



Southern California–Nevada Section
Mathematical Association of America
NEWSLETTER



Volume LV, Number 1

September 2013

**Southern California-Nevada Section to Meet
Saturday, Oct. 12, 2013, at Cal State Dominguez Hills**

*Michael Krebs, California State University – Los Angeles
2013-14 MAA Southern California-Nevada Section Chair*



Greetings from the 2013–2014 MAA Southern California-Nevada Section Chair! Invited speakers and their topics for our Fall 2013 Section Meeting include:

- Jennifer Quinn, *The Combinatorialization of Linear Recurrences*
- Jesús A. De Loera, *Not as Innocent as They Appear: The Geometry of Magic Squares, Sudokus, Latin Squares and Other Mathematical Tables*
- Ann Watkins, *Statistics Isn't Mathematics: So How's That Working Out?*

The Fall Meeting also will include Contributed Paper Sessions, the MAA Book Sale, graduate student c.v. reviews, and a Section NExT workshop on time management.

Deadlines for 2013 Fall Section Meeting at CSU Dominguez Hills:

Contributed paper for Fall Meeting: **Friday, October 4, 2013, 5 p.m.** (see page 7)

Mail-in registration for Fall Meeting: received by **Monday, October 7, 2013, 5 p.m.**
(See pages 11-12 or our section website: <http://sections.maa.org/socalnv/> for the registration form. Online registration will not be available for the Fall Meeting.)

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**MAA So Cal-Nevada
Section to Meet ...** is
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Please see **MAA
Fall 2013 Meeting.**

Registration form is
on page 12 and at the
Section website:
<http://sections.maa.org/socalnv/>

Message from Section Chair: MAA Fall 2013 Meeting, *continued*



That's 2013-14 MAA SoCal-Nevada Section Chair Mike Krebs on the right!

son. When I told him that Kathryn Leonard talked about, among other things, teaching robots to pick strawberries and helping firefighters by predicting the course of a blaze, he even stopped playing LEGO®s for a minute to hear about it. My views on teaching, I reported, were informed by Chris Rasmussen's thought-provoking research on persistence in Calculus. I drew some doodles and told him what I had learned from Ravi Vakil about their mathematical properties. I might have lost him for a minute trying to explain Francis Su's results on combinatorial equivalents of the Brouwer fixed point theorem, but he could tell that I was enthused about it, and besides, I had a copy of the accompanying diagram, showing Mr. Smiley on an octahedron. Other highlights of the meeting included a student poster session and the presentation of our section's teaching award to Perla Myers of USD.

2013 Fall Meeting. Our Fall Meeting, to be held on Saturday, Oct. 12, 2013, at Cal State Dominguez Hills, holds equals promise for electrifying all who attend. Jennifer Quinn (University of Washington, Tacoma), Ann Watkins (California State University, Northridge), and Jesús A. De Loera (UC Davis). Formerly a professor at Occidental College, Jennifer Quinn is well-known to many in our section; indeed, she is a past recipient of our section's teaching award as well as the national MAA Haimo Award. She'll be speaking on combinatorialization of linear recurrences. Ann Watkins is a former president of the MAA and an expert on statistics education. She is a Fellow of the American Statistical Association and a recipient of numerous teaching awards. She'll speak about the effect of the statistics-mathematics divide on statistics education. Jesús A. De Loera has likewise received several awards for teaching and mentoring. A specialist in the field of discrete mathematics, he is associate editor of the journals *SIAM Journal of Discrete Mathematics* and *Discrete Optimization*. His topic will be the geometry of Sudoku, magic squares, Latin squares, and other mathematical tables. The Fall Meeting will also feature contributed talks by students and faculty.

Future Meetings. Mark your calendars for the Spring Meeting, to be held at Concordia University in Irvine, California, on Saturday, April 12, 2014. We will have another great lineup of speakers for that event, along with our annual Student Poster Session. National MAA meetings in 2014 include the Joint Mathematics Meetings in Baltimore, Maryland, from Jan. 15 to Jan. 18, and MathFest in Portland, Oregon, from Aug. 7 to Aug. 9.

SoCal-Nevada Section NExT is back!

Geoffrey Buhl, Cal State Channel Islands, MAA So Cal-Nevada Section NExT Director



Project NExT is an MAA program designed to provide valuable professional development activities for new and recent Ph.D.s in the mathematical sciences. For the last year or so the SoCal-Nevada Section has not had an active Section NExT chapter. My goal for the Fall 2013 and the Spring 2014 MAA meetings is to revive this section's Project NExT activities and build an active community.

My name is Geoffrey Buhl, and I'm an Associate Professor of Mathematics at Cal State Channel Islands. In addition to math, one of my institutional responsibilities is designing and running faculty development workshops. I want to identify what potential Section NExT

members would find valuable in professional development opportunities and provide those experiences. One thing I am acutely aware of is that it's hard for people starting out in their academic careers to take advantage of opportunities they don't know about. I have one request for Project or Section NExT alums or really anyone reading this newsletter: **please let your newer colleagues know about this opportunity.**

This year there are two goals for Project NExT activities in our section. The first goal is to identify Section members who are interested in professional development opportunities at Section meetings, and potentially beyond. The second goal is to provide two Section NExT workshops, one in the fall and one in the spring. These workshops are designed to address broadly issues that early career mathematicians face.

MAA SoCal-Nevada Section NExT is pleased to announce that **at the 2013 Fall Section Meeting**, to be held **Saturday, October 12, at Cal State Dominguez Hills**, our own **Gizem Karaali**, of Pomona College, will be giving our first **workshop**. She will address **time management and productivity for an academic life**. We will also organize an informal dinner at a local restaurant following the meeting.

