Southern California-Nevada Section to Meet Saturday, October 13, 2012, at Cal State Long Beach

Come join us for invited addresses on the lonely runner conjecture, game-learning machines, and intellectual need in math education!

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

Susan Martonosi (left) of Harvey Mudd College and Kathryn Leonard of Cal State Channel Islands received the MAA Alder Award at MathFest in Madison, Wisconsin. Photo by Magnhild Lien.

A challenge. When I was a student, no one pushed or advised me to attend a mathematics conference, except once when there was an AMS sectional meeting held at my graduate school. It was not until I first became an assistant professor here at Cal State San Bernardino that my colleagues invited me to attend a SoCal-Nev MAA section meeting. I was amazed by how much fun it was to attend such a meeting and I realized how much I had missed when I was a student. Therefore, now I always try to push and encourage my students to attend mathematics conferences – especially MAA meetings – as much as they can. I am glad that there are so many other faculty members in our section bringing their students to meetings. Besides

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

MAA Fall 2012 Meeting, *continued*

Math Club students from Cal State San Bernardino, there are also large groups of students attending our section meetings from Cal State Channel Islands and Bakersfield College. I would like to challenge all faculty in our section to match our record by bringing as many students as you can to the meeting. For those of you who are new to our MAA section meetings, don't wait, this is the time to do it! You will have lots of fun that day (even though you have to get up painfully early on a Saturday), and feel recharged and refreshed after the meeting. For those of you who are experienced attendees, you know what I am talking about and I hope to see you again at our next meeting!

At left, the Cal State San Bernardino Math Club spells what they love! That's Math Club Advisor and MAA SoCal-Nevada Section Chair Min-Lin Lo third from left and above.

Fall 2012 Meeting. Our program committee has lined up some exciting speakers for the Fall Meeting, to be held on Saturday, October 13. Guershon Harel (UC San Diego) will speak about "Intellectual Need and its Application in Curriculum and Instruction." Sarah Eichhorn (UC Irvine) will lead us to look at applications of certain adaptive learning techniques to prove results for a variety of open game theory problems. Daphne Liu (CSU Los Angeles) will take us on a journey of discovery in her "From Graph Coloring to the Lonely Runner Conjecture." Matt DeLong (visiting professor at Harvey Mudd College this year) will talk about "Variations on Farmer Ted's Chicken Coop: The Story of a Natural Undergraduate Research Problem." Just the four talks above are worth the Saturday trip to attend our fall meeting at Cal State Long Beach, but we are promising more: you will enjoy lots of interesting contributed talks, and have the opportunity to make new friends and catch up with old friends. You will also find new and discounted books and information about other mathematical events in our region. What better way to spend your day on Saturday, October 13, 2012? Make plans to attend – and bring some of your students. See you at Cal State Long Beach!

Message from Section Chair, *continued*

MAA MathFest in Madison, WI. Many of our section members attended the MAA MathFest in Madison, Wisconsin, this past August and enjoyed the talks and activities. Our section's own Kathryn Leonard (Cal State Channel Islands) and Susan Martonosi (Harvey Mudd College), pictured on page 1, are two of the three 2012 MAA Alder Award recipients and delivered inspirational talks on their teaching and research.

Future Meetings. Mark your calendars for the Spring Meeting, to be held at the University of San Diego on Saturday, April 20, 2013. We already have another great lineup of speakers planned for that event, including Ravi Vakil of Stanford University, Kathryn Leonard of Cal State Channel Islands, Chris Rasmussen of San Diego State University, and Francis Su of Harvey Mudd College. And don't forget that the annual Joint Meetings of the MAA and AMS will be held in San Diego January 9-12, 2013.

MAA Southern California-Nevada Section Fall Meeting

Saturday, October 13, 2012

California State University, Long Beach

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

Directions to Cal State Long Beach: http://daf.csulb.edu/maps/directions.html

Cal State Long Beach campus map: http://daf.csulb.edu/maps/parking/index.html
Park in Lot 6, located near the bottom of this map. A parking permit is required and may be purchased from the yellow dispenser.

