of new MAA books, along with almost all of the other titles in the MAA booklist. Even the Business Meeting promises to be exciting, with the highly anticipated presentation of the 2011 Section Distinguished Teaching Award and recognition of our section's 25- and 50-year MAA members.

The Southern California-Nevada Section NExT (New Experiences in Teaching) will run a parallel program of activities for its members; new faculty members within three years of beginning their teaching careers who wish to participate should apply by Friday, April 8, at <http://www.csun.edu/~sf70713/application.html> (See page 3 for more information.) See you in San Diego!

### *Spring Meeting Speakers*

**Mike Krebs** is an Associate Professor of Mathematics at California State University, Los Angeles. He received his Ph.D. in mathematics from Johns Hopkins University, and his undergraduate degree from Pomona College. His current research focuses on algebraic graph theory, specifically the theory of expander families. His book, *Expander Families and Cayley Graphs: A Beginner's Guide*, co-authored with Anthony Shaheen, is due to come out in Fall 2011 with Oxford University Press. For some of Krebs' recent papers, as well as the opportunity to procrastinate while being mildly entertained by various mathematical videos, puzzles, and musical pieces, see Krebs' website at [www.calstatela.edu/faculty/mkrebs](http://www.calstatela.edu/faculty/mkrebs)



*Spring Meeting Speakers and Presenters, continued on page 7...*



*Spring Meeting Speakers and Presenters, continued from page 6...*



**Bernd Sturmfels** received doctoral degrees in Mathematics in 1987 from the University of Washington, Seattle, and the Technical University Darmstadt, Germany. After teaching at Cornell University, he joined the UC Berkeley faculty in 1995, where he is Professor of Mathematics, Statistics and Computer Science. His honors include NSF, Sloan, and Packard fellowships; a Clay Institute scholarship; the von Humboldt Senior Research Prize; MAA Polya and SIAM von Neumann lectureships; and MAA Ford and Allendoerfer awards for expository writing. He recently served as Vice President of AMS. A leading experimentalist among mathematicians, Sturmfels has authored or edited 15 books and 190 research articles, in the areas

of combinatorics, algebraic geometry, polyhedral geometry, symbolic computation, and their applications. His current research focuses on algebraic methods in optimization, statistics, and computational biology. See some of his recent papers at <http://math.berkeley.edu/~bernd/>.

**Talithia Williams** is an Assistant Professor of Mathematics and Statistics at Harvey Mudd College. She joined the Harvey Mudd College faculty in 2008 after receiving her B.S. in Mathematics from Spelman College, her M.A. in Mathematics from Howard University, and her Ph.D. in Statistics from Rice University. As a junior faculty member, Williams exemplifies the role of teacher and scholar through outstanding research, with a passion for integrating and motivating the educational process with real world statistical applications. Her research focuses on developing dynamic statistical models that emphasize the spatial and temporal structure of data with environmental applications. Her professional experiences include research appointments at the Jet Propulsion Laboratory (JPL), the National Security Agency (NSA), and NASA. In addition to her academic accomplishments, Williams is active in various Christian ministries involving marriage and family planning. She is a member of Pomona First Baptist Church and resides in Pomona, California, with her husband, Donald, and their sons, Josiah (3 yrs) and Noah (11 months).



**What would you really like to see at MAA Section Meetings? Please tell us!**

The SoCal-NV Section of the MAA would like to provide you with the events and opportunities you find most interesting. If you haven't done so already, please complete the short survey at <http://www.surveymonkey.com/s/FG8NM9R>. The survey should take less than 5 minutes to complete. Your responses will be tremendously useful to us.

## Registration for Spring Meeting

Participants can register online (using a credit card) for the Spring Meeting, to be held Sat., April 16, 2011, at Point Loma Nazarene University in San Diego, by going to the link on the section website <http://sections.maa.org/socalnv/>. Online registration will be available from Thursday, March 10, at 8:00 am, to **Tuesday, April 12, at 5:00 p.m.**

Participants also may register by mail by **Monday, April 11, 2011**. Either send the registration form on page 9 of this newsletter, or send your

Name  
Affiliation  
Address  
E-mail address

along with appropriate payment (see below) to:

Ernie Solheid  
Department of Mathematics  
California State University, Fullerton  
800 N. State College Blvd.  
Fullerton, CA 92834

### Help Write Our Section History!

Do you have a special memory of an MAA Southern California Section meeting, event, or personality? Please share it with Ernie Solheid (contact information at left and below).