Because we are trying to restart Section NExT activities as well as build interest, there will not be a formal application process as there has been in the past. **If you are interested in checking out what Section NExT has to offer, all I ask is that you email me at geoffrey.buhl@csuci.edu and let me know that you are willing to commit to one or both of the two Section NExT activities, workshop and/or dinner.** For now, that's all it takes to participate. Things may become more formal in the future, but for now I want to open up the experience for anyone interested. If you're merely curious, feel free to stop by the Section NExT table the morning of the meeting, and I'll happily twist your arm!

MAA Southern California-Nevada Section Fall Meeting

Saturday, October 12, 2013

**California State University, Dominguez Hills
Carson, California**

How to Get There, Where to Park, and Where to Register

Directions to and a **campus map** of Cal State Dominguez Hills:

<http://www4.csudh.edu/campus-map-directions/>

Parking: The nearest parking lot to Welch Hall, where the MAA Southern California - Nevada Fall Meeting will be held, is Lot 3, shown in the upper left corner of the campus map. Parking is \$5 with permits available at the Parking Ticket Dispensers shown on the campus map. The campus honors faculty, student, and staff semester or full-year parking permits from other CSU campuses.

The first invited address (and all the invited addresses) will be in James L. Welch Hall, Room D165. Registration, refreshments, and the Book Sale will be in or just outside of this building. The contributed talks will be in the Social and Behavioral Sciences Building (SBS on the map) and lunch will be distributed just outside of this building. Lunch will consist of Subway box lunches (choice of four sandwiches), which must be reserved ahead of time for \$7 each (see the registration information on pages 11 and 12.)

Hotel information: Cal State Dominguez Hills is in Carson, California. Nearby hotels include:

- Hampton Inn - Los Angeles/Carson/Torrance, 767 East Albertoni Street, Carson, CA 90746, (310) 768-8833
- Doubletree By Hilton Hotel - Carson, 2 Civic Plaza Drive, Carson, CA 90745, (310) 830-9200

Deadlines for 2013 Fall Section Meeting at CSUDH:

Contributed paper for Fall Meeting: **Friday, October 4, 2013, 5 p.m.** (see page 7)

Mail-in registration for Fall Meeting: received by **Monday, October 7, 2013, 5 p.m.**

See pages 11-12 or our section website <http://sections.maa.org/socalnv/> for the registration form. Online registration will not be available for the Fall Meeting.

Undergraduate Research Grant Opportunity

The Center for Undergraduate Research in Mathematics (CURM) provides funding and training for mathematics faculty to oversee academic year undergraduate research groups. Minigrants provide \$6000 per faculty member and \$3000 per student per year, along with funding for travel and supplies. The deadline for funding for AY 2014-15 is November 15, 2013. See curm.byu.edu for more information.

Fall Meeting Schedule
Saturday, October 12, 2013
California State University, Dominguez Hills

- 8:00 – 12:00 **Registration** – James L. Welch Hall
- 8:00 – 10:30 **Refreshments** – James L. Welch Hall
- 8:00 – 9:00 **Graduate Student CV Submission** – Drop off your c.v. and related materials for review at the registration table. (See page 10 for details.)
 Organized by Ivona Grzegorzczuk, Cal State Channel Islands
- 8:30 – 4:10 **MAA Book Sale** – James L. Welch Hall
 Organized by Michael Hoffman, Richard Katz, Cal State Los Angeles
- 9:00 – 10:00 **Invited Address by Jennifer Quinn, University of Washington**
 James L. Welch Hall, Room D165

The Combinatorialization of Linear Recurrences

Binet's formula for the n th Fibonacci number is a classic example of a closed form solution for a homogenous linear recurrence with constant coefficients. Proofs range from matrix diagonalization to generating functions to strong induction. Could there possibility be a better way? A more visual approach? A combinatorial method? This talk introduces a combinatorial model using weighted tiles. Coupled with a sign reversing involution, Binet's formula becomes a direct consequence of counting exceptions. But better still, the weightings generalize to find solutions for any homogeneous linear recurrences with constant coefficients.

- 10:00 – 10:15 **Section Business Meeting** – James L. Welch Hall, Room D165
- Recognition of 25- and 50-year MAA members
 - Discussion of change to section bylaws implementing term of section chair to include one year as chair-elect, one year as chair, and one year as past chair
- 10:30 – 12:30 **Contributed Paper Sessions** – Social & Behavioral Sciences Building
 Organized by Gizem Karaali, Pomona College
 (See **Call for Contributed Papers**, page 7.)
- 11:30 – 12:30 **Section NExT Workshop by Gizem Karaali, Pomona College**
 Location to be announced. (See page 3 to pre-register.)
 Organized by Geoffrey Buhl, Cal State Channel Islands

Time Management and Productivity for a Successful Academic Career

- 12:30 – 1:30 **Lunch** – Outside Social & Behavioral Sciences Building

Continued on next page ...

MAA 2013 Fall Meeting Schedule, *continued from page 5*

1:30 – 2:30 **Invited Address by Jesús De Loera, UC Davis**
James L. Welch Hall, Room D165

Not as Innocent as They Appear: The Geometry of Magic Squares, Sudokus, Latin Squares and Other Mathematical Tables

For hundreds of years people have been fascinated by and played with rectangular tables whose entries are non-negative integer and satisfy certain sum conditions. Famous examples include sudoku, magic and latin squares, etc. Even though some of these examples were born in recreational mathematics, they have some rather interesting structure and connect with interesting applications in combinatorics, optimization and statistics (think, for example, of permutation matrices!). In this lecture I will recount the current knowledge we have about the geometry of the space of such tables and their multidimensional array generalizations. I will make a point of mentioning some rather surprising open questions about these cute mathematical beasts – questions that can be understood by undergraduate students.

