Southern California-Nevada Section Mathematical Association of America NEWSLETTER

Volume XLIX, Number 1

September 2007

Dates to Remember:

October 13, 2007 Fall Meeting at Santa Ana College

Section NExT deadline: Sept. 28, 2007.

Contributed paper deadline: Oct. 1, 2007.

Pre-registration mail-in deadline: Oct. 8, 2007.

Pre-registration online deadline: Oct. 9, 2007.

Jan. 6-9, 2008 Joint Mathematics Meetings in San Diego, CA

March 15, 2008 Spring Meeting at U. of San Diego

MAA Southern California-Nevada Section to Meet Saturday, Oct. 13 at the 'Orange Crush'!

Fall 2007 Meeting. Encourage your colleagues and students to attend the Fall Meeting Saturday, Oct. 13, 2007, at Santa Ana College in Santa Ana, near the "Orange Crush" freeway interchange. Both faculty and students can give talks during the Contributed Paper Sessions. Invited speakers will include Christopher Heil of Georgia Tech on "Music, Time Frequency Shifts, and Linear Independence," Ivars Peterson of the MAA on "Geometreks," and our 2007 Section Distinguished Teaching Award winner, Jon McCammond of UC Santa Barbara, on "Roots, Ratios, and Ramanujan."

Spring 2007 Meeting. The Spring 2007 Meeting, held at Pomona College on Satur-

day, March 3, opened with a talk by Ami Radunskaya (right) of the host college on "Noisy, Selflimiting Growth."





Radunskaya demonstrated her ideas via computer and electronic cello. Next on the schedule was a short business meeting during which former MAA President Ron Gra-

ham of UCSD (above, left) was honored for having been an MAA member for 50 years. Everyone then streamed outside for the Student Poster Session, held under sunny skies in the Smith Campus Center Courtyard. The afternoon speakers included Stan Wagon of Macalester College, who presented

some computational surprises from the 100-Digit Challenge, and Michael Starbird of the University of Texas, Austin, who showed how to make math fascinating for general education students. Finally, Robert Baker and Gizem Karaali led a workshop on the MAA Math Digital Library.

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McCammond Wins Section Teaching Award

Mario Martelli, Section Chair and 2007 Teaching Award Committee Chair



Prof. Jonathan P. McCammond of the University of California, Santa Barbara, has been selected as the 2007 Recipient of the Distinguished Teaching Award from the Southern California-Nevada Section of the Mathematical Association of America. Prof. McCammond received his Ph.D. in Mathematics from UC Berkeley in 1991 and his BA in Mathematics and German and BS in Physics from Bethel

College in 1988. The members of the Selection Committee were truly impressed by his innovative teaching style as revealed in the letters of appreciation written by his students, and in the extremely positive recommendation of his nominator. We felt that Prof. McCammond represents and embodies in a very distinguished manner the unique characteristics of an accomplished teacher and scholar. He is capable of presenting in a perfectly comprehensible way very difficult mathematical ideas and proofs. Many students took his courses even though their schedule did not require them to do so. The number of students positively influenced by his innovative methods of teaching is impressive. The Selection Committee feels that the members of our Section will benefit a great deal when Prof. McCammond presents his ideas to us at our Fall Meeting Saturday, Oct. 13, 2007, at Santa Ana College.

The five members of the Selection Committee were Prof. Mario Martelli of Claremont McKenna College, Prof. Bob Brown of the University of California Los Angeles, Prof. Jackie Dewar of Loyola Marymount University, Prof. Rebecca Head of Bakersfield College, and Prof. Michelle (Schultz) Robinette of the University of Nevada Las Vegas. Every member of the Committee was truly impressed by the records of the candidates and had a very difficult time in making a choice. We would like to convey this message to all nominators and to their nominees.

