



Southern California–Nevada Section
Mathematical Association of America
NEWSLETTER



Volume LIV, Number 2

March 2013

**Southern California-Nevada Section to Meet
Saturday, April 20, 2013, in San Diego**

The Spring Meeting of the MAA Southern California-Nevada Section will be held on the beautiful campus of the University of San Diego. The meeting will feature four dynamic speakers on four exciting areas of mathematics and its teaching:

- ❖ **Ravi Vakil** of Stanford University on math of doodling;
- ❖ **Kathryn Leonard** of CSUCI on geometric modeling;
- ❖ **Chris Rasmussen** of CSUSD on student persistence in college calculus; and
- ❖ **Francis Su** of Harvey Mudd College on combinatorics.

The meeting also will feature the popular Student Poster Session and MAA Book Sale, along with free faculty review of resumes and teaching & research statements for graduate students in attendance.

Deadlines for 2013 Spring Section Meeting:

Title and abstract for Student Poster Session: Monday, April 8
(see page 11)

Mail-in registration for Spring Meeting: Monday, April 15 (see pages 9-10)

Online registration for Spring Meeting: Tuesday, April 16, 5 p.m. (see pages 9-10)



*MAA Polya Lecturer
Ravi Vakil of
Stanford University
will speak at our
Spring Section
Meeting!*

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**Pre-register online at
the section website
for the MAA So Cal-
Nevada Section
Saturday, April 20
Spring Meeting:**

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

Greetings from the 2012-2013 MAA Southern California-Nevada Section Chair

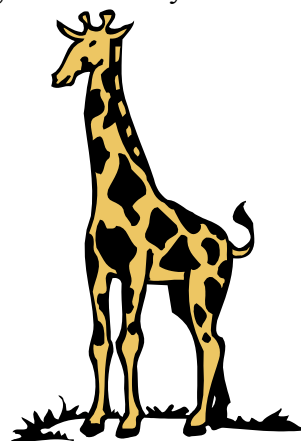
*Min-Lin Lo, California State University – San Bernardino
MAA Southern California-Nevada Section Chair*

After almost six months of waiting since our Fall Meeting, our Spring Meeting is finally here to recharge us!



Our Section Chair, Min-Lin Lo, is a math prof and advisor to the Math Club at Cal State San Bernardino.

We had a wonderful meeting on a gorgeous day at Cal State Long Beach last fall. Our attendees enjoyed the excellent talks given by Guershon Harel from UCSD (if you were there, you know why there is a giraffe on this page), Sarah Eichhorn from UCI (we got to simulate a computer using match boxes), Daphne Liu from CSULA (we learned about rainbow coloring), and Matt DeLong, who is a visiting professor at Harvey Mudd College this year (we heard the story of Farmer Ted's Chicken Coop), with topics on math education, game theory, graph theory, and undergraduate research problems, respectively. There were also interesting talks given



by students and faculty from our section in the contributed paper sessions. Graduate students were able to get help from our section's faculty on their CVs and job application materials. There were also coupons with huge MAA student membership discounts

available that day. If you were not able to attend our meeting last fall, I know reading about it here is probably making you regret that you missed all that fun. No worries, you'll have another chance this spring Saturday, April 20, at the University of San Diego!

Our program committee has invited some great speakers for the Spring Section Meeting.

- **Ravi Vakil**, Stanford University (MAA Polya Lecturer), will speak on "The Mathematics of Doodling."
- **Kathryn Leonard**, CSUCI (recipient of the 2011 MAA Alder Teaching Award), will present "Image Modeling with Industry and Undergraduates."
- **Chris Rasmussen**, San Diego State (Department of Mathematics and Center for Research in Mathematics and Science Education) will discuss "Who Chooses Not to Persist in Calculus and Why?"
- **Francis Su**, Harvey Mudd College (recipient of our 2012 Section Teaching Award and of the 2013 MAA Haimo Teaching Award) will present "Combinatorial Fixed Point Theorems."

Continued, next page ...

Greetings from Our Section Chair! ... continued from page 2

At our Spring Section Meeting, we will also have a Student Poster Session and a Book Sale. Come have fun with us on Saturday, April 20, and get recharged by wonderful talks and friendly peers. See pages 4–6 for a complete meeting schedule and pages 9-10 for registration information. See you at the University of San Diego on April 20!