Make checks payable to **Southern California-Nevada MAA**.

### Registration and luncheon:

MAA member: \$50

Non-member: \$55

Student: \$25

### Registration only (no luncheon):

MAA member: \$35

Non-member: \$40

Student: \$15

### Join the Section e-mail list!

Register at the Section website:  
<http://sections.maa.org/socalnv/>

Look for the "Join the Mailing List" box.

**Pre-registration deadline is Monday, April 11, 2011 (mail-in using form on page 9) or Tuesday, April 12, 2011, 5 p.m. (online at <http://sections.maa.org/socalnv/>).**

On-site meeting registration is available for \$5 more than pre-registration.

**Questions or problems?** Contact Ernie Solheid, Meetings Coordinator

Email: [esolheid@fullerton.edu](mailto:esolheid@fullerton.edu) Phone: (657) 278-7023

For **Directions to Point Loma Nazarene University**, see page 5.

For **MAA So Cal-Nev Section Spring Meeting Program**, see pages 4–5.



## Spring Meeting Pre-Registration / Luncheon Reservation Form

*Point Loma Nazarene University, Saturday, April 16, 2011*

Enter the number of registrations of each type in the appropriate blank in the table below.  
Make checks payable to Southern California-Nevada MAA.

Name(s) \_\_\_\_\_

Affiliation \_\_\_\_\_

Address \_\_\_\_\_

E-mail address(es) \_\_\_\_\_

	MAA Member	Non-member	Student
Registration only	_____ @ \$35	_____ @ \$40	_____ @ \$15
Registration and Luncheon	_____ @ \$50	_____ @ \$55	_____ @ \$25

**Note:** On-site meeting registration  
is available for \$5 more.

Total Enclosed \$ \_\_\_\_\_

The MAA national office has requested the following information. Please check all boxes that apply to you—or enter appropriate numbers for multiple registrations.

Faculty member at college or university with highest degree offered:

\_\_\_\_\_ Associate      \_\_\_\_\_ Bachelors      \_\_\_\_\_ Masters      \_\_\_\_\_ Doctorate

\_\_\_\_\_ High school teacher      \_\_\_\_\_ Business/Industry/Government

\_\_\_\_\_ Undergraduate student      \_\_\_\_\_ Graduate student

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### BALLOT FOR MAA SECTION OFFICERS: PLEASE VOTE!

**Note:** You may vote online when you register online for the Spring Section Meeting!  
Please visit <http://sections.maa.org/socalnv/> to register for the meeting and to vote.

Position	Candidate	Write-in alternative
Section Vice-Chair	<input type="checkbox"/> Min-Lin Lo Cal State San Bernardino	
2 <sup>nd</sup> Vice Program Chair	<input type="checkbox"/> Steven Morics University of Redlands	

## The Students' Column

Cynthia Wyels, Student Chapters Coordinator  
California State University, Channel Islands

### **Plan to attend the Spring 2011 Meeting April 16 in San Diego! Enter a poster in the Student Poster Competition!**

Consider presenting a poster at our Spring 2011 Meeting on April 16, 2011, at Point Loma Nazarene University in San Diego! Student poster presenters receive free registration and lunch at the meeting (up to two presenters per poster). More importantly, they share their work with the wider mathematical community, receiving accolades, feedback, and further ideas. And they develop their communication skills and gain a resume item. Undergraduate and Masters students are invited to submit a poster. Do so by providing the information requested at <http://sections.maa.org/socalnv/> (under Spring 2011 Meeting) by **Tuesday, April 5, 2011**. Topic ideas follow.

- Results of masters thesis, honors, senior, or independent study projects;
- Results of classroom projects or modeling contests;
- Results of REUs and academic-year research programs;
- Historical investigations in pure or applied mathematics;
- Solutions of problems from the Putnam Exam or from the *American Mathematical Monthly*, *Math Horizons*, or other journals.