The Students' Column

Cindy Wyels, Student Chapters Coordinator

The 2007 Student Poster Session: Is there any topic that cannot be approached mathematically? What do phylogenetics, using algebra to study voting theory, allocating resources to counter terrorism, Lissajous and Fourier knots, search design, Lubin's conjecture, Reed-Solomon codes, power grids, and fixed points have in common? These were just some of the topics addressed in the posters presented by 30 students at the Spring Student Poster Session in a beautiful location at Pomona College last March. Juniors and seniors presenting REU and senior thesis/capstone work predominated. Thanks to the many individuals who volunteered their time and expertise to serve as poster judges. Information about the presenters and posters receiving Meritorious Poster Awards is listed at the end of this column.



Why not attend the Fall Meeting? You'll find all the information you need about the Fall Meeting of our MAA section elsewhere in this newsletter. There will be some fantastic "large" talks, lots of shorter presentations (including some by students), a book fair, and a historic computer display. Check out the program in this newsletter, get your friends who appreciate some mathematics together, and attend!

Invited Speakers (the "large" talks): Christopher Heil of Georgia Tech on "Music, Time Frequency Shifts, and Linear Independence," Ivars Peterson of the MAA on "Geometreks," and our 2007 Section Distinguished Teaching Award winner, Jon McCammond of UC Santa Barbara, on "Roots, Ratios, and Ramanujan."

Get beyond the classroom! Meetings and seminars, extracurricular mathematics projects, the Putnam Exam and the Mathematical Modeling Competition, summer 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 on the web, at your school's Career Center, and anywhere you can find it. You might start at http://www.maa.org/students/career.html and http://www.maa.org/awards/putnam.html. **Student Poster Sessions in San Diego in January & March** The largest annual math conference in the U.S. – probably in the world – comes to Southern California January 6 – 9, 2008. The Joint Mathematics Meetings include technical research presentations, survey talks, poster sessions, often movie showings and musical performances, and much more. The Student Poster Session has become one of the highlights of the meetings (abstract deadline: Fri., Nov. 2). Information on all student activities planned for these meetings may be found at http://www.ams.org/amsmtgs/2109_maasessstud.html.

Meanwhile, it's never too early to start thinking about presenting a poster at the 2008 Spring Meeting of the So Cal-NV Section of the MAA. This meeting will be held at the University of San Diego on March 15. Detailed information will be in the next 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 the *Monthly* or other journals.

Spring 2008 Conferences for Undergraduates

The Spring Meeting of the MAA So Cal-NV Section will be held Saturday, March 15 at the University of San Diego.

The third annual Pacific Coast Undergraduate Math Conference will be held on Saturday, April 5 at Loyola-Marymount University. http://www.lclark.edu/~ncameron/PCUMC3/

Spring 2007 Meritorious Poster Awardees

Jonathan Azose, *A Tiling Interpretation of q-Binomial Coefficients*, Harvey Mudd College. Advisors: Art Benjamin (HMC) and Kristina Garrett (St. Olaf Col.)

Jay Daigle, Adam Boocher, and Wenjing Zheng, *Sampling Lissajous and Fourier Knots*, Pomona College. Advisor: Jim Hoste (Pitzer Col.)

Adam Ericksen and Keith Merrill, *Fixed Point Theory of an Aspherical Wedge*, UCLA. Advisor: Robert Brown Christina Fernandez and America Flores (pictured, above left), *The Radio Number of Gear Graphs*, CSU Channel Islands. Advisors: Cindy Wyels (CSUCI) & Maggy Tomova (Rice U.) Mike Hansen, *Algebraic Invariants of Phylogenetic Trees*,

Harvey Mudd College. Advisor: Francis Su Andrea Heald, *Understanding Counter-examples to Lubin's Conjecture,* Harvey Mudd College. Advisor: Ghassan Sarkis (Pomona Col.)

Alexander Izsak, *Special Cases of Carry Propagation*, Harvey Mudd College. Advisor: Nick Pippenger

Roshani Patel, *Designing for Power*, Bakersfield College. Advisors: Arnie Andrasian, Rebecca Head, Liz Rozell, Dan Cronquist

Kimberly Walters, *Normalized Matching in the Lattice of Noncrossing Partitions*, Pomona College. Advisor: Shahriar Shahriari

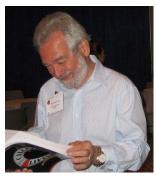


2007 MathFest: Did You Find Your Way to San Jose?

Message from the Section Chair

Mario Martelli, Section Chair Claremont McKenna College

First, I want to express my appreciation to all of you for selecting me as Chair of the Southern California-Nevada Section for the incoming academic year. On one side, I have now completed my tour of duties for the Section, since I was first Secretary-Treasurer, then Vice-Chair and Chair of the Program,



Governor, Vice-Chair and now Chair of the Section. On the other side, I feel that your unanimous approval of my name expressed appreciation for my previous work. Thank you!