2:30 – 3:00 **Refreshments** – James L. Welch Hall

2:45 – 3:00 **Graduate Student CV Retrieval** – Pick up your reviewed c.v. and job application materials. (See page 10 for details.)

3:00 – 4:00 **Invited Address by Ann Watkins, CSU Northridge**
James L. Welch Hall, Room D165

Statistics Isn't Mathematics: So How's That Working Out?

Mathematics and statistics faculty have different priorities concerning their overlapping interests in the school mathematics curriculum, the training of teachers, the Advanced Placement program, undergraduate majors, and the introductory statistics course. For example, statisticians believe that the introductory course taught by mathematicians has not kept up with statistical practice or the computing power now available. We will survey this and other issues that have arisen because of the separation of statistics from mathematics.

Deadlines for 2013 Fall Section Meeting at CSU Dominguez Hills:

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For Cal State Dominguez Hills parking and hotel information, see page 4.

Call for Contributed Papers for 2013 Fall Meeting

Faculty and students (undergraduate and graduate) are invited to submit short proposals for 15-minute talks in the Contributed Paper Session of the Fall 2013 Meeting.

This session accepts contributions in all areas of mathematics, including research and pedagogy, and all complete proposals will be considered.

The selection of talks will be based on interest to the expected audience, on common themes with other submissions, and on scheduling constraints. Since space and time are limited, acceptance may be prioritized based on the status of the speaker; first undergraduates (U), then graduate students (G), retirees (R), and full-time faculty (F) in order of rank (from lowest rank to highest).

Submissions should contain

1. a title,
2. an abstract (not to exceed 150 words and should be suitable for inclusion in the conference program),
3. the author(s) of the paper (with an indication of who the presenter will be),
4. institutional affiliations and current status (U, G, R, or F) of all authors (if applicable),
5. the desirable mathematical background of the audience,
6. any special presentation display needs, and
7. selection of up to two of the following categories to indicate your main theme:
 - Education / Pedagogy
 - History and Philosophy of Mathematics
 - Interdisciplinary Topics
 - Probability and Statistics
 - Geometry and Linear Algebra
 - Analysis
 - Number Theory
 - Graph Theory and Combinatorics
 - Algebra and Topology
 - Applied Mathematics
 - Other Assorted Topics

Each room will have a built-in projector for computers. If you require a traditional overhead projector, document camera, or computer, please say so in your proposal and we will work with you to obtain one.

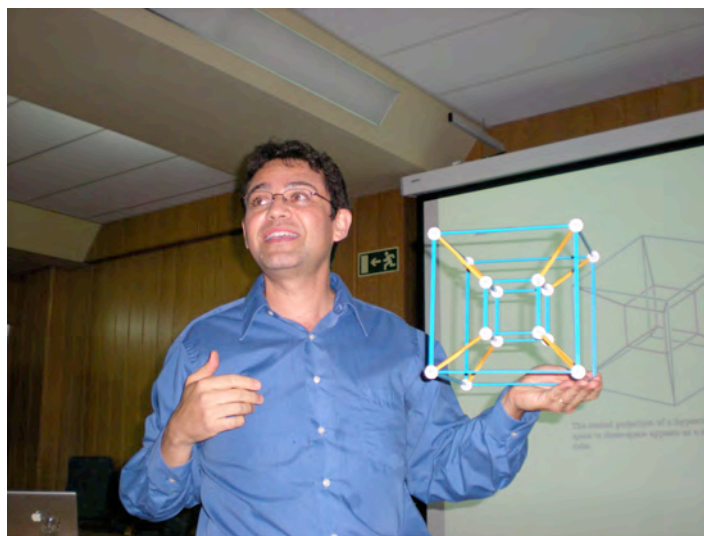
Ideally abstracts should be submitted in LaTeX format, with an accompanying PDF file. If you do not use LaTeX, please submit a Text document together with a PDF file. Please email all submissions to Gizem Karaali at Gizem.Karaali@pomona.edu

The submission **deadline** is **5 p.m. on Friday, October 4, 2013**.

We look forward to receiving your proposals!

About the 2013 Fall Meeting Speakers

Jesús De Loera received his Bachelors degree in Mathematics from the National University of Mexico in 1989, his M.A. in Mathematics from Western Michigan University in 1990, and his Ph.D in Applied Mathematics from Cornell University in 1995. An expert in the field of Discrete Mathematics, his work approaches difficult computational problems in Applied Combinatorics and Optimization using tools from Algebra, Combinatorics, and



Convex Geometry. He has held visiting positions at the University of Minnesota, the Swiss Federal Technology Institute (ETH Zürich), the Mathematical Sciences Research Institute at Berkeley (MSRI), Universität Magdeburg (Germany), the Institute for Pure and Applied Mathematics at UCLA (IPAM), and the Technische Universität München. He arrived at UC Davis in 1999, where he is now a professor of Mathematics as well as a member of the Graduate groups in Computer Science and Applied Mathematics. His research has been recognized by an Alexander von Humboldt Fellowship, the 2010 INFORMS computer society prize, and a John von Neumann professorship at the Technical University of Munich. He is associate editor of the journals *SIAM Journal of Discrete Mathematics* and *Discrete Optimization*. De Loera has received many awards for his dedication to outstanding mentoring and teaching, including, most recently, the 2013 UC Davis Chancellor's Award for mentoring undergraduate research. He has supervised eight Ph.D students, five postdocs, and over 20 undergraduate honors theses, with more than 40 undergraduates conducting research with him.