### **Meetings and Conferences**

Meetings are attended by people who share your interest in mathematics. There may be a variety of activities: talks on interesting topics, a book sale, career panels, other students presenting their research projects... Our section keeps students in mind when planning meeting events: give the Spring Meeting a try! It will be Saturday, April 16, at Point Loma Nazarene University in San Diego; details appear elsewhere in this newsletter.

### **Stretch Your Learning!**

The MAA Undergraduate Page is a great resource:

<http://www.maa.org/students/undergrad/>

Did you know you could spend several weeks this summer pursuing research under the guidance of a mentor near or far ... while having your travel costs and room and board covered ... and even receive a stipend to offset your usual summer job earnings? Check out the REU section of the MAA Undergraduate Page. (Don't wait: most application deadlines are in February and March.) And spend some time with the other information on this page – opportunities to consider abound. Our own section's webpage (<http://sections.maa.org/socalnv/>) and this newsletter list many of the regional conferences that are relatively easy to attend. In addition to our Spring Meeting, consider attending an event tailored expressly to undergraduates: the Pacific Coast Undergraduate Math Conference, March 12 at Loyola Marymount University: [www.pcumc-math.org](http://www.pcumc-math.org).

*Students' Column, continued from page 10...*

### **Southern California – Nevada Students at the 2011 JMM in New Orleans**

The Southern California – Nevada Section was well represented by students at the Joint Mathematics Meetings in New Orleans, Jan. 6 – 9, 2011. Many presented their work in the Student Poster Session there, others gave oral presentations in some of the dozens (hundreds?) of sessions, and yet others attended graduate school fairs, panels, networking sessions, and many talks – and most enjoyed their time in the French Quarter. Four regional students were recognized as having particularly excellent posters (see the list below). All who presented are worthy of congratulations: the facts that your advisor(s) approved your entry and it was accepted to be presented are in themselves accomplishments.

#### **2011 MAA Undergraduate Poster Session Prize Winners**

- *Bishop's Lemma and Boundaries of Lipschitz Function Algebras*, Ann Kathryn Johnston, Harvey Mudd College and a co-author
- *2-Dimensional Shape Modeling*, Carlos Fernando Hernandez, California State University Fullerton and a co-author
- *Permissible Plane Embeddings of Ribbon Graph Blow-Ups*, Sarah Jane Loeb, Harvey Mudd College

#### **Special Interest Group of the MAA on Statistics Education Award**

*Rational Distance Sets on Conic Sections*, Megan Danielle Ly, Loyola Marymount University and a co-author

### **Congratulations to 25- and 50-Year MAA Members!**

Congratulations to the following members of the Southern California-Nevada Section who have been MAA members for 50 years!

Gerald L. Bradley  
Donald G. Saari  
Henry F. Bunch  
William Margulies  
Neil E. Gretskey

William O. Alltop  
Curtis N. Browne  
Charles T. Zahn  
Paul H. Palmquist

Congratulations also to the following members of the Southern California-Nevada Section who have been MAA members for 25 years!

Robert J. Cornelison  
David A. Short

Kenneth K. Warner  
Usher J. Rettke

These members will be recognized during the Business Meeting of our upcoming MAA Southern California-Nevada Section Spring Meeting April 16 in San Diego.

## Call for Nominations for Section Teaching Award

*Kathryn Leonard, Section Secretary*

Preliminary nominations for the 20th annual MAA Southern California-Nevada Section Award for Distinguished College or University Teaching of Mathematics will be accepted in Fall 2011.

The preliminary nomination consists of a one-page form (available at <http://sections.maa.org/socalnv/>) and a 1-2 page description of the candidate's qualities and teaching successes. If you have an eligible and qualified colleague in your department, we urge you to nominate her/him so that s/he may be considered for the award.

From the preliminary nominees, two to three semi-finalists will be chosen by the selection committee. Each nominator will then be asked to complete a full nomination packet for the semi-finalist. The full packet is required only for semi-finalists and will be due by early January of 2012. (Full nomination requirements may be found at [http://www.maa.org/Awards/Haimo\\_NF.pdf](http://www.maa.org/Awards/Haimo_NF.pdf).)

Upon receipt of the full nomination, semi-finalists will automatically become finalists. Each finalist will receive an official letter of commendation from the Chair of the Section, which will be copied to the candidate's department chair and dean. The selection committee will choose the winner from the pool of finalists. Finalists who are not selected will automatically have their full applications considered the following year for the Section award.