Joint Math Meetings at San Diego, CA.

Many of our section members attended the Joint Math Meetings in San Diego, CA, this past January and enjoyed the talks and activities. The MAA Dramatic Presentation by the *Mathematically Bent Theater* was a hit as usual. Our section's own Francis Su (Harvey Mudd College) is one of the three winners of the 2013 Haimo Awards for Distinguished College or University Teaching and delivered an inspirational talk on teaching and research. His talk was so touching that I had to pretend I was yawning when, in reality, I was moved to tears by his talk.

Students from Cal State San Bernardino, who worked with advisor Min-Lin Lo (lower right) on research projects on radio numbers of graphs, presented a poster on their work at the Joint Mathematics Meetings in San Diego in January of this year.

Future Meetings. MAA MathFest will be held in Hartford, CT, July 31-August 3, 2013. Watch our section website for an announcement of the date and location of our Fall 2013 Section Meeting. The Spring 2014 Section Meeting has already been scheduled for Saturday, April 12, 2014, at Concordia University in Irvine, CA.

Spring Meeting Schedule

Saturday, April 20, 2013, 9 a.m. – 4 p.m.

Mother Rosalie Hill Hall, University of San Diego, Old Town, San Diego, CA

- 8:15 – 12:00 **Registration** – Entrance to Warren Auditorium
- 8:15 – 10:30 **Refreshments** – Entrance to Warren Auditorium
- 8:15 – 9:00 **Graduate Student Resume Review**—Entrance to Warren Auditorium
Drop off your c.v. or resume and/or your teaching and research
statements for same-day faculty review and feedback.
Organized by Ivona Grzegorzczuk, Cal State Channel Islands
- 8:30 – 2:30 **MAA Book Sale** – Entrance to Warren Auditorium
Organized by Michael Hoffman, Richard Katz, Cal State Los Angeles
- 9:00 – 10:00 **Invited Address by Chris Rasmussen**, San Diego State University
Warren Auditorium, Mother Rosalie Hill Hall

Who Chooses Not to Persist in Calculus and Why?

The transition from high school to college mathematics is one of the most critical junctures in the preparation of individuals to meet the mathematical demands of the 21st century in science, technology, engineering, and mathematics (STEM). Even while more students are taking more advanced mathematics in high school than ever before—including over half a million each year who study calculus while in high school—the percentage of all college students in 4-year undergraduate programs who are enrolled in mathematics at the level of calculus or above has decreased steadily over the past decades. Moreover, a substantial percentage of students who enroll in Calculus I intending to take more Calculus end up deciding not to continue in Calculus. This represents a huge loss to the nation in terms of the need for more students to pursue a major in one of the STEM disciplines. In this presentation I examine the characteristics of STEM-intending students who begin their post-secondary studies with Calculus I and either persist or switch out of the Calculus sequence, and hence either remain in or leave the STEM pipeline. The data used for this analysis comes from a unique, in-depth national survey aimed at identifying characteristics of successful programs in college Calculus.

- 10:00 – 10:15 **Section Business Meeting** – Warren Auditorium
Presentation of Section Distinguished Teaching Award

Spring Meeting Schedule continued on page 5 ...

Spring Meeting Schedule, continued from page 4

- 10:00 – 10:15 **Section Business Meeting** – Warren Auditorium
- Presentation of Section Distinguished Teaching Award
 - Proposal for Change to Section Bylaws: Should the current two-year term for Section Chair (one year each as Section Vice-Chair and Section Chair) be changed to a three-year term (one year each as Vice-Chair, Chair, and Past-Chair)?

- 10:15 – 11:15 **Student Poster Session** – Entrance to Warren Auditorium
See Page 11 to find out how to submit a poster proposal!
Organized by Ioana Mihaila, Cal Poly Pomona

- 11:20 – 12:20 **Invited Address by Kathryn Leonard**, CSUCI
Warren Auditorium, Mother Rosalie Hill Hall

Image Modeling with Industry and Undergraduates

This talk explores various tiers of research in geometric modeling of shapes, connecting "high-level" research with projects involving students and industrial/government partners. Shape modeling arises from object recognition problems in the field of computer vision. We explore a particular category of shape models, skeletal models, that represent an object as a collection of connected branches of curves and associated scalar function or functions. We also present a collection of applications where skeletal models have proved useful.