Jennifer Quinn is Professor of Mathematics and Associate Director for Interdisciplinary Arts & Sciences at the University of Washington - Tacoma. She earned her BA, MS, and PhD from Williams College, the University of Illinois at Chicago, and the University of Wisconsin, respectively. She was Professor of Mathematics at Occidental College in Los Angeles and an active member of the Southern California-Nevada



Continued, next page ...

About the 2013 Fall Meeting Speakers (continued from page 8)

Section of the MAA for 12 years before moving to Tacoma and the Pacific Northwest Section. After serving as Executive Director of the Association for Women in Mathematics (AWM) for two years, she joined UW Tacoma in 2007 to help create and teach mathematics curriculum for the new campus. Jenny received the MAA Haimo Award for Distinguished College or University Teaching in 2007 and the MAA Beckenbach Book Award for *Proofs That Really Count: The Art of Combinatorial Proof*, co-authored with Arthur Benjamin, in 2006. She and Art Benjamin co-edited the MAA's magazine for students, *Math Horizons*, from 2004 to 2008 and she currently serves as MAA Second Vice President. As a combinatorial scholar, Jenny thinks that beautiful proofs are as much art as science. Simplicity, elegance, and transparency should be the driving principles. She strives to bring this same ethic to her professional service and administrative work.



Ann Watkins is Professor of Mathematics at California State University, Northridge (CSUN), and specializes in statistics education. Beginning as co-chair of the joint committee of the American Statistical Association and National Council of Teachers of Mathematics, Ann has worked for many years with high school teachers and statisticians to develop materials for teaching statistics and probability in secondary schools and the introductory courses in colleges and to design opportunities for professional development for teachers. She is a co-author of textbooks published as a result of the Quantitative Literacy, Activity-Based Statistics, and Core-Plus Mathematics projects. She chaired the College Board's Development Committee for Advanced Placement Statistics, was exam leader at AP Statistics readings, and was primary author of the AP Statistics Teacher's

Guide. She was a member of the Board of Editors of the *Journal of Statistics Education*. She served as president of the MAA from 2001 to 2003, and has been MAA second vice-president, sectional governor, co-editor of the *College Mathematics Journal*, and associate editor of the *American Mathematical Monthly*. She has won the following CSUN awards: Outstanding Professor, Advancement of Teaching Effectiveness, and Extraordinary Service. In 1999, she was elected a Fellow of the American Statistical Association "for innovative contributions to curriculum and pedagogy; for masterful teaching, and teaching of teachers; and for an extraordinary record of sustained and successful efforts to institutionalize reform in statistics education."

Deadlines for 2013 Fall Section Meeting at Cal State Dominguez Hills:

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More 2013 Fall Section Meeting Highlights

California State University, Dominguez Hills
Saturday, October 12, 2013

Free CV Review for Graduate Students!!!

Are you applying for faculty positions or other jobs this year? Have you crafted your resume already? Are you planning to do it soon? If you bring three (3) hard copies of your CV and, if you like, your teaching and research statements, to the Fall Meeting at Cal State Dominguez Hills, a team of local mathematicians will review them for you. They will look for ways to improve your application materials so that you are more competitive on the job market. Please leave your CV and teaching/research statements at the registration table before 9 a.m.; they will be reviewed and ready for pick-up by about 3 p.m. You may bring academic and industrial versions, which highlight different skills and achievements. You will receive an evaluation rubric and comments on how to improve the content and/or the presentation of your application materials. And good luck in your job hunt! Meeting attendees only.

Questions? Contact Prof. Ivona Grzegorzczak at ivona.grzegorzczak@csuci.edu

Great Books, Great Bargains at MAA Book Sale!

The 2013 Fall Meeting at Cal State Dominguez Hills will include the ever-popular MAA Book Sale, run by Mike Hoffman and Dick Katz of Cal State Los Angeles. Under the MAA's new "Book Sale in a Box" program, book prices at the meeting (and for one week before and one week afterward) will be 35% less than MAA list prices.

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!

Courtney S. Coleman
John A. Ferling

Henry Price Kagey
Kenneth O. Leland

Norman E. Sexauer

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

Robert D. Crise
Rod Elsdon
Geoffrey Hagopian

Elliot M. Landaw
Angel S. Muleshkov
Alan Weiss

Paul C. Wilfong
Maria R. Zack

These members will be recognized during the Business Meeting of our upcoming MAA Southern California-Nevada Section Fall Meeting Saturday, October 12 at CSUDH.

Pre-registration for Fall Meeting

California State University, Dominguez Hills
Saturday, October 12, 2013

Online registration will not be available for this meeting.

Participants may register by mail by **Monday, October 7, 2013**. Either send the registration form on page 10 of this newsletter, or download the same form from the section website: <http://sections.maa.org/socalnv/>

Name
Affiliation
Address
E-mail address
Lunch preference (sandwich choices:
veggie, beef, chicken, turkey/ham)

along with appropriate payment (a check for the amount shown below made payable to **Southern California-Nevada MAA**) to:

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

Registration and box lunch:

MAA member: \$47
Non-member: \$52
Student: \$22

Registration only (no lunch):

MAA member: \$40
Non-member: \$45
Student: \$15

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).

Join the Section e-mail list!

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

Look for the "Join the Mailing List" box.

Mail-in registrations should be received by Monday, October 7, 2013.

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

Questions or problems? Contact Ernie Solheid, Meeting Coordinator
Email: esolheid@fullerton.edu Phone: (657) 278-7023

For **Cal State Dominguez Hills parking and hotel information**, see page 4.

Fall Meeting Pre-Registration / Luncheon Reservation Form

California State University, Dominguez Hills, Saturday, October 12, 2013

Please complete one registration form for each meeting attendee. Make checks payable to **Southern California-Nevada MAA**.