The winner of the award will be recognized at the 2012 Spring Meeting of the MAA Southern California-Nevada Section. The awardee will also be the official Section nominee for the MAA Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics.

Successful nominees are individuals who are widely recognized for their extraordinarily successful teaching effectiveness and for teaching that has had influence beyond their own institutions. To be eligible, nominees must be current MAA members who teach mathematical science courses at least half-time during the academic year and have at least seven years experience teaching at the college or university level. (For greater detail on eligibility requirements, please go to: [http://www.maa.org/Awards/Haimo\\_EGN.pdf](http://www.maa.org/Awards/Haimo_EGN.pdf).)

**Preliminary nomination deadline is Tuesday, November 1, 2011.**

**Questions?** Contact *Kathryn Leonard* [kathryn.leonard@csuci.edu](mailto:kathryn.leonard@csuci.edu) or 805-437-3127

Initial nominations may be sent electronically or mailed to:

Kathryn Leonard  
CSU Channel Islands  
1 University Dr.  
Camarillo, CA 93012

## Message from the Governor: JMM and Other National MAA News

*Magnhild Lien, 2010-2013 Section Governor  
California State University – Northridge*

With this bi-annual report, I hope to keep you informed about the latest news from the MAA. I would also like to hear from you. If you have questions or concerns that should be brought to the Board of Governors (BOG) please feel free to contact me via email at [magnhild.lien@csun.edu](mailto:magnhild.lien@csun.edu) or by phone at 818-677-6424 or to catch me at one of the section meetings.



The Joint Mathematics Meetings (JMM) in New Orleans in January 2011 were a great success, with the highest meeting attendance ever – 6000 attendees! The following photo gallery captures some of the activities and ambiance there:

<http://www.flickr.com/photos/maaorg/sets/72157624594731556/>.

The BOG met the day before the official starting date of the JMM and we had a full agenda with reports and discussions. One of the pleasures of being on the BOG is that we get to vote on the recommendations from the prizes and awards committees. Once again, members of our section were recipients of a teaching award. **Congratulations to Alissa Crans**, Loyola Marymount University, and **Sarah Eichhorn**, University of California, Irvine, both recipients of the 2011 Henry L. Alder Award for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member.



*Susan Montgomery of USC presents the AWM Emmy Noether Lecture, "Orthogonal Representations: From Groups to Hopf Algebras," during the January 2011 Joint Mathematics Meetings in New Orleans. Photo by Laura McHugh, MAA.*

The budget discussion took up a large part of the BOG meeting. The year 2010 was budgeted as a break-even year. However, final figures are likely to show deficits due to continued weakness in membership, journals, and advertising. The 2011 budget was revised, cutting expenses to meet lower revenue expectations. We have seen a decrease in membership and non-member journal subscriptions, all contributing to the decrease in revenue. The Membership Committee presented a proposal to recognize an associate membership category offered to high school teachers. The annual fee for this category is substantially smaller than the regular membership fee and it also comes with some restrictions. For example, an associate member will receive the *MAA Focus* but does not have an option to add any journals. This membership category has been on the books for a few years and MAA currently has more than 400 active associate members but the category had never formally been approved by the BOG. To increase revenue, however, the number of members in this category, as well as in the regular membership category, needs to increase.

*Message from Governor, continued on page 14...*

*Message from the Governor, continued from page 13...*

**I would like to encourage all active members to recruit new members. If we all look around in our departments, we may very well find a colleague who is doing work and has interests that fit well with the mission of MAA and would be amenable to becoming a member of the MAA but just needs a little nudge.**

The e-membership option, which took effect January 2010, has been expanded to include student member groups (graduate and undergraduates). In the fall I reported that about 15% of the members opted for an e-membership. E-members are renewing at a high rate and are not returning to print versions of membership. Twenty-five percent of the members are now e-members.

For anyone interested in learning more about the finances of the MAA, the Treasurer's page is available at: <http://www.maa.org/treasurer/> (for members only). It contains current and historical information about MAA's finances.

The director of the American Mathematics Competition (<http://amc.maa.org/>) reported to the BOG on last year's activities.