- 12:30 – 1:30 **Lunch** – Pick up box lunches at entrance to Warren Auditorium.

- 1:30 – 2:30 **Invited Address by Ravi Vakil**, Stanford University
Warren Auditorium, Mother Rosalie Hill Hall

The Mathematics of Doodling

Doodling has many mathematical aspects: patterns, shapes, numbers, and more. Not surprisingly, there is often some sophisticated and fun mathematics buried inside common doodles. I'll begin by doodling, and see where it takes us. It looks like play, but it reflects what mathematics is really about: finding patterns in nature, explaining them, and extending them. By the end, we'll have seen some important notions in geometry, topology, physics, and elsewhere; some fundamental ideas guiding the development of mathematics over the course of the last century; and ongoing work continuing today.

- 2:30 – 3:00 **Refreshments** – Entrance to Warren Auditorium

- 2:30 – 3:00 **Grad Student Resume Retrieval** – Entrance to Warren Auditorium
Pick up your faculty-reviewed job application materials!

Spring Meeting Schedule continued on page 6 ...

Spring Meeting Schedule, continued from page 5

3:00 – 4:00 **Invited Address by Francis Su**, Harvey Mudd College
Warren Auditorium, Mother Rosalie Hill Hall

Combinatorial Fixed Point Theorems

The Brouwer fixed point theorem and the Borsuk-Ulam theorem are beautiful and well-known theorems of topology. It is perhaps less well-known that the Borsuk-Ulam theorem implies the Brouwer fixed point theorem. These theorems both admit combinatorial analogues. In particular, Sperner's lemma is equivalent to the Brouwer fixed point theorem, and Tucker's lemma is equivalent to the Borsuk-Ulam theorem. With these theorems, I will trace recent connections, applications, and generalizations – some of which include research with undergraduates.

Pre-register for the Spring Meeting at the MAA Southern California-Nevada Section website <http://sections.maa.org/socalnv/> or using the mail-in form on page 10.

Where to Park, Register, and Sleep at University of San Diego

The University of San Diego is located in Old Town, San Diego, California. For a campus map, see the website at <http://www.sandiego.edu/maps/> Mother Rosalie Hill Hall, where the MAA Southern California-Nevada Section Meeting will be held on Saturday, April 20, 2013, is at the west end of campus, on the northwest corner of Marian Way, near where it meets Alcalá Park Way. Parking is available in the lot directly north of Mother Rosalie Hill Hall or in the lot across the street from the Hall.

The first invited address will begin at 9 a.m. in the Warren Auditorium in Mother Rosalie Hill Hall. The registration table, refreshments, Book Sale, and Student Poster Session will be just outside the Warren Auditorium, Mother Rosalie Hill Hall.

Hotels: The following hotels are close to the University of San Diego campus.

Hacienda Hotel, Old Town, 4041 Harney St., San Diego (Ask for USD rate of \$129.)
(619) 298-4707 or (800) 888-1991, <http://www.haciendahotel-oldtown.com/>

Courtyard San Diego Old Town, 2435 Jefferson Street, San Diego
(Ask for USD rate: \$177.66; weekend regular rate is only \$139/night.)
(619) 260-8500 or (800) 255-3544, <http://www.marriott.com/hotels/hotel-information/travel/sanot-courtyard-san-diego-old-town/>

Old Town Inn, 4444 Pacific Hwy., San Diego
(Ask for USD rate of \$79; includes buffet breakfast, free parking, free wireless)
(619) 260-8024, <http://www.oldtown-inn.com/>

Four Dynamic Speakers and Dozens of Student Posters to Be Featured at MAA Spring Section Meeting Saturday, April 20, at University of San Diego

The Spring Meeting of the Southern California-Nevada Section of the MAA will feature four exceptional speakers on four exciting topics:

- ❖ **Ravi Vakil** of Stanford University on the mathematics of doodling;
- ❖ **Francis Su** of Harvey Mudd College on combinatorial analogs of famous theorems from topology;
- ❖ **Kathryn Leonard** of Cal State Channel Islands on geometric modeling with applications in industry and government; and
- ❖ **Chris Rasmussen** of San Diego State University on which students persist in college and university calculus classes and which do not.