Please plan to attend the Fall Meeting of our section on October 13, 2007, at Santa Ana College. The program is excellent and the location is central. We should have a very good meeting. The Spring Meeting will be at the University of San Diego on Saturday, March 15, 2008. Mark the date on your calendar!



At the MathFest in San Jose, I attended the talks of **Francis Su** from Harvey Mudd College, **Judith Grabiner** from Pitzer College (left), and **Shawnee McMurran** from Cal State San Bernardino. I was also one of the panelists for an activity of Project NExT and I organized a Special Session on Undergraduate Research with the participation of Frank Mor-

gan from Williams College, Estelle Basor from Cal Poly San Luis Obispo, **Mike O'Neill** from Claremont McKenna College, and Robin Blankenship from Morehead State University.

On Friday afternoon I attended the meeting of all Section Officers in the Crystal Ballroom of the Fairmont Hotel. The highlight of the meeting was a discussion on MAA section meetings. The questions raised by Nancy Hagelgans, Chair of the Committee on Sections, were

• Why do you go to Section meetings?

• What has changed in your section meetings in the last few years?

• What are the most successful components of your section meetings?

• How do you attract faculty members from all type of institutions?

- What do you do to involve graduate students?
- Do you offer any workshops?

I reported our practices and I listened intently to what other sections do, particularly to attract members from all types of institutions and to involve graduate students. I feel that our Fall Meeting is a move in the right direction, since Santa Ana College is a community college and it is centrally located. How-

Please see Message from Section Chair, page 8.

Message from the Section Governor

Kenneth Millett, Section Governor University of California, Santa Barbara Reporting from Grambois, France

Attending my first meeting as your governor, the long-range planning discussions were of great interest and an opportunity to observe the organization in action from a new perspective. As a consequence, I would like to hear from you about your thoughts on how the MAA best supports its mission and your work (to make sure we don't abandon things that are working well) and your ideas as to how the MAA could be more effective in achieving its goals and in supporting your professional goals. A wonderful aspect of the work of the governors is the ratification of awards but, of course, we will hear of these at the Joint Mathematics Meetings in January 2008.

Francis Su (right) and **Art Benjamin** were among the more visible representatives of our section at MathFest and I very much enjoyed watching them in action surrounded by students and interested colleagues. For me, the presentation of **Gwen Fisher**, Cal Poly SLO, on "symmetries of beaded beads" reporting on joint work with **Blake Mellor**, Loyola Marymount University, was



another highlight. This is the subject of Ivars Peterson's Mathematical Tourist piece on the MAA webpage. Take a look at <u>www.beadinfinitum.com</u> where you will see her work with **Florence Newberger Turnour**, CSULB.

While there were many other exciting facets of the program I would like to highlight two others. First, I believe that the large number of undergraduate student research talks were a critical part of the event bringing together students to share their mathematical interests and experiences. This opportunity to talk about the nature of mathematical research and the ways in which one "does" mathematics can be a catalytic experience independent of whether any truly new mathematics was discovered in the course of their efforts. I hope our section can strengthen its participation both regionally and at national events such as the MathFest. Second, having an opportunity to encounter and talk with another wonderful group of new Project NExT participants, many of whom are joining our departments this fall. I hope we can all welcome them and encourage them to join us at our regional meetings.

MAA Associate Secretary Jim Tattersall reports that Math-Fest 2007 had the largest attendance (1,410) since 1,553 mathematicians attended the MAA 75th Anniversary Meeting in Columbus, Ohio in 1990, and the 11th largest MAA (and AMS-MAA) Summer Meeting attendance since 1916.