Name _____

Affiliation _____

Address _____

E-mail address _____

	MAA Member	Non-member	Student
Registration only	_____ @ \$40	_____ @ \$45	_____ @ \$15
Registration and Box Lunch	_____ @ \$47	_____ @ \$52	_____ @ \$22
Please specify sandwich choice: veggie beef chicken turkey/ham			

Total Enclosed \$ _____

The MAA national office has requested the following information. Please check all boxes that apply to you.

Faculty member at college or university with highest degree offered:

_____ Associate _____ Bachelors _____ Masters _____ Doctorate

_____ High school teacher _____ Business/Industry/Government

_____ Undergraduate student _____ Graduate student

Save these dates for future MAA national meetings!

Winter 2014	Baltimore, MD	January 15-18
Summer 2014	Portland, OR	August 7-9
Winter 2015	San Antonio, TX	January 10-13
Summer 2015	MAA Centennial Celebration!	
	Washington, DC	August 5-8
Winter 2016	Seattle, WA	January 6-9
Winter 2017	Atlanta, GA	January 4-7
Winter 2018	San Diego, CA	January 10-13
Winter 2019	Baltimore, MD	January 16-19

The Students' Column

Ioana Mihaila, Cal Poly, Pomona, Student Chapters Coordinator

The Spring 2013 Student Poster Session

The Student Poster Session held at University of San Diego was one of the greatest in recent memory! The high participation, the quality of the posters, and the range of topics were amazing. The topics presented spanned applications of mathematics such as: cryptography, voting methods, modeling hydrogeological features, collisions of polygonal plates, energy stored in fishing rods, image processing, just to name a few. Theoretical topics included various aspects of graph theory, geometry, differential equations, knot theory, and others. Twelve posters (20 students) received meritorious award certificates. The students in our section are clearly engaged in a variety of in-depth investigations and research projects. In all, 62 students presented 44 posters. Many thanks to all the individuals who volunteered their time and expertise to interact with the presenters, providing them the chance to share their results and new understanding, and receive feedback and encouragement.

Fall Meeting, Saturday, October 12, 2013, at Cal State Dominguez Hills

You'll find all the information you need about the Fall Meeting of our MAA section elsewhere in this newsletter. This is a friendly, relatively close-by, one-day meeting: the perfect introduction to mathematical meetings. More experienced students don't need convincing, but they might consider participating in the Contributed Paper Session if they have a project ready for a short oral presentation. Check out the program in this newsletter, get your friends who appreciate some mathematics together, and attend.

Deadlines for 2013 Fall Section Meeting at CSUDH:

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Get beyond the classroom

Meetings and seminars, extra-curricular mathematics projects, the Putnam Exam and the Mathematical Contest in Modeling, summer or academic-year research opportunities, mathematics-related internships: these are just a few of the ways you can broaden your thinking, put your classroom learning to use in new situations, and learn new mathematics. Talk to more experienced students, recent graduates, and your professors, and look for information about ways to expand your relationship with mathematics. You might start at <http://www.maa.org/students/career.html>, <http://www.maa.org/awards/putnam.html> and <http://www.comap.com/undergraduate/contests/mcm/>.

Students' Column, continued on next page ...

The Students' Column, *continued from page 13*

Spring Meeting Student Poster Session Sat., April 12, 2014, Irvine, California

It's never too early to start thinking about presenting a poster at the 2014 Spring Meeting of the So Cal-NV Section of the MAA. This meeting will be held at Concordia University in Irvine on Saturday, April 12. Detailed information will be posted at the section website and in the winter newsletter. But start planning now: your poster could feature the results of any individual or group mathematics project, including:

- Results of honors, senior, or independent study projects;
- Results of classroom projects or modeling contests;
- Results of REUs or other summer research programs;
- Historical investigations in pure or applied mathematics;
- Solutions of problems from the Putnam Exam or from one of the MAA journals or other journals.

Southern California-Nevada Conference Calendar

- | | |
|----------------------------------|---|
| Sat., Oct. 12, 2013 | MAA Southern California–Nevada Section Fall Meeting , 9 a.m. – 4 p.m., California State University, Dominguez Hills. See this Newsletter for details. |
| Sat., Oct. 19, 2013 | 6th Annual Women in Mathematics Symposium , approximately 9 a.m. – 3 p.m., University of California, Riverside. Register by Friday, Oct. 11 using the form at https://docs.google.com/forms/d/1w64GqkivhLXH84WfyK6C6ocyVxWCO1zD9RGhN-PcRZI/viewform |
| Fri.-Sat., Nov. 1-2, 2013 | California Mathematics Council – South: 54th Annual Conference , Palm Springs, California: For details, see http://www.cmc-south.org/conferences.html |
| Sat.-Sun., Nov. 2-3, 2013 | AMS Western Sectional Meeting , University of California, Riverside. For details, see http://www.ams.org/meetings/sectional/sectional.html |
| Sat., March 15, 2014 | Pacific Coast Undergraduate Mathematics Conference (tentative pending funding), Pepperdine University, Malibu, Calif. For details, watch the PCUMC website: http://www.pcumc-math.org/ |
| Sat., April 12, 2014 | MAA Southern California–Nevada Section Spring Meeting , approximately 9 a.m. – 4 p.m., Concordia University, Irvine, California. Watch the SoCal-Nev Section website http://sections.maa.org/socalnv/ for details. |

Message from the MAA Southern California-Nevada Section Governor

*Perla Myers, 2013-2016 Section Governor
University of San Diego, California*

This summer I began my term as Governor of the Southern California and Nevada Section of the MAA. I am honored to serve in this capacity and I thank you for the opportunity. The Board of Governors (BoG) of the MAA meets twice a year—immediately before Mathfest, in the summer, and immediately before the Joint Mathematics Meetings in January. Each semester I will share some of the highlights of the Board of Governors meeting and of the national MAA meeting that follows it. I will also bring issues that are of interest to our section members to the BoG. Please contact me with any such issues, questions, concerns, suggestions, etc. at pmyers@sandiego.edu, (619) 260-4545, or in person at the section meetings.