- Almost 400,000 exams were taken at all grade levels. Colleges and universities can host contests and strengthen ties with high schools and bright students.
- MAA co-sponsored participation of two 4-member teams of high school girls in the 2010 China Girls Math Olympiad held in Shijiazhuang, China, August 9-13, 2010. One team of 4 placed 2<sup>nd</sup> overall (1 Bronze, 1 Silver, 5 Gold total).
- At the 2010 International Mathematical Olympiad held in Astana, Kazakhstan, the U.S. 6-member team placed third in the world. Team members individually won 3 silver medals and 3 gold medals.

MAA supports a variety of outreach programs for students. Here are some examples.

- Tensor Grants for Women in Mathematics. Deadline: February 12.
- Tensor – SUMMA Grants: Strengthening Underrepresented Minority Mathematics Achievement. Deadline: February 12.
- Dolciani Mathematics Enrichment Grant (DMEG) program. Deadline: Feb. 12.
- National Research Experiences for Undergraduates Program to broaden participation in the mathematical sciences. Deadline: February 25.
- Regional Undergraduate Mathematics Conferences. Proposals requested by May 15 for following academic year.

If you missed these submissions, look at <http://www.maa.org/funding/faculty.html> for solicitations again in Fall 2011 for 2012 funding.

The Southern California-Nevada Section was well represented at the JMM. Several members gave talks both in the invited paper sessions and contributed paper sessions. Unfortunately, I was not able to see them all. I have a long list of names of people from our section who contributed one way or the other to a great program. Here I am mentioning only a few. Chuu-Lian Terng, UC Irvine, gave an AMS-MAA Invited Address on *Curves, Surfaces and Solitons* and the AWM Emmy Noether Lecture was



*Message from the Governor, continued from page 14...*

given by Susan Montgomery, USC (see photo on page 13). Our newsletter editor, Janet Beery, University of Redlands, was one of the organizers of a panel on *Writing the*



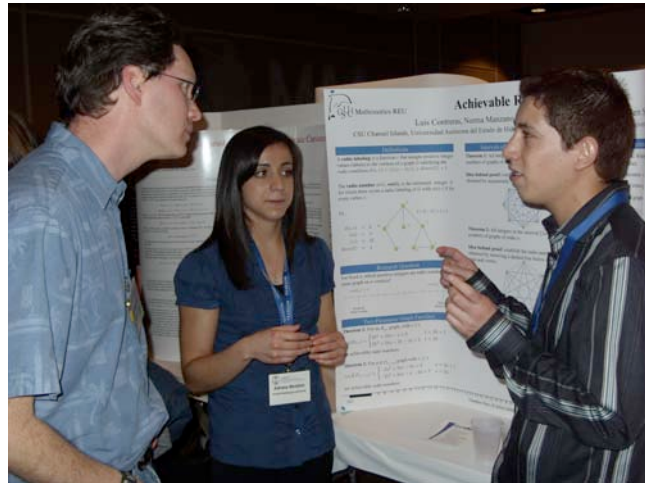
*History of the MAA's First 100 Years*. I went to a very interesting panel discussion, *Proving Hardy Wrong: Math Research with Social Justice Applications*. Lily Khadjavi, Loyola Marymount University, in the center in the photo at left, and Gizem Karaali, Pomona College, on the right, were on the panel.

I was not able to attend the Joint Prize Session where Erica Flapan was presented with the Haimo Teaching Award (see page 2 for a photo). However, I had an opportunity to hear

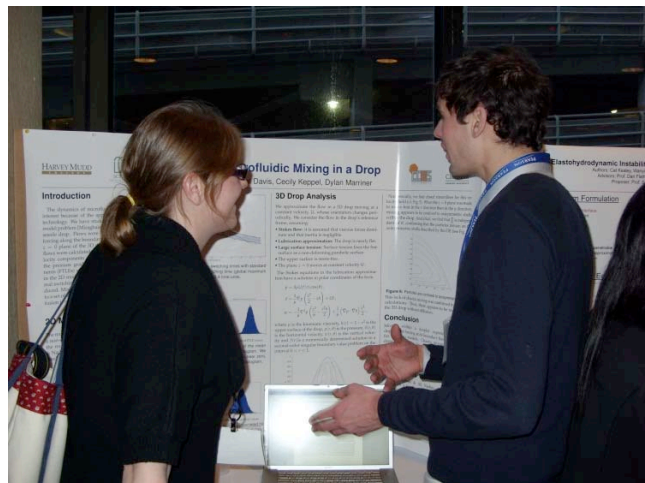
Erica give a delightful talk, *The problem of how to be a good teacher is undecidable*, in the session where the three Haimo Award recipients presented.