The Lecture Hall (LH) and Building LA5, where the meeting will be held, are located in the southwest section of the map and of the campus. The first invited address (and all the invited addresses) will be in the Lecture Hall Building (LH on the campus map). Registration, refreshments, and the Book Sale will be in the courtyard outside this building. The contributed talks will be in Building LA5. Lunch will consist of Subway box lunches (choice of four sandwiches), which must be reserved ahead of time for $6.50 each (see the registration information on pages 9 and 10.)

Hotel information: Use the link at http://www.csulb.edu/community/

Deadlines for 2012 Fall Section Meeting at California State University, Long Beach:

Contributed paper for Fall Meeting: Monday, October 1, 2012, noon (see page 6)

Mail-in pre-registration for Fall Meeting: Monday, October 8, 2012 (pages 9-10)

Online pre-registration for Fall Meeting: Tuesday, October 9, 2012, 5 p.m.
(Online pre-registration at our section website http://sections.maa.org/socalnv/
begins Monday, September 24, at 8 a.m.)

Fall Meeting Schedule

Saturday, October 13, 2012

California State University, Long Beach

8:00 – 12:00   **Registration** – Lecture Hall Building Courtyard

8:00 – 10:30   **Refreshments** – Lecture Hall Building Courtyard

8:00 – 9:00   **Graduate Student CV Submission** – Drop off your c.v. for review at the registration table. (See page 8 for details.)
Organized by Ivona Grzegorczyk, Cal State Channel Islands

8:30 – 3:15   **MAA Book Sale** – Lecture Hall Building Courtyard
Organized by Michael Hoffman, Richard Katz, Cal State Los Angeles

9:00 – 10:00   **Invited Address by Guershon Harel, UC San Diego**
Lecture Hall Building – 151

Intellectual Need and Its Application in Curriculum and Instruction

Years of experience with schools have left me with a strong impression that most students, even those who are eager to succeed in school, feel intellectually aimless in mathematics classes because we (teachers) fail to help them realize an *intellectual need* for what we intend to teach them. The main goal of the talk is to define *intellectual need*, discuss its manifestations in mathematical practice, and demonstrate its absence and potential presence in mathematics instruction. Examples from calculus, complex numbers, and mathematical proofs will be discussed.

10:00 – 10:15   **Section Business Meeting** – Lecture Hall Building – 151
Recognition of 25- and 50-year MAA members

10:20 – 11:35   **Contributed Paper Sessions** – Building LA5 – 147, 148, and more!
Organized by Steven Morics, University of Redlands
(See **Call for Contributed Papers**, page 6.)

11:40 – 12:40   **Invited Address by Sarah Eichhorn, UC Irvine**
Lecture Hall Building – 151

Would You Like to Play a Game? Revisiting Martin Gardner's Matchbox Game-Learning Machine

In 1983, the movie *WarGames* provided a dramatized look at a computer programmed to learn to play games and the resulting nuclear missile scare. This sort of game learning computer program is not just science fiction, but rather an easy to create tool, useful to game theorists (minus the nuclear missiles). In this talk, we will take a look at the Hexapawn game learning machine created in 1962 by renowned

Continued on next page ...

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recreational mathematician Martin Gardner. In order to fully analyze his remarkable game learning machine, we will draw from results in probability, graph theory, game theory, and numerical analysis. We will look at applications of this adaptive learning technique to prove results for a variety of open game theory problems.

12:40 – 1:50   **Luncheon** – Location to be announced

1:50 – 2:50   **Invited Address by Daphne Liu, CSU Los Angeles**
                        Lecture Hall Building – 151

From Graph Coloring to the Lonely Runner Conjecture:
A Journey of Discovery

Suppose k runners are running laps on a circular field of circumference $m,$ say 400 meters. Each runner runs at a constant speed, and all speeds are distinct. The *lonely runner conjecture* asserts that for each runner there exists some moment at which he or she becomes lonely; that is, at distance at least m/k apart from each of the other runners [Wills 1952, Goddyn 1998]. While it has been confirmed only for $k \leq 7$, the parameter involved in the conjecture has been investigated extensively by researchers in number theory, geometry, and graph theory. In this talk, we introduce amazing connections between this parameter and graph coloring parameters for distance graphs, a notion motivated by the plane coloring problem and introduced by Eggleton, Erdős, and Skilton in the mid-1980s. We also see recent results on how these relations are utilized to solve open problems. In addition, the speaker will share her experience of conducting successful undergraduate and graduate research projects on this topic.