I am fortunate to serve on the BoG with two fellow SoCal-Nevada section members, and with a third section member who has a long history of serving the MAA and will soon re-join the BoG. They are all happy for you to contact them as well. **Talithia Williams** (twilliams@hmc.edu) from Harvey Mudd College also just began her service to the BoG as Governor-at-Large for Minority Interests. **Jackie Dewar** (jdewar@lmu.edu) from Loyola Marymount University serves as Governor-at-Large for Teacher Education. **Francis Su** (su@math.hmc.edu) (Harvey Mudd) is the MAA President-Elect-Elect, as he lightheartedly introduced himself at the BoG meeting. In February 2014 he will begin a four-year term—one year as President-Elect, two years as the 55th President of the Association, and one year as Past President.

Talithia Williams



Jackie Dewar



Governor's Message continued on next page ...

Message from Section Governor, continued

Board of Governors Meeting



Francis Su of Harvey Mudd College is MAA President-Elect.

Photo Credit: Laura McHugh (MAA Photographer)

As new members of the BoG, Talithia and I attended an orientation meeting two days before Mathfest where we met the MAA staff and Executive Board (including 2nd Vice President **Jenny Quinn**, who used to be in our section and will speak at our Fall Meeting on Sat., Oct. 12, at Cal State Dominguez Hills). Then, the day before Mathfest, we attended the BoG meeting. There were introductions, announcements and reports from various MAA officers, staff members, editors, councils and committees. Here are some highlights:

- 1) The MAA has been operating under budget deficits for eight years (1 million dollar total deficit), and the free reserve has been diminishing each year. The staff and volunteers are working hard to reverse this trend and to start growing the free reserve. At the end of 2012 the free reserve was at approximately 30% of the annual operating budget (the annual operating budget is approximately \$8.2 million). The goal is to have a free reserve of 40% to 70% of the annual operating budget by 2025.
- 2) Project NExT has been in existence for 20 years and has served 1,400 fellows in that time. Project NExT seeks applications and nominations for the Project NExT Leadership Team: <http://www.maa.org/about-maa/employment-opportunities/nominations-applications-project-next-leadership>.

Governor's Message continued on next page ...

Message from Section Governor, continued

- 3) The MAA introduced a new offer for Section members: Section members can order books from MAA's online store at 35% discount one week before and one week after a Section meeting.
- 4) In August a selection of historically significant films produced by the MAA in the 1960s began to be digitized through support from the Simons Foundation. The digitized videos will be posted at:
http://www.cah.utexas.edu/collections/math_digital_collections.php.

- 5) The MAA just launched a new website and simplified the membership structure. The website is at: <http://www.maa.org/>. The membership categories are:

- Member
- Member Plus
- Student
- K-12 Teacher
- Departmental

Unemployed mathematicians will be able to request up to two years of a discounted rate, and new (non-student) members will get a discount their first year. If you are not an MAA member, we encourage you to become one! We also encourage departments to join and to gift an MAA membership to each new faculty member. For a departmental membership call: 1-800-331-1622.

- 6) **Some Awards:** The *2014 Haimo Awards* will be presented to Andrew Bennett from Kansas State University, Gavin LaRose from University of Michigan, and Karl Lee from University of Kentucky. The *2014 Leitzel Lecturer* will be Joe Gallian from University of Minnesota, Duluth. William Dunham from Muhlenberg College will be the *Pólya Lecturer* for the 2014-2015 and 2015-2016 academic years. Our section is next eligible to host a Pólya Lecturer during the 2018-19 academic year.

Check out the MAA website (<http://www.maa.org/programs/maa-awards>) for a list of awards and the nominating process for each award. Consider nominating a colleague who would be a good candidate for an MAA Award.

- 7) Congratulations to **Art Benjamin** from Harvey Mudd College (shown at right), who will be one of the new Associate Editors for *The College Mathematics Journal*. His term will be from 2014-2018.



- 8) The next couple of meetings of the MAA:
- Joint Mathematics Meetings: January 15-18, 2014, in Baltimore, MD.
 - MathFest: August 7-9, 2014, Portland, OR.

Governor's Message continued on next page ...

Message from Section Governor, continued

MAA Mathfest 2013 at Hartford, Connecticut



The MAA Mathfest in Hartford had a total of 1313 people preregistered, and more than 1520 people attended. The meeting was great, with many activities to choose from for students, faculty and all those interested in mathematics: invited lectures, short courses, paper sessions, contests, and presentations, as well as social activities, including an ice cream social for students and an early morning 5K Fun Run/Walk in Bushnell Park. A few highlights:



5K Fun Run/Walk. (Photo Credit: Laura McHugh, MAA Photographer)

- 1) Before the conference **Art Benjamin** from Harvey Mudd College presented an exciting two-day mini-course entitled "The Mathematics of Games and Puzzles."
- 2) **Talithia Williams** (Harvey Mudd College) and **Alissa Crans** from Loyola Marymount University were two of the organizers of a well-attended Town Meeting on Goals for Minority Participation in Mathematics (see <http://www.maa.org/news/maa-mathfest-2013-town-meeting-on-goals-for-minority-participation-in-mathematics>).