Although I am on sabbatical leave this year in Grambois, France, please let me know how I can best represent our section via email (<u>millett@math.ucsb.edu</u>) in case I am unable to speak with you directly at one of our meetings. Page 4

Southern California-Nevada Section of the Mathematical Association of America

Fall Meeting Schedule

Saturday, October 13, 2007, Santa Ana College, Santa Ana

- 8:00—11:45 **Registration**—Entrance to Dunlap Hall (Building "D")
- 8:30—2:30 MAA Book Sale—Entrance to Dunlap Hall Organized by Richard Katz, Michael Hoffman, Cal State Los Angeles
- 9:00—9:55 **Invited Address by Ivars Peterson**—Dunlap Hall Mathematical Association of America

Geometreks

Walking the streets of a city or town can provide wonderfully illuminating glimpses of mathematical art if the "seeing" is done with a keen eye for mathematics. This illustrated presentation highlights public sculptures and other artworks and structures with mathematical themes in Washington, D.C., Philadelphia, Toronto, Ottawa, Cambridge, Mass., New Orleans, and other locales.

- 10:15—11:45 Faculty/Student Contributed Paper Sessions—Dunlap Hall Organized by Perla Myers, University of San Diego See Call for Contributed Papers, page 5.
- 11:30—12:45 Exhibit: Remembering ENIAC and the IAS Electronic Computer Project 1945-1949—Johnson Campus Center Organized by Akrevoe Emmanouilides and Ann Forkeotes
- 11:45—12:45 Luncheon—Johnson Campus Center
- 12:45—1:00 Section Business Meeting—Johnson Campus Center
- 1:00—2:00 **Invited Address by Chris Heil**—Johnson Campus Center Georgia Institute of Technology, Atlanta

Music, Time-Frequency Shifts, and Linear Independence

Fourier series provide a way of writing almost any signal as a superposition of pure tones, or musical notes. But this representation is not local, and does not reflect the way that music is actually generated by instruments playing individual notes at different times. We will discuss Fourier series, and then present time-frequency representations, which are a type of local Fourier representation of signals. This gives us a mathematical model for representing music. While the model is

crude for music, it is in fact a powerful mathematical representation that has appeared widely throughout mathematics (e.g. partial differential equations), physics (e.g. quantum mechanics), and engineering (e.g. time-varying filtering). We ask one very basic question: are the notes in this representation linearly independent? This seemingly trivial question leads to surprising mathematical difficulties.

2:15—3:15 Invited Address by Jon McCammond—Dunlap Hall

University of California, Santa Barbara

Roots, Ratios, and Ramanujan

This talk will focus on a connected set of surprises that arise through simple iteration: punching the [cos] button repeatedly on a calculator, continued fractions -- along with their connections to the golden ratio and the Fibonacci numbers, and continued square roots, with some mentions of Ramanujan, Chebyshev polynomials, and the Mandelbrot set thrown in along the way.

Remember to Register!

Complete the registration form on page 7 and send it with payment **by Monday**, **Oct. 8, 2007** to:

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

Or, register online at the section website: <u>http://www.maa.org/socal</u>

Call for Contributed Papers

Students (undergraduate and graduate) and faculty are invited to submit short proposals for 15-minute talks in the Contributed Paper Session of the Fall Meeting. All topics will be considered. The selection of talks will be based on interest to expected audience and on scheduling constraints.

Submissions for all contributed papers should contain a title, an abstract (not to exceed one-half page and suitable for inclusion in the conference program), the desirable mathematical background of the audience, and any special presentation display needs other than an overhead projector. Electronic submission is preferred.

Please send all submissions to:

Email (preferred): perlamyers@gmail.com OR Perla Myers Department of Mathematics and Computer Science University of San Diego 5998 Alcalá Park San Diego, CA 92110

Deadline for receipt of submissions: Monday, October 1st, 2007.

Join SoCalNev Section NExT!