2:50 – 3:20   **Refreshments** – Lecture Hall Building Courtyard

2:50 – 3:20   **Graduate Student C.V. Retrieval** – Pick up your reviewed c.v. and
                        job application materials from the table in the Lecture Hall Courtyard.
                        (See page 8 for details.)

3:20 – 4:20   **Invited Address by Matt DeLong, Taylor University**
                        Lecture Hall Building – 151

Variations on Farmer Ted's Chicken Coop:
The Story of a Natural Undergraduate Research Problem

The problem of minimizing the perimeter of a rectangle of a given area is familiar to all introductory calculus students. Its solution was not at all natural, however, to Farmer Ted, a fictitious character introduced by Greg Martin in a 1999 *Mathematics Magazine* article, who required integer solutions to his farming needs. To help Farmer Ted build his coop, Martin's article defined and characterized what he called *almost-squares*. Two undergraduate students of mine, Alspaugh and Cooper, wrote follow-up

papers in the *Magazine*, in which they helped Farmer Ted by generalizing Martin's work to three dimensions and to weighted sides, respectively. In this talk I will share the mathematics of, as well as the story behind, these cute problems. I will also discuss some lessons learned from directing undergraduate research, and tell you why my Erdős number is not exactly four.

Call for Contributed Papers

Faculty and students (undergraduate and graduate) 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 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, then graduate students, retirees, and full-time faculty in order of rank.

Submissions for all contributed papers should contain a title, an abstract (not to exceed one-half page in 12-point font and suitable for inclusion in the conference program), the desirable mathematical background of the audience, and any special presentation display needs. Each room will have a built-in projector for computers as well as a traditional overhead projector. If you require a 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 Steven Morics at steven_morics@redlands.edu

The submission **deadline** is **noon on Monday, October 1, 2012**.

About the Fall Meeting Speakers

Guershon Harel has been a Professor of Mathematics at the University of California, San Diego, since 2000. Prior to his tenure at UCSD he served for a decade as a faculty member at the Department of Mathematics at Purdue University. His research focuses on cognition and epistemology of mathematics and their application in mathematics curricula and teacher education. During the last two decades he has been working closely with teachers and schools and has developed a research-based conceptual framework (called DNR-based instruction in mathematics) for the learning and teaching of mathematics. The most central characteristic of DNR is that it puts the mathematical integrity of the content taught and the intellectual need of the student in the center of the instructional effort. ***Continued ...***

Sarah Eichhorn is the Assistant Vice Chair of Undergraduate Studies in Mathematics at the University of California, Irvine. She received her Ph.D. in Applied Mathematics from the University of Arizona in 2004. Her original research area was in dynamical systems applications to planetary science and geodesy; however, she has recently started dabbling in computational game theory due to the interesting, accessible undergraduate research projects in this field. Dr. Eichhorn currently has several NSF undergraduate training grants, which supported 40 undergraduate student researchers this past summer. Dr. Eichhorn has won several teaching awards including the MAA Alder Award for Distinguished Teaching in 2011.

Daphne Liu joined the California State University, Los Angeles, faculty in 1991 and is currently the graduate advisor for the mathematics department. She deeply enjoys teaching and research. Her research interests include graph theory and its relations to number theory and topology. Liu has received several teaching and research awards including the CSULA Outstanding Professor Award and the Innovative Teaching Award. With more than 40 published research articles, she was the principal investigator for two NSF multi-year research grants. Prior to coming to CSULA, Liu received her Ph.D. from the University of South Carolina, Columbia, and her B.S. from the National Central University, Taiwan, and held research and visiting scholar positions at the Academia Sinica, Taiwan.