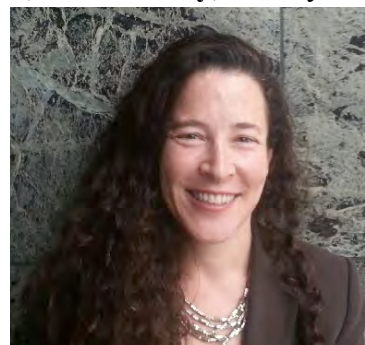
Town Meeting on Goals for Minority Participation in Mathematics. (Photo Credit: Laura McHugh, MAA Photographer)

- 3) Congratulations to the winners of the 2013



Photo Credit: Laura McHugh (MAA Photographer)

MAA Awards! From our section, **Rachel Levy**, Harvey Mudd College, received a Henry L. Alder Award for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member. Her talk, "Mentoring Through Media: Grandma Got STEM," shared her efforts to change



society's perspectives about the ability of grandmothers to engage in the STEM fields (see <http://ggstem.wordpress.com>).

Governor's Message continued on next page ...

Message from Section Governor, continued

The full list of MAA Awards is here: <http://www.maa.org/news/2013-maa-awards-recipients-announced>.



- 4) Another one of our very own section members, **Ann Watkins** from California State University Northridge, was honored as the James R. Leitzel Lecturer. She presented a survey of important current issues concerning the teaching of statistics: “Statistics Isn’t Mathematics: So How’s That Working Out?” Catch a repeat

performance of this interesting and entertaining talk during our upcoming Fall Section Meeting Saturday, Oct. 12, 2013, at Cal State Dominguez Hills.

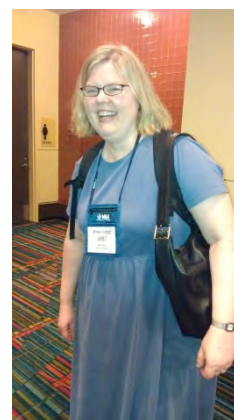


Ann Watkins, in the photo at left and at right in the photo above (Photo Credit: Laura McHugh, MAA Photographer)

- 5) Other invited lectures included the Earle Raymond Hedrick Lecture Series, presented by **Olga Holtz** from University of California Berkeley and Technical University Berlin; the AMS-MAA Joint Invited Address included *Coding Theory: A Cornucopia of Mathematics* by **Judy Walker**, University of Nebraska at Lincoln; *Algebra, Analysis, and the Way You Eat Corn: The Complete Story* by **Susan Loepp** from Williams College; *Improving Numerical Weather Predictions Using Ideas from Nonlinear Dynamics* by **Chris Danforth**, University of Vermont, and the inspiring AWM-MAA Etta Z. Falconer Lecture: *Improving Equity and Education: Why and How* by **Patricia Kenschaft**, Montclair University, where she emphasized the importance of elementary school teachers knowing the mathematics they are supposed to teach.

- 6) Activities and receptions for students included

- student paper and poster sessions
- “Math Jeopardy”
- MAA Lecture for Students (Optimal Pentagonal Tilings by **Frank Morgan**, Williams College)
- panel of representatives of various Hartford companies that employ actuaries titled “Opportunities in the Actuarial Profession”
- “A Mathematician and an Environmental Scientist Walk into a Bar” conversation to empower students to answer the questions “Who cares about Math?” and “How does it get used?”
- and many other opportunities.



Janet Beery, University of Redlands, Editor of *MAA Convergence*

News from the Southern California-Nevada Section

CSU Alliance for Preparing Undergraduates through Mentoring toward PhDs

Maria Noronha, Cal State Northridge, and Cindy Wyels, Cal State Channel Islands



CSU Alliance 2013 Summer Program participants

This project focuses on increasing the participation of highly qualified underrepresented minority students in Mathematical Sciences PhD programs. It brings together eight campuses of the California State System, Channel Islands, Dominguez Hills, Fullerton, Long Beach, Los Angeles, Northridge, Pomona and San Bernardino, all located in the predominantly Hispanic/Latino Southern California area. Built on the cornerstones of

- undergraduate research,
- advanced course work and seminars, and
- strong mentoring and aggressive recruitment,

the project identifies and prepare selected talented and motivated underrepresented undergraduate students to succeed in Mathematical Sciences careers through a series of high-quality, personalized activities. These include

- summer institutes that complement courses and expand students' mathematical horizons;
- at least one year of undergraduate research projects for junior and senior math majors; and
- seminars and rigorous and advanced mathematics course work.

News from the Section: CSU Alliance, *continued*

Eight mathematics faculty with experience in mentoring students from underrepresented groups co-direct the project with support of the chairs and fellow members of their departments. Approximately 50 undergraduates and 15 faculty mentors participate in each year of this five-year project.



More News from the Campuses of the Southern California-Nevada Section

At **Cal Poly Pomona**, **Hubertus von Bremen** of the Mathematics Department was awarded the 2012-13 Cal Poly Pomona College of Science Ralph W. Ames Research Award. **Randall Swift** won this award in 2011-12. **Jennifer Switkes** won the Cal Poly Pomona Distinguished Teaching Award for 2011-12.

Rachel Levy of **Harvey Mudd College** is a winner of the 2013 MAA Alder Award for outstanding teaching by a beginning faculty member. **Francis Su** is a winner of the 2013 MAA Franklin and Deborah Tepper Haimo Award for Distinguished Teaching. Su was recently elected MAA President, with his term as President-Elect to begin in 2014, his term as President in 2015, and his term as Past-President in 2017.

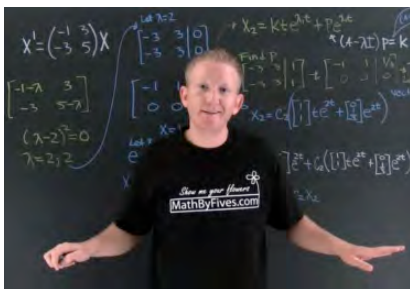
Send your campus news items to janet_beery@redlands.edu

News from the Section, continued on next page

News from the Section, *continued*

The Department of Mathematics, Physics, and Computer Science at the **University of La Verne** is pleased to announce that second-year faculty member **Gail Tang** has been selected as an MAA Project NExT fellow. The Department has received a \$45,000 grant from the Ahmanson Foundation to fund a new Math Emporium.