SoCalNev NExT is now recruiting applicants to participate in activities at the 2007-2008 MAA Southern California-Nevada Section meetings. The fall meeting is scheduled for Saturday, October 13, 2007, at Santa Ana College, and the Section NExT program will include the sessions listed below. Section NExT will accept applications from faculty with Master's degrees or PhDs who are within the first three years of beginning full-time employment with significant teaching responsibilities at the community college, college, or university level. (See page 8 for more info about Section NExT.) To apply, please visit <u>http://www.maa.org/socal</u>, follow the link to SoCal-Nev NExT, and fill out the on-line application. To participate in the Saturday, Oct. 13, 2007, Fall Section Meeting at Santa Ana College, please **apply by Fri., Sept. 28**.

Section NExT Fall Meeting Program:

Directions to Santa Ana College

The Santa Ana College campus is located at the corner of 17th Street and Bristol Street in Santa Ana.

From the 57 South, take the 22 W exit toward Long Beach and, almost immediately, take the Bristol Street/La Veta Avenue exit. Turn right onto La Veta, which becomes Bristol Street. Travel south on Bristol Street.

From the 5 South, take the La Veta Avenue exit. Turn left onto La Veta, which becomes Bristol Street. Travel south on Bristol Street.

From the 5 North, take the 17th Street exit. Turn left onto 17th Street and travel west to Bristol Street. Turn left (south) onto Bristol Street.

From the 22 West, take the Main Street exit. Turn left onto La Veta Avenue and follow it until it becomes Bristol Street. Travel south on Bristol Street.

From the 22 East, take the Bristol Street exit. Turn left onto Bristol Street and travel south.

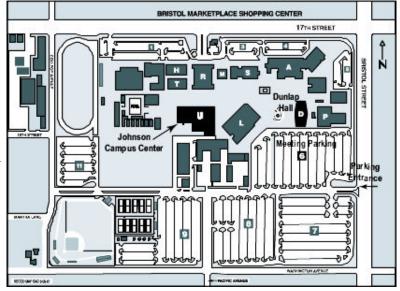
Once you are traveling south on Bristol Street: Just south of 17th Street, turn right into the parking lot (Lot 6) at the Bristol Street entrance. Meeting parking is free in Lot 6. For additional maps and directions, see the campus website at <u>http://www.sac.edu/apps/page.asp?Q=Maps</u>.

Registration, refreshments, and the MAA Book Sale will be outside Dunlap Hall ("D" Building). The first and last invited addresses and the contributed paper sessions will be in Dunlap Hall. The luncheon and luncheon address will be in the Johnson Campus Center ("U" Building). There are a variety of casual and fast food restaurants in the Bristol Marketplace Shopping Center, just north of campus along 17th Street.

Lodging Near Santa Ana College: Doubletree Hotel

100 The City Drive S. Orange, CA 92868 (800) 804-6835

Santa Ana College Campus Map



Evaluating Teaching Effectiveness at Georgia Tech, by Chris Heil, Georgia Institute of Technology Panel Discussion: Surviving the First Years in an Academic Job, organized by Alissa Crans, Loyola Marymount University Scholarship of Teaching and Learning, by Curtis Bennett, Loyola Marymount University

Terrific Trio of Speakers to Present at MAA Southern California-Nevada Section Meeting at Santa Ana College

The MAA Southern California-Nevada Section has assembled a terrific trio of speakers for its Fall Meeting, to be held Saturday, October 13, 2007, at Santa Ana College in Santa Ana. The meeting also will feature a Contributed Paper Session with presentations by both faculty and students and the MAA Book Sale, run by Richard Katz and Michael Hoffman of Cal State Los Angeles. Southern California-Nevada Section NExT will run sessions for new faculty members. Please see **Join SoCalNev Section NExT!**, page 5, to find out how to apply to participate. See you at Santa Ana!

Fall Meeting Invited Speakers:

Ivars Peterson is the new Director of Publications for Journals and Communications at the Mathematical Association of America. For more than 25 years previously, he was a writer at *Science News*, reporting on mathematics. He also served as editor of *Science News for Kids* and *Science News Online* and wrote the weekly online column *Ivars Peterson's MathTrek*. He continues to write for the children's magazine *Muse*.