Matt DeLong is a visiting professor in the Department of Mathematics at Harvey Mudd College for 2012-2013, while on sabbatical from his roles as Professor of Mathematics and Fellow of the Center for Teaching and Learning Excellence at Taylor University in Upland, Indiana. He was also recently named one of the Associate Directors of the MAA's Project NExT. Matt has a B.A. from Northwestern University and a Ph.D. from the University of Michigan. He was awarded the 2005 MAA Alder Award and the 2012 MAA Haimo Award. Both are awards for distinguished teaching.

More Fall Meeting Highlights

California State University, Long Beach
Saturday, October 13, 2012

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 Long Beach, 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 9:00 a.m.; they will be reviewed and ready for pick-up by 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 Grzegorczyk at ivona.grzegorczyk@csuci.edu

Great Books, Great Bargains at MAA Book Sale!

The 2012 Fall Meeting at Cal State Long Beach will include the ever-popular MAA Book Sale, run by Mike Hoffman and Dick Katz of Cal State Los Angeles. Book prices at the meeting will be about 10% less than the already discounted MAA member 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!

Edwin Buchman	Arthur P. Gittleman	Eugene C. Johnsen

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

Bernard W. Banks	Geoffrey J. Iverson	Leonard J. Schulman
John P. Boyd	Elliot M. Landaw	Robert L. Smazenka
Richard N. Cornez	Kim McInturff	Stephen J. Whitsitt
Erica L. Flapan	David R. Morrison	

These members will be recognized during the Business Meeting of our upcoming MAA Southern California-Nevada Section Fall Meeting Saturday, October 13 in Long Beach.

Pre-registration for Fall Meeting

California State University, Long Beach
Saturday, October 13, 2012

Participants can register online (using a credit card) via the link at the section website http://sections.maa.org/socalnv/. Online registration will be available from Monday, September 24, at 8 a.m., to **Tuesday, October 9, at 5 p.m.**

Participants also may register by mail by **Monday, October 8, 2012**. Either send the registration form on page 10 of this newsletter, or send your

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: $46.50
Non-member: $51.50
Student: $21.50

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 8, 2012.
Online registrations must be completed by Tuesday, October 9, at 5 p.m.

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

Fall Meeting Pre-Registration / Luncheon Reservation Form

California State University, Long Beach, Saturday, October 13, 2012

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	____ @ $46.50	____ @ $51.50	____ @ $21.50
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—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

Save these dates for future MAA national meetings!

Winter 2013	San Diego, CA	January 9-12
Summer 2013	Hartford, CT	August 1-3
Winter 2014	Baltimore, MD	January 15-18
Summer 2014	Portland, OR	August 7-9
Winter 2015	San Antonio, TX	January 10-13
Summer 2015	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

The Students' Column

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

Fall Meeting, Saturday, October 13, 2012

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.

Members of the Cal State San Bernardino Math Club attended the Spring 2012 MAA Southern California-Nevada Section Meeting at Cal State Fullerton. The faculty advisor for the Math Club is this year's Section Chair, Min-Lin Lo, third from left. Some Cal State San Bernardino students presented posters during the Student Poster Session, which you can read about below.

The Spring 2012 Student Poster Session

The Student Poster Session held at Cal State Fullerton 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: topology of the DNA, voting methods, celtic knots, audio signal processing, image inpainting, minimizing fuel consumption, detecting terrorist networks, cryptography, pertussis diagnostic tests, analysing chappel attendance trends and modeling cholera epidemics.

The Students' Column, *continued*

Theoretical topics included various aspects of graph theory, radio numbers, fixed point problems, finite groups, tesselations, wave equations, M&M sequences, calculus of variations, helicoids in a tri-twisted ambient space, Schläfli's cubic surface family … Different research projects in mathematics education focused on training gifted students, building foundations for pre-service teachers, using art as an aid in memorizing formulas, analysing Russian mathematical pedagogy, and using clocks in studying modular arithmetic in elementary algebra. Twelve posters (15 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, 40 students presented 32 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.