Frank Ives, Instructor of Mathematics, will head up revision of math courses for underprepared students in order to take advantage of the new Emporium. Finally, **Yousef Daneshbod** (Mathematics) and **David Chappell**



(Physics) were awarded a grant of \$34,000 by the II-VI Foundation for summer 2013 to encourage and enable students to pursue a career, in Engineering, Science and Mathematics. They supervised a group of students on two projects involving the fabrication and modeling of robotic swimmers in fluid systems and investigating the dynamics and instabilities in self-organizing bouncing droplets.

At Loyola Marymount University, Professor **Jacqueline Dewar** retired from Loyola Marymount University after 40 years of distinguished service. Recently Jackie's scholarly work has focused on the scholarship of teaching and learning, and over the years she has also been involved with work in gender-related issues in mathematics education and mathematics teacher preparation. Jackie was recognized with the Deborah and Franklin Tepper Haimo Award in 2006 and currently serves on the MAA's Board of Governors.

The LMU Mathematics Department is very pleased to welcome two new Assistant Professors **Christina Eubanks-Turner** and **Thomas Laurent**. Christina Eubanks-Turner earned her PhD from the University of Nebraska-Lincoln and then joined the faculty at the University of Louisiana at Lafayette before making her way west to the LA area. Her interests are primarily in commutative algebra and mathematics teacher education. Thomas Laurent earned his PhD from Duke University, completed a post-doc at UCLA, and served on the faculty at UC Riverside before joining the LMU Mathematics Department. His interests are primarily in machine learning and numerical and analytical study of nonlinear PDEs arising in biology and material science.

At the University of Nevada, Las Vegas, **Jessica Jaynes** has joined the faculty as an assistant professor after receiving her Ph.D. in statistics from UCLA. **Amei Amei**, **Monika Neda**, and **Pengtao Sun** were tenured and promoted to the rank of Associate Professor. UNLV began its mathematics Ph.D. program in 2005 and just graduated its second woman Ph.D. student, **Jiajia Waters**, whose doctorate was in computational mathematics. Waters is also the second UNLV Ph.D. to accept a research and development position with the casino industry.

News from the Section, *continued on next page*

News from the Section, *continued*

Kathy Yoshiwara of **Pierce College**, winner of national teaching awards from AMATYC and NISOD and of our MAA Southern California Section teaching award in 1996, retired earlier this year. In partial compensation, Pierce College hired four new mathematics faculty members to begin during the 2013 fall semester. They are **Melody Rashidian**, **Steve Chow**, **Kristin Lassonde**, and **Scott Maccarone**.

The **University of San Diego** Mathematics and Computer Science Department welcome two new Associate Professors to their community, **Saturnino Garcia** and **Michael Shulman**. **Perla Myers** is the winner of the 2013 Southern California-Nevada Section Distinguished Teaching Award. She also is our section's new Governor, representing us on the MAA Board of Governors, and is the new Associate Dean for Faculty at USD.

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

Please send news from your institution to janet_beery@redlands.edu

Perla Myers Wins 2013 Section Teaching Award

Michael Krebs, Section Chair and 2013 Section Teaching Award Committee Chair



Our 2013 Section Award for Distinguished College or University Teaching of Mathematics goes to Dr. Perla Myers from the University of San Diego (USD). Dr. Myers is an outstanding teacher, as evidenced by her nomination letter and supporting letters. One colleague wrote, “If a student needs more help or more time, Perla will find a way to give that to the student. She is extraordinarily creative; if one approach doesn't work, she will find another. As a Hispanic woman Perla is a terrific role model for many students.” At USD, Perla co-organized a student chapter of SACNAS (the Society for the Advancement of Chicanos and Native Americans in

Science); directed USD's Mathematics Center; and spearheaded an innovative mentoring project. Perla's influence has extended well beyond her home institution. She co-founded our region's Section NExT chapter. She was a co-PI on a California Math and Science Partnership Grant for an “Inquiry Learning Partnership” between USD, the Reuben H. Fleet Science Center (a local science museum), and the Lemon Grove and Chula Vista School Districts. She has organized Family Math Nights, where students work with elementary school children and their parents on math activities. Remarkably, the preceding list gives only a few highlights amongst Perla Myers' many accomplishments in service to her students and to the education and inspiration of young mathematical minds throughout the surrounding community.

Call for Nominations for Section Teaching Award

Melinda Schulteis, Section Secretary

Herbert Medina, Section Vice-Chair and 2014 Section Teaching Award Committee Chair

Preliminary nominations for the 23rd annual MAA Southern California-Nevada Section Award for Distinguished College or University Teaching of Mathematics are now being accepted. The initial nomination consists of a one-page form (available at <http://sections.maa.org/socalnv/>), together with a one- to two-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, the selection committee will choose two to three semi-finalists. Each nominator will then be asked to complete a full nomination packet for the semi-finalist. The full packet will be required only for semi-finalists and will be due by early January of 2014. (Full nomination requirements may be found at 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 Spring 2014 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 Award 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. Because the Section Award winner will be forwarded for consideration for the national Haimo award, successful nominees will have an extended record of teaching success. (For greater detail on eligibility requirements, please go to: http://www.maa.org/Awards/Haimo_EGN.pdf.) **Preliminary nomination deadline is Friday, November 1, 2013.**

Questions? Contact Melinda Schulteis at melinda.schulteis@cui.edu