CSU Channel Islands, Fullerton and San Bernardino all had students presenting posters at the Student Poster Session, as did Harvey Mudd College, Whittier College, UCLA, UCI, USC, Pomona College, Pepperdine University, Claremont-McKenna College and Loyola Marymount University.

*Luis Davis Contreras of CSU Channel Islands answers questions about his poster during the Student Poster Session at the January 2011 Joint Mathematics Meetings in New Orleans.*



*Dylan Owen Marriner of Harvey Mudd College explains the project presented in his poster.*



## News from the Campuses of the Southern California–Nevada Section

Associate mathematics professor **Ron Buckmire** of **Occidental College** has been chosen



as the 2011 Educator of the Year by the National Organization of Gay and Lesbian Scientists and Technical Professionals. Buckmire was chosen for his "outstanding achievements in mathematics and education on race and [gay, lesbian, bisexual and transgender] issues," said John Burke, a member of the organization's board of directors. Buckmire's research areas include computational aerodynamics, numerical analysis, and applying mathematics to "real world" situations. He joined the Occidental faculty in 1996. Buckmire was honored at a reception and dinner on February 20 during the annual conference in Washington, DC, of the American

Association for the Advancement of Science (AAAS), with which the gay and lesbian scientists and technical professionals group is affiliated.

**Kathryn Leonard** of **California State University, Channel Islands**, received a grant award of \$250,000 from the Keck Foundation to develop and implement a 4-year undergraduate stepladder for interdisciplinary research that will engage students in original research projects beginning in the freshman year, steadily increasing their sophistication until graduation.

**CSU Channel Islands** will host an NSF-sponsored Research Experience for Undergraduates in 2011: 12–15 undergraduates will work with four faculty mentors exploring the world of mathematical research in an eight-week residential summer program. An international component features a faculty mentor and students from Mexico. **Cindy Wyels** is director of the program and **Kathryn Leonard** co-director. Application deadline was Feb. 18. For more information, see:

<http://faculty.csuci.edu/cynthia.wyels/REU/>

At **California State University Northridge**, **Kellie Evans** (PI) and **Silvia Fernandez** (co-PI) received an award of \$1.5 million from the National Science Foundation to establish the **CSUN NSF Teaching Fellowship Program**. Encourage your seniors and graduates to visit <http://www.csun.edu/~kme52026/csunsf.html> for more information.

The 2011 REU at **California State University, San Bernardino**, directed by **Rollie Trapp**, will feature projects in geometry and knot theory. Application deadline was Feb. 25; for details, see <http://www.math.csusb.edu/reu/>

The **Claremont Colleges** 2011 REU will focus on knot theory and on statistics with projects led by **Sam Nelson** of Claremont-McKenna College, **Gabriel Chandler** of Pomona College, and **Talithia Williams** of Harvey Mudd College. **Chris Towse** of Scripps College will direct the REU. See <http://ccms.claremont.edu/REU> for details. Application deadline was Feb. 15. In addition to this NSF-funded program, the

*News of the Section, continued from page 16...*

**Claremont Center for the Mathematical Sciences (CCMS)**, founded in 2007 by retired Harvey Mudd College mathematics professor **Bob Borelli**, funds summer research for eight students from the Claremont Colleges with a grant from the Fletcher Jones Foundation.

**Fred Feldon** of **Coastline Community College** led a webinar titled, “Unleash the Power of Your Tablet PC,” on Feb. 16. Slides from his presentation are available from Facebook, Twitter, SlideShare, etc. Watch for other useful webinars sponsored by AMATYC throughout the year at the AMATYC website: <http://www.amatyc.org/>

The **El Camino College Compton Center** Mathematics Department welcomes new professors **Ruth Zambrano**, **Abigail Tatiloglu**, and **Patricia Stoddard**, and offers its best wishes to recently retired professor **Mohomad Shaikh**.