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/.

The Students' Column, *continued*

Joint Meetings in San Diego, January 9–12, 2013

The largest annual math conference in the U.S. – probably in the world – will be held right in our back yard in San Diego, January 9–12, 2013. The Joint Mathematics Meetings include 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. Poster proposals are due by October 26, 2012; visit http://forms.maa.org/r/studentposter/add.aspx to submit an abstract. Keep an eye out for activities of special interest to students planned for this meeting at http://jointmathematicsmeetings.org/meetings/national/jmm2013/2141_students The general meeting site is http://jointmathematicsmeetings.org/jmm

Yet Another Student Poster Session in San Diego, Saturday, April 20, 2013

Meanwhile, it's never too early to start thinking about presenting a poster at the 2013 Spring Meeting of the So Cal-NV Section of the MAA. This meeting will be held at the University of San Diego on Saturday, April 20. 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 the *Monthly* or other journals.

California Conference Calendar

Sat., Oct. 13, 2012	**MAA Southern California–Nevada Section Fall Meeting**, 9 a.m. – 4:20 p.m., California State University, Long Beach. See this Newsletter for details.
Fri.-Sun., Oct. 26-28	**History and Pedagogy of Mathematics (HPM) West Coast Meeting**, University of California, Berkeley. See http://www.hpm-americas.org/ for details.
March 16-17, 2013	**Association for Women in Mathematics (AWM) Research Symposium,** Santa Clara University. See https://sites.google.com/site/awmmath/awm-research-symposium-2013 for details.
Sat., April 20, 2013	**MAA Southern California–Nevada Spring Section Meeting**, approximately 9 a.m. – 4:00 p.m., University of San Diego. Watch http://sections.maa.org/socalnv/ for details.

Message from the MAA Southern California-Nevada Section Governor

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

My term as governor is nearing its end. In August 2012, I traveled to Madison, Wisconsin to attend my last MathFest Board of Governors (BOG) meeting. The final meeting will be at the JMM in San Diego in January 2013. As always the BOG met the day before the official start of MathFest. One fellow member of the Southern California-Nevada Section of the MAA also attended the BOG meeting. **Jackie Dewar**, Loyola Marymount University, started her 3-year term as Governor-at-Large for Teacher Education earlier this year.

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 BOG meeting.

- A year ago I reported that the Association temporarily has had to deal with repeated deficits. The Association had to be a bit more austere when it came to spending as revenue continued to decrease. One of the casualties of these measures was the lunch provided for the governors during the daylong BOG meeting. That policy was short-lived and this year we once again gathered for lunch. This was welcomed news for the governors as we value this opportunity to interact with a larger group of our colleagues than the ones sitting to our immediate left or right in the meeting room. The MAA is still running a deficit. At the meeting the BOG endorsed a plan for significant investments intended to substantially improve financial performance.

- For the fourth year in a row, a member of our section will be a recipient of the Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics. **Congratulations go to Francis Su**, Harvey Mudd College, for being bestowed this recognition, following Cindy Wyels (2012), Erica Flapan (2011) and Curtis Bennett (2010). The award will be presented to Francis at the Joint Prize Session at the JMM in San Diego, January 2013. **Congratulations also to Ann Watkins**, California State University Northridge, for being selected to give the Leitzel Lecture at MathFest 2013.

- The fact that a member of the Southern California-Nevada Section once again received the Haimo Award prompted one governor to ask about the geographical diversity in regard to the Haimo Award recipients. A motion was passed to have the Council on Prizes and Awards look into this issue.

Section Governor's Report, *continued*

- Please download a list of all MAA Prizes, Awards, and Lectureships from http://sections.maa.org/mddcva/OtherDocuments/MAAAwardsPosterJuly2012.pdf. If you know of a colleague you believe would be a good candidate for any of these honors, check out the MAA website (http://www.maa.org) for the nominating process for that particular award.