The meeting also will feature the popular Student Poster Session, organized by our Student Chapters Coordinator Ioana Mihaila of Cal Poly Pomona. (See page [10] for instructions on entering a poster; deadline: Monday, April 8.) 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. This year, for the first time ever, the MAA will offer meeting attendees a 35% off coupon, good for all MAA book purchases at the meeting. Even the Business Meeting promises to be exciting, with the highly anticipated presentation of the 2013 Section Distinguished Teaching Award.

Spring Meeting Speakers

Chris Rasmussen received his B.A., M.A. and Ph.D. from the University of Maryland in Mechanical Engineering, Mathematics, and Mathematics Education, respectively. He is currently Professor of Mathematics Education at San Diego State University in the Department of Mathematics and Statistics. His research focuses on the teaching and learning of undergraduate mathematics, with an emphasis on courses that typically function as a transition to advanced mathematics. He is a past Coordinator for the Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (RUME SIGMAA); co-Editor for a book in the MAA Notes series, *Making the connection: Research and teaching in undergraduate mathematics education*; and is currently co-PI on a 5-year NSF-funded project to study characteristics of successful programs in college calculus.



Spring Meeting Speakers and Presenters, continued on page 8...

Spring Meeting Speakers and Presenters, continued from page 7...

Kathryn Leonard received her PhD in Mathematics from Brown University, then joined the faculty of California State University, Channel Islands (CSUCI), after postdoctoral work at the California Institute of Technology and Mathematical Sciences Research Institute. Her awards include an NSF CAREER award and an MAA Henry L. Alder Award for Distinguished Teaching. She is a co-director of the NSF-funded Center for Undergraduate Research in Mathematics hosted by Brigham Young University, and is also the director of her campus' Center for Integrative Studies.



Ravi Vakil (pictured on page 1 of this *Newsletter*) is Professor of Mathematics at Stanford, where he is also Robert K. Packard University Fellow and David Huntington Faculty Scholar. He is an algebraic geometer, and his work touches on many other parts of mathematics, including topology, string theory, applied mathematics, combinatorics, number theory, and more. He was born in Toronto, Canada, and studied at the University of Toronto, where he was a four-time Putnam Fellow. He received his Ph.D. from Harvard in 1997, and taught at Princeton and MIT before moving to Stanford in 2001. He has received the Dean's Award for Distinguished Teaching; AMS Centennial, Frederick E. Terman, and Alfred P. Sloan Research fellowships; the NSF CAREER grant; and the Presidential Early Career Award for Scientists and Engineers. He has also received the Coxeter-James Prize from the Canadian Mathematical Society and the André-Aisenstadt Prize from the CRM in Montreal. He was the 2009 Hedrick Lecturer at MAA MathFest, and is the MAA's Pólya Lecturer for 2012-2014. He has served as an informal advisor to the new website *mathoverflow*, and works extensively with talented younger mathematicians at all levels, from high school (through math circles, camps, and olympiads) through recent PhDs.



Francis Su is the Benediktsson-Karwa Professor of Mathematics at Harvey Mudd College in Claremont, California. His research is in geometric combinatorics and applications to the social sciences, and he has co-authored over 25 papers, half of them with undergraduates. From the MAA, he has received recognition for his writing and teaching, including the Hasse Prize in 2001, the Alder Award in 2004, and the Haimo Award in 2013. He recently concluded a term as MAA vice-president. His passion for teaching and popularizing mathematics is evident from his website "Math Fun Facts", which receives over a million hits each year, as well as his iPhone app by the same name. His hobbies include songwriting, gardening, photography, and theology; just like mathematics, these are for him modes of creative expression that divinely blend structure and freedom, truth and beauty, reflection and action.

Registration for Spring Meeting

Participants can register online (using a credit card) for the Spring Meeting, to be held Sat., April 20, 2013, at the University of San Diego, by going to the link on the section website <http://sections.maa.org/socalnv/>. Online registration will be available from Wednesday, March 27, at 8:00 am, to **Tuesday, April 16, at 5:00 p.m.**

Participants also may register by mail by **Monday, April 15, 2013**. Either send the registration form on page 10 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-Nevada 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 (not including luncheon):

MAA member: \$40

Non-member: \$45

Student: \$15

Box Lunch:

MAA member: \$10

Non-member: \$10

Student: \$8

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 15, 2013 (mail-in using form on page 10) or Tuesday, April 16, 2013, 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 Phone: (657) 278-7023

For **University of San Diego parking and hotel information**, see page 5.