Peterson was educated at the University of Toronto, where he earned a Bachelor of Science degree (majoring in physics and chemistry) and a Bachelor of Education degree, which qualified him to teach physics, chemistry, science, and mathematics in Ontario schools. He taught high school science and mathematics for eight years. In 1980, he left his teaching position to pursue a masters degree in journalism from the University of Missouri in

Columbia. As part of the program, he served as an intern at *Science News* in Washington, D.C., and was offered a position on the weekly magazine's staff.

Peterson followed up his successful first book, *The Mathematical Tourist: Snapshots of Modern Mathematics* (W.H. Freeman, 1988, 1998), with eight more books on contemporary mathematics and science, including two written with his wife, Nancy Henderson. His most recent book, *Mathematical Treks: From Surreal Numbers to Magic Circles* (MAA, 2002), will be available at the MAA Book Sale at the Fall Meeting.

In 1991, Peterson received the Joint Policy Board for Mathematics Communications Award recognizing him for his "exceptional ability and sustained effort in communicating mathematics to a general audience."

Christopher Heil is Professor of Mathematics at the Georgia Institute of Technology in Atlanta, Georgia. His research interests focus on time-frequency analysis, wavelet theory, redundant representations, and their applications. He has published over 60 research articles, and is known for his clarity of exposition in these papers. He has edited three books, and is currently writing a graduate-level textbook, *Introduction to*



Harmonic Analysis. Heil also serves as the Director of Teaching Effectiveness for the School of Mathematics at Georgia Tech, and in this role is responsible for overseeing the mentoring and evaluation of the teaching of the junior faculty in his department.

Jonathan McCammond is a professor of mathematics at the University of California, Santa Barbara. He received his Ph.D. in Mathematics from the University of California, Berkeley in

1991 and bachelor's degrees in Mathematics, Physics, and German in 1988 from Bethel College in Kansas. Before arriving in Santa Barbara in 2002, he was an assistant professor at Texas A&M University and a community college instructor at Chabot College in Hayward, California. His recent research has ranged in area from geometric group theory to lowdimensional topology to geometric combinatorics. A constant theme underlying this



wide range of areas has been the constructive aspects of various geometric operations. He is the 2007 winner of the MAA Southern California-Nevada Section Distinguished Teaching Award.

Great Books, Great Bargains at MAA Book Sale!

The 2007 Fall Meeting at Santa Ana College will include the ever-popular MAA Book Sale. Book prices at the meeting will be about 10% less than the already discounted MAA member prices. Almost all of the books in the current MAA Catalog will be on display, including several brand-new titles and the most recent title by invited speaker Ivars Peterson, *Mathematical Treks: From Surreal Numbers to Magic Circles*. Book Sale organizers are Michael Hoffman and Richard Katz of California State University, Los Angeles.

Future MAA National Meetings

Winter 2008 Summer 2008 Winter 2009	San Diego, CA Madison, WI Washington, DC	January 6-9 July 31-Aug. 2 January 7-10
Summer 2009 Winter 2010	Portland, OR San Francisco, CA	August 6-8 January 6-9
Summer 2010	Pittsburgh, PA	August 5-7
Winter 2011	New Orleans, LA	January 5-8
Winter 2012	Boston, MA	January 4-7
Winter 2013	San Diego, CA	January 9-12
Winter 2014 Summer 2015	Baltimore, MD Washington, DC	January 15-18 August 5-8



REGISTER FOR THE FALL MEETING!

Complete the form at right and send it with payment to:

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

Mail-in registration deadline is Monday, October 8, 2007.

OR

Register online at the Section website: <u>http://www.maa.org/</u> <u>socal</u> Click the online registration link and have your credit card ready.

Online registration deadline is 5 p.m., Tues., Oct. 9, 2007.

Pre-Registration/Luncheon Reservation Form

Fall Meeting at Santa Ana College, Santa Ana Saturday, October 13, 2007

Enter the number of registrations of each type in the appropriate blank in the table below. Make checks payable to **Southern California-Nevada MAA.** (Attach a separate page for multiple registration information.)