- During the executive session of the BOG meeting, in addition to approving the recommendations for various prizes and awards, the governors elected Hortensia Soto-Johnson, University of Northern Colorado, Greeley, as the new Associate Treasurer. We also approved the appointments of Brian Hopkins, Saint Peter's College, as the editor-elect of the *College Mathematics Journal* and David Richeson, Dickinson College, as the editor-elect of *Math Horizons* magazine. Both appointments start January 1, 2013.

- The Association for Women in Sciences (AWIS) and MAA Joint Task Force on Prizes and Awards, chaired by Betty Mayfield, developed the document, "Avoiding Implicit Bias: Guidelines for MAA Selection Committees," available at http://sections.maa.org/avoiding_bias.pdf. This document was approved by the BOG at the August meeting. Sections are encouraged to follow these guidelines when making selections for section awards.

- A recommendation from the AWIS-MAA Task Force on Prizes and Awards regarding double-blind reviewing created a lively discussion at the January 2012 BOG meeting and again at this meeting. In August the following motion was passed. *All print journals of the MAA will move to a system of doubly-masked review, under which editors make a good-faith effort to see that authors' names and affiliations are not explicitly present in manuscripts sent for review. Editors may set their own policies about how authors refer to their own work. Editors shall be given broad discretion to make exceptions. Current editors will not be required to change existing practice. The policy does not apply to online-only journals.*

If you have questions or concerns that should be brought to the BOG, please feel free to contact me via email at magnhild.lien@csun.edu or by phone at 818-677-7789, or catch me at the section meetings.

MathFest in Madison, Wisconsin, was a great meeting even with the walks to and from the Monona Terrace in the heat and humidity. As always there were many activities to choose from; invited addresses, contributed paper sessions, panels, and mini-courses, as well as recreational activities including a 5K run on Saturday morning. The MAA-AMS Joint Invited Address by David Mumford, Brown University, was a tantalizing talk on "The Synergy of Pure and Applied Math, of the Abstract and the Concrete." One of the MAA Invited addresses was given by Robert Ghrist, University of Pennsylvania, who

gave a great visual talk on "Putting Topology to Work." This year's Leitzel Lecturer was Sylvia Bozeman, Spelman College, who gave a stimulating talk on "The Many Faces of Mentoring."

Susan Martonosi, left, and Kathryn Leonard, far right, wait onstage to receive their Alder Teaching Awards during the Prizes and Awards Session at MathFest. That's Nathan Carter and former Southern California Section member Dan Kalman sitting between Martonosi and Leonard. (Photo by Magnhild Lien.)

At the Prizes and Awards Ceremony, two section members, **Kathryn Leonard**, California State University, Channel Islands, and **Susan Martonosi**, Harvey Mudd College, were presented with Henry L. Alder Awards for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member. They both gave inspiring presentations, " I Failed and No One Died" by Kathryn and "An ORnate ORation on OR" by Susan at the Alder Awards Session.

News from the Campuses
of the Southern California-Nevada Section

At **California State University, Channel Islands**, **Geoff Buhl** and **Kathryn Leonard** were promoted to Associate Professor and received tenure. Leonard is a winner of the 2012 MAA Alder Award for outstanding teaching by a beginning faculty member.

Susan Martonosi of **Harvey Mudd College** is a winner of the 2012 MAA Alder Award for outstanding teaching by a beginning faculty member. **Francis Su** is the winner of our 2012 MAA Section Award for Distinguished Teaching and also has been named one of three winners of the national 2013 MAA Franklin and Deborah Tepper Haimo Award for Distinguished Teaching.

Professor of Mathematics **Alfonso Castro** has been awarded a Simons Foundation Collaboration Grant for Mathematicians. Mississippi State University and the University of Alabama have dedicated their upcoming 9th Differential Equations & Computational Simulations Conference to Castro in celebration of his outstanding contributions to differential equations research.

Matt DeLong joins Harvey Mudd College as a Visiting Professor for the 2012-2013 academic year. Matt was a recipient of the 2012 MAA Haimo Award. **Jacqueline Dresch** joins the math department as a Postdoctoral Fellow. **Art Benjamin** is on sabbatical at Oxford University for the 2012-2013 academic year.