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

Spring Meeting Pre-Registration / Box Lunch Reservation Form

University of San Diego, Saturday, April 20, 2013

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	_____ @ \$40	_____ @ \$45	_____ @ \$15
Registration and Box Lunch	_____ @ \$50	_____ @ \$55	_____ @ \$23
Sandwich choice:	_____ hummus/veggie	_____ tuna	_____ turkey
		_____ ham	_____ beef

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

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"/>	Herbert Medina Loyola Marymount University	
2 nd Vice Program Chair	<input type="checkbox"/>	Sarah Eichhorn University of California-Irvine	
Section Secretary	<input type="checkbox"/>	Melinda Schulteis Concordia University-Irvine	

The Students' Column

*Ioana Mihaila, Student Chapters Coordinator
California Polytechnic State University, Pomona*

Plan to attend the Spring 2013 Meeting April 20 in San Diego! Present a poster in the Student Poster Session!

Consider presenting a poster at our Spring 2013 Meeting on April 20, 2013, at the University of 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 recognition, feedback, and further ideas. And they develop their communication skills and gain a resume item. Both 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 2013 Meeting) by **Monday, April 8, 2013**. Possible topic ideas:

- 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 mathematical journals, such as the MAA journals or the PME journal.

Poster presenters: Be sure to register for both the Student Poster Session and the meeting/conference itself.

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, book sales, panels, presentations of research projects done by fellow students. Our section keeps students in mind when planning meeting events: give the Spring Meeting a try! It will be Saturday, April 20, at the University of 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 or next pursuing research under the guidance of a mentor near or far, with 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, but there are a few in April.) And spend some time with the other information on this page – opportunities abound. Regional conferences that are relatively easy to attend are listed at our own section's webpage: <http://sections.maa.org/socalnv/> In addition to our Spring Meeting on Saturday, April 20, we'll have a Fall Meeting in October of 2013. And watch for news of the March 2014 Pacific Coast Undergraduate Math Conference at: www.pcumc-math.org.

Students' Column, continued on page 12...

Students' Column, continued from page 11...



Students and faculty from California State University, Los Angeles, traveled to the MAA Southern California-Nevada Section Fall 2012 Meeting at California State University, Long Beach. Faculty included front row: Silvia Heubach (left), Daphne Liu (third from left), who gave an invited address at the meeting, and back row: Dick Katz (third from left), Mike Hoffman (fourth from left), and Mike Krebs (sixth from left).

Southern California – Nevada Students at the 2013 JMM in San Diego

The Southern California – Nevada Section was well represented by students at the Joint Mathematics Meetings in San Diego, Jan. 9–12, 2013. Many presented their work in the Student Poster Session there, others gave presentations in some of the many sessions of invited and contributed talks, while others took advantage of the meeting's proximity to attend graduate school fairs, panels, networking sessions, and many talks – and most enjoyed their time in a somewhat chilly San Diego. Fourteen regional students were recognized for having excellent posters (see the list on the next page). 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.

Students' Column, continued on page 13...

Students' Column, continued from page 12...

2013 JMM MAA Undergraduate Poster Session Prize Winners

A Multivariate Statistical Inference for the Analysis of Neuronal Spiking Rates

Reina Galvez, California State University, Fullerton

Antouneo Kassab, California State University, Fullerton

Duy Ngo, California State University, Fullerton

Advisor: Dr. Sam Behseta, California State University, Fullerton

Predicting the Presence of Multiple Sclerosis Using Semantic Categories and Logistic Regression

Brayan Ortiz, California State University, Fullerton

Advisor: Dr. Mortaza Jamshidian, California State University, Fullerton

Pursuit-Evasion in Polygonal Environments: When Can Two Cops Win?