Address					
E-mail address					
	Nonmember	MAA Member	New MAA Member First Meeting	Student	
Registration Only	@ \$35	@ \$30	@ FREE	@ \$12	
Registration and Luncheon	@ \$50	@ \$45	@ \$15	@ \$20	
Registration and Vegetarian Luncheon	@ \$50	@ \$45	@ \$15	@ \$20	
			Total Enclosed		

Email: esolheid@fullerton.edu, phone: (714) 278-7023

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

MAA member	MAA	non-member	Bi	usiness/industry/government			
Undergraduate stud	ent Gradu	uate student	H	igh school teacher			
Faculty member at college or university with highest mathematics degree offered:							
Associate	Bachelors	Masters		Doctorate			

What's (SoCalNev Section) NExT?

Magnhild Lien, CSU Northridge Ioana Mihaila, Cal Poly Pomona

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

The SoCalNev Section NExT program has just completed its fifth year, and has sponsored dynamic cohorts of participants at the MAA Southern California-Nevada Section meetings. SoCalNev Section NExT Fellows attend both the Fall and Spring meetings of the MAA Section and participate in special activities. These activities involve practical information about implementing effective pedagogical and professional strategies, including topics such as teaching methods, directing undergraduate research, and writing grant proposals. In addition,

Call for Nominations for Section Teaching Award

Shawn McMurran, Section Secretary

Preliminary nominations for the 16th 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://www.maa.org/socal, first page only) and a 1-2 page description of the candidate's qualities and teaching successes (not the more extensive full nomination described on the second page of the form). From the initial nominees, the selection committee will choose two to three semifinalists. Each nominator will then be asked to complete a full nomination for the semi-finalist. 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 Meeting of the MAA Southern California-Nevada Section March 15, 2008, at the University of San Diego. 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 five years experience teaching at the college or university level. If you have an eligible and qualified colleague in your department, we urge you to nominate her/him so that s/he may be SoCalNev NExT provides a venue in which its participants can meet informally and discuss issues relevant to new faculty. Unlike the national Project NExT program, Section NExT includes community college faculty.

SoCalNev NExT is now recruiting applicants to participate in activities at the 2007-2008 MAA Southern California-Nevada Section meetings. The fall meeting is scheduled for Saturday, October 13, 2007, at Santa Ana College, and the Section NExT program will include the sessions listed on page 5. Section NExT will accept applications from faculty with Master's degrees or PhDs who are within the first three years of beginning full-time employment with significant teaching responsibilities at the community college, college, or university level. For more information, including a link to the online application and a list of past activities, please visit http://www.maa.org/socal and follow the link to SoCalNev NExT. To participate in the Saturday, Oct. 13, 2007, Fall Section Meeting at Santa Ana College, please **apply by Friday, Sept. 28, 2007.**

considered for the award. Initial application deadline is Monday, November 5, 2007.

Questions? Contact Shawn McMurran at smcmurra@csusb.edu

Message from Section Chair ... from page 3

ever, I am also concerned that if we stress too much a teaching component we may lose the attendance of those members who are research oriented. We should strike a balance so that we foster the participation of both groups. In particular, I feel that History and Education are two areas of research where we can do better. The choice of our section's nominee for this year's Distinguished Teaching Award is a correct move, since Prof. Jonathan McCammond of UC Santa Barbara is an accomplished researcher and, at the same time, an extremely successful teacher.

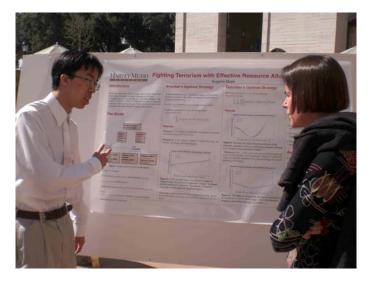
Thanks to Section Officers. As I begin my service as Section Chair for 2007-08, I offer thanks to outgoing Section Chair Rebecca Head, Section Governor Art Benjamin, Secretary Curtis Bennett, Program Chair George Jennings, and Las Vegas Liaison Michelle Schultz Robinette for their fine service to the section.

Welcome to New Officers. At the same time, I am pleased to welcome our new section officers, including Governor Ken Millett, Vice Chair Michael Frantz, Secretary Shawnee McMurran, Program Chair Florence Newberger, Program Vice Chair Perla Myers, Program Second Vice Chair Michael Orrison, and Las Vegas Liaison Satish Bhatnagar.

Several board members are continuing in their current roles. Ernie Solheid is the Meetings Coordinator, Janet Beery is the Newsletter Editor, Cindy Wyels is the Student Chapters Chair organizing the Student Poster Session, Ioana Mihaila is the Section NExT Liaison, and David Hunter is our Web Page Editor.

News of the Section

At Harvey Mudd College, Michael Orrison was promoted to Associate Professor with tenure. HMC welcomes assistant professor Rachel Levy and postdoctoral fellow Kimberly Tucker. Below, Eugene Quan of Harvey Mudd College explains his poster project to Florence Newberger of Cal State Long Beach at the Spring 2007 Meeting Student Poster Session at Pomona College.



At Loyola Marymount University, Blake Mellor was tenured and promoted to Associate Professor.

At UC Santa Barbara, Jeff Stopple is chair and Jon McCammond and Mihai Putinar are vice-chairs. Mike Crandall retired in June 2007. Paolo Cascini joins the faculty as an assistant professor with interests in algebraic geometry, and new visiting lecturers and researchers are: Emille Davie (PhD 2007 University of Georgia) Yujen Shu (PhD 2007 SUNY at Stony Brook) Pawel Gladki (PhD 2007 University of Saskatchewan) Andrea Malmendier (PhD 2007 MIT) Chetan Pahlajani (PhD 2007 UIUC) Returning lecturers and researchers are: Azer Akhmedov (PhD 2004 Yale) Alex Dugas (PhD 2006 UCB) Sookyung Joo (2004 PhD Purdue) Helena McGahagan (PhD 2005 NYU, NSF Post Doc) Julie Rowlett (PhD 2006 Stanford)

Christopher Hacon and **James McKernan** received the Clay Mathematics Institute 2007 research award for "their work in advancing our understanding of the birational geometry of algebraic varieties in dimension greater than three, in particular, for their inductive proof of the existence of flips." **Sergei Gukov** received a Sloan Fellowship. **Carlos Garcia-Cervera** received an NSF Career Research Award.

At the **University of Nevada, Las Vegas**, Professor **C. H. Ho** was elected to a 3-year term as Department Chair in 2006. The Department hired six tenure-track assistant professors to begin in Fall of 2007, three in statistics and three in applied mathematics. **David Costa**'s book, *An Invitation to Variational Methods in Differential Equations,* was published by Birkhauser.

Lecturer Elizabeth Doolittle received the Outstanding Teaching Award at the University of Redlands.

In Memorium

Ken Cooke passed away on August 25, 2007. Ken was Professor Emeritus at **Pomona College**, and was a past Chair of the Southern California Section of the MAA.

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

Section offers four REUs--plus one just outside our boundaries!

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Site: California State University, San Bernardino Directors: Rollie Trapp and Joe Chavez Topics: Trapp advises projects in knot theory (stick knots) and Chavez in combinatorics (graph labeling). For more information: http://www.math.csusb.edu/reu/reu.html

Site: California State University, Channel Islands Director: Cindy Wyels Topics: graph theory (graph pebbling, graph labeling) For more information: <u>http://faculty.csuci.edu/cynthia.wyels/</u>

Site: Claremont Colleges Directors: Chris Towse (Scripps College) and Jo Hardin (Pomona College) Topics vary depending on interests of faculty participants. For more information: http://ccms.claremont.edu/REU

Site: Loyola Marymount University and Cal Poly Pomona Directors: Erika Camacho and Ed Mosteig of LMU, and Randall Swift and Stephen Wirkus of Cal Poly Pomona Topics: Applied mathematics, including theory and applications of linear algebra and finite fields, probability and statistics, and nonlinear differential and difference equations. For more information: <u>http://www.amssi.org/</u>

Site: Cal Poly San Luis Obispo Directors: Jonathan Shapiro and Joseph Borzellino Topics: operator theory and topology For more information: http://www.calpoly.edu/%7Ejshapiro/reuinfo.html