**Sid Kolpas** of **Glendale College** is one of four 2010 winners of the Hayward Award, conferred by the Board of Governors of the California Community Colleges. The award honors “outstanding community college faculty who have a track record of excellence both in teaching and in professional activities and have demonstrated commitment to their students, profession, and college.” Four winners representing four regions are selected annually from all disciplines.

The popular website, *Math Fun Facts* <http://www.math.hmc.edu/funfacts/> created by **Francis Su** of **Harvey Mudd College** is now available as a free iPhone application, also created by Su, at <http://itunes.apple.com/us/app/math-fun-facts/id392240642?mt=8>

**Judith Grabiner** of **Pitzer College** published the book, *A Historian Looks Back: The Calculus as Algebra and Selected Writings*, in the MAA Spectrum series in October of 2010. The book is a collection of Grabiner’s articles and essays and will be available during the MAA Book Sale at the section’s April 16 meeting at Point Loma Nazarene University.

**Bruce Yoshiwara** of **Pierce College** is one of four 2011 winners of the Hayward Award, conferred by the Board of Governors of the California Community Colleges to “outstanding community college faculty who have a track record of excellence both in teaching and in professional activities and have demonstrated commitment to their students, profession, and college.” Four winners representing four regions are selected annually from all disciplines.

The **University of Nevada, Las Vegas**, congratulates **Hongtao Yang** for receiving tenure and promotion to associate professor in 2010, and **Ebrahim Salehi** (Graph Theory), **Jichun Li** (Computational Mathematics), and **Arthur Baragar** (Number Theory) for their promotion to full professor in 2009, 2010, and 2011, respectively. **Satish Bhatnagar**’s book, *Scattered Matherticles: Mathematical Reflections*, was published in November of 2010, with further volumes on the way. (Bhatnagar explains

*News of the Section, continued from page 17...*

that “matherticle” is derived from the words “**mathematical**” and “**particle**” and that the blending is due to Paul Halmos’ influence, as he was Halmos’ student at Indiana University.) UNLV’s PhD program, initiated in 2005 to augment its longstanding MS program, has graduated four students and currently has 26 enrolled, with 60 graduate students overall. PhDs have been awarded in statistics (two under **Melwane Anand**), in PDE (**David Costa**), and in Computational Finance (**Hongtao Yang**). The undergraduate students have an active math club and Pi Mu Epsilon chapter under the faculty guidance of **Michelle Robinette**. The Putnam math competition is run annually by **Gennady Bachman**. The department chair during these tough economic times is **Derrick DuBose**.

**Elizabeth Doolittle** is the **University of Redlands’** 2011 Mortar Board Professor of the Year.

*New hires, promotions, honors, awards, grants? Let us know!*

*Please send news from your institution to [janet\\_beery@redlands.edu](mailto:janet_beery@redlands.edu)*

### **Southern California-Nevada Conference Calendar**

Saturday, April 16, 2011: Mathematical Association of America Southern California-Nevada Section Spring Meeting, Point Loma Nazarene University, San Diego. See this newsletter and/or <http://sections.maa.org/socalnv/> for more information.

June 20–24, 2011: 9<sup>th</sup> Annual Permutation Patterns Conference, California Polytechnic State University, San Luis Obispo, featuring invited speakers Herbert Wilf from the University of Pennsylvania and Igor Pak from the University of California at Los Angeles. See <http://math.calpoly.edu/PP2011/index.html> for details on lodging, travel, and online registration. Submit one page abstracts by April 1, 2011, to Robert Brignall <[r.brignall@open.ac.uk](mailto:r.brignall@open.ac.uk)>.

### **Save these dates for future MAA national meetings!**

Summer 2011	Lexington, KY	August 4-6
Winter 2012	Boston, MA	January 4-7
Summer 2012	Madison, WI	August 2-4
Winter 2013	San Diego, CA	January 9-12
Summer 2013	Hartford, CT	August 1-3
Winter 2014	Baltimore, MD	January 15-18
Summer 2014	Portland, OR	August 7-9
Winter 2015	San Antonio, TX	January 10-13
Summer 2015	Washington, DC	August 5-8
Winter 2016	Seattle, WA	January 6-9
Winter 2017	Atlanta, GA	January 4-7