Rosalie Carlson, Harvey Mudd College

Maxray Savage, Macalester College

Claire Djang, Oberlin College

Stephen Ragain, Pomona College

Advisor: Dr. Andrew Beveridge, Macalester College (University of Minnesota REU)

Comparison of Two Models for Fat/Water Separation in Magnetic Resonance Imaging (MRI)

Cody Gruebele, California State University, Fullerton

Advisor: Dr. Angel R. Pineda, California State University, Fullerton

Improved High-Order Modulation Maximal Likelihood Detection in MIMO System

Skyler Seto, Massachusetts Institute of Technology

Karen Larson, University of California at Los Angeles RIPS

Advisor: Dr. Stacey Beggs, IPAM UCLA (Hong Kong University of Science and Technology REU)

A New Probability-Based Characteristic in Finite Group Theory

Danny Orton, California State University, Fullerton

Daniel Lenders, California State University, Fullerton

Advisor: Dr. Scott Annin, California State University Fullerton

Ranking Rankings: a Comparison of the Predictive Power of Sports Ranking Methods

Peter Elliott, University of California at Los Angeles

Daniel Barrow, Pitzer College

Ian Drayer, University of California at Los Angeles

Garren Gaut, University of California at Los Angeles

Advisor: Dr. Braxton Osting, UCLA (UCLA REU)

Message from the Governor: JMM and Other National MAA News

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

This will be my final report as Governor of the Southern California-Nevada Section of the MAA. My term ends in June 2013 and the Board of Governors (BOG) meeting held in conjunction with the Joint Mathematics Meeting in San Diego in January 2013 was my last. A new governor will be in place for MathFest 2013 in Hartford, Connecticut. It has been a great pleasure to serve as governor these past three years and I once again thank the members of the section for giving me this opportunity. I have interacted with fellow governors from the other sections, learnt more about the association and how it functions and gotten to know many of the MAA officers and staff.



The record attendance of nearly 7200 people at the JMM in Boston last year was difficult to beat even for a meeting held in sunny (although quite breezy and chilly) San Diego. A mere 6600 attendees congregated in the San Diego Convention Center for four days filled with exciting invited talks, special sessions, contributed paper sessions, panels, poster sessions and other activities including networking with colleagues and friends. Actually 6600 is a pretty good number and much higher than at previous meetings, with the exception of Boston. The increase in the attendance numbers at the JMM over the last few years is mostly due to a drastic increase in number of student attendees, both at the undergraduate and graduate level.

Oh well – I digress. Let's get back to the report from the BOG meeting. As always, the BOG met the day before the official start of the JMM. In addition to the standard reports from various constituencies, including the MAA officers, and staff from the Washington Office, here are some of the highlights from the January 2013 BOG meeting.

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 a member of the Southern California-Nevada Section was a recipient of the Henry L. Alder Award for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member. **Congratulations to Rachel Levy**, Harvey Mudd College, for receiving this award. She will be invited to give a talk at the special session for the three Alder Award recipients at MathFest 2013 in Hartford, Connecticut.

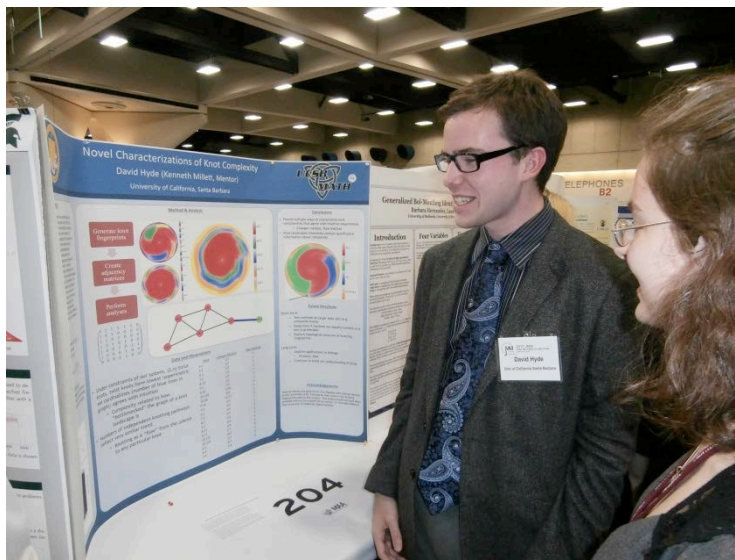
The board approved Gerard Venema as associate secretary for a new five year term, February 1, 2013 – January 31, 2019.

Governor's Report, continued on page 15...

Governor's Report, continued from page 14...

I would like to draw your attention to a couple of issues raised during the meeting. MAA is always looking for volunteers to serve on the many committees that are part of the governance structure of the association and have set up a Committee Suggestions link on the MAA webpage. If you want to get involved or you have a colleague you think would do a wonderful job serving on one of the MAA committees, please enter your suggestions at <https://www.surveymonkey.com/s/committeesuggestions2013>. The link will stay live through April 1. Jerry Porter, the chair of Council on Prizes and Awards, mentioned that less than 10% of the authors of articles in the MAA journals are women. He asked what we can do to attract more women to submit articles for publication in these journals? Maybe knowing this fact alone is enough to get some of you to consider submitting articles to one of the MAA journals and, if not you, consider encouraging others to do so.

David Hyde, a student at the University of California, Santa Barbara, presented a poster at the JMM in San Diego in January of this year. Hyde's project advisor was former MAA Southern California-Nevada Section Governor Ken Millett of UCSB. (Photo by Magnhild Lien)



A new MAA membership structure will take effect in 2014. The current dues structure, which has 9 different membership types with several due categories within each type, has been simplified to five groups: Member (\$169/\$100*), Member Plus (\$269), K-12 Teacher (\$55), Student (\$35) and Departmental (\$370, same as in 2013). * \$100 is for certified long-term members (70 years old + 25 years of membership). Membership benefits for all of the categories will be listed on the MAA webpage later this year. The basic member benefits will include electronic versions of the three MAA journals, and *Math Horizons*, and member discount on print editions of the same.

MAA Executive Director Michael Pearson announced a new initiative, “MAA Book Sale in a Box”. The virtual book sale will replace the traditional Section book sale. Members will be emailed a 35% off coupon before the section meeting, which can be used at the meeting or applied to purchases at the MAA store <http://maa-store.hostedbywebstore.com/> The discount is valid for two weeks.

Governor's Report, continued on page 16...

Governor's Report, continued from page 15...



*Krista Leal from California State University, San Bernardino, presented a poster during the Student Poster Session at the JMM in San Diego in January of this year. Leal's project advisor was current MAA Southern California-Nevada Section Chair Min-Lin Lo.
(Photo by Magnhild Lien)*

As always, the JMM program was rich and full of interesting talks, panels and fun activities, and the Southern California-Nevada Section was well represented. The only problem with such an extensive program is that it is impossible to get to see and hear everyone.



I attended the Joint Prize Session where **Francis Su** (left) of Harvey Mudd College was presented with the MAA Haimo Teaching Award; **Perci Diaconis** and **Ron Graham**, UC San Diego, were presented with the MAA Euler Book Prize for their book *Magical Mathematics: The Mathematical Ideas that Animate Great Magic Tricks*; and **John Baez**, UC Riverside, with co-author John Huerta, was presented with the AMS Levi L. Conant Prize for the article "The algebra of grand unified theories" (*Bulletin Amer. Math. Soc.* 47 (2010), no. 3).

Above: Francis Su at the Joint Prize Session, where he received the MAA Franklin and Deborah Tepper Haimo Distinguished Teaching Award. Su was the Southern California-Nevada Section's nominee for the 2013 award.

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Governor's Report, continued from page 16...

CSU Bakersfield, Channel Islands, Fresno, Fullerton, Long Beach, San Bernardino, San Diego State and Cal Poly Pomona all had students presenting posters at the Student Poster Session, as did Harvey Mudd College, Loyola Marymount University, Pepperdine University, Pitzer College, Pomona College, UCI, UCLA, UCSB, University of Redlands and University of San Diego.

I conclude with a couple of announcements from MAA headquarters. A new and improved MAA website is scheduled to be launched this spring. MathFest in Hartford begins a day early, July 31 with a Grand Opening Reception, which is included in the conference registration. A final plug: Membership is aging – please help recruit the younger generation of mathematicians as MAA members!

News from the Campuses of the Southern California–Nevada Section



Concordia University Irvine welcomes **Amanda Croll**, Ph.D. candidate at the University of Nebraska – Lincoln, to its mathematics faculty beginning in July, 2013. The future Dr. Croll will defend her Ph.D. in Mathematics this April at the University of Nebraska – Lincoln before joining the CUI faculty. The title of her dissertation is “Periodic modules over Gorenstein local rings.” A native Texan, Amanda did her undergraduate work at Sam Houston State University. She and

her husband Nick will relocate to the Irvine area this summer. Amanda joins CUI full-time faculty members Dr. **Melinda Schulteis** (CUI '95), Professor **Julie Melberg**, Professor **Ken Clavir**, and Dr. **Bret Taylor**, department chair.

The inaugural class of AMS Fellows includes **Arthur Benjamin**, **Maria Klawe**, and **Nicholas Pippenger** of Harvey Mudd College; **Judith Grabiner** of Pitzer College; and **Erica Flapan** of Pomona College. Klawe is president of Harvey Mudd College.

At **Pomona College**, “Seeing Symmetry,” an exhibition of mathematical art, will be on display on the second floor of Millikan Hall (home of the mathematics department) through Summer 2013. The artist is **Frank Farris** of Santa Clara University.

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

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

Southern California-Nevada Conference Calendar

April 4-6, 2013: 44th Interface Symposium, Chapman University, Orange, CA. With the theme “Big Data and Analytics,” the symposium will focus on the interface between Computing and Statistics. More information: <http://www.chapman.edu/events/interface-2013/>

Saturday, April 20, 2013: Mathematical Association of America Southern California-Nevada Section Spring Meeting, University of San Diego, Old Town, San Diego, CA. See this newsletter and/or <http://sections.maa.org/socalnv/> for more information.

Sunday, April 21, 2013: Twin WiMSoCal (Women in Mathematics of Southern California), University of California, San Diego. First annual San Diego version of the popular Los Angeles area gathering of women mathematicians will include a plenary lecture and talks by participants. Contact organizers Alina Bucur and Kristin Lauter via WiMSoCal organizer Cymra Haskell chaskell@usc.edu for more information.

Friday, April 26, 2013: 4th Cal State University–Fullerton and Chapman University Joint Mathematics Colloquium, to be held at Cal State Fullerton, 2–5 p.m. Watch http://mathcs.chapman.edu/mathcs/index.php/MathCS_Seminar for details.

August 5-9, 2013: BLAST 2013 Conference, Chapman University, Orange, CA. The conference will focus on Boolean algebras, lattices, algebraic and quantum logic, universal algebra, set theory, set-theoretic topology, and point-free topology. More information: <http://www.chapman.edu/events/BLAST-2013/>

Saturday-Sunday, November 2-3, 2013: American Mathematical Society (AMS) Western Fall Sectional Meeting, University of California, Riverside. See <http://www.ams.org/meetings/sectional/sectional.html> for details.

Save these dates for future MAA national meetings!

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: MAA Centennial, 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

Francis Su Wins MAA National Haimo Teaching Award

*By Min-Lin Lo, Cal State San Bernardino
Chair, Section Teaching Award Committee, 2011-12
Section Chair, 2012-13*



Francis Edward Su of Harvey Mudd College was one of three winners of the MAA's highest award for distinguished teaching, the Franklin and Deborah Tepper Haimo Award for Distinguished College or University Teaching, for 2013. He received the award during the Joint Prize Session at the Joint Mathematics Meetings held in San Diego, California, in January of 2013.

Dr. Su is an outstanding teacher as evidenced by numerous student comments and peer evaluations. He has not only made a positive impact at Harvey Mudd College as a great teacher (influencing math curriculum, mentoring undergraduate research, overseeing the Putnam seminar), but also by reaching out to a broader audience in other teaching venues (Cornell University, MAA PREP workshops, Park City Mathematics Institute) and outreach to middle-school students (Foothill Country



Day School, Math Path). Furthermore, Dr. Su authored the widely popular "Math Fun Facts" website and iPhone app, and also made his Real Analysis course available to a worldwide audience on YouTube.

Dr. Su received the Southern California-Nevada Section Distinguished Teaching Award during our April 2012 Section Meeting at Cal State Fullerton.

To find out how to nominate a colleague for the MAA Southern California-Nevada Section Distinguished Teaching Award, see the next page of this *Newsletter*!

Call for Nominations for Section Teaching Award

Kathryn Leonard, Section Secretary

Preliminary nominations for the 22nd annual MAA Southern California-Nevada Section Award for Distinguished College or University Teaching of Mathematics will be accepted in Fall 2013.

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 2013. (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 2013 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. 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 *Kathryn Leonard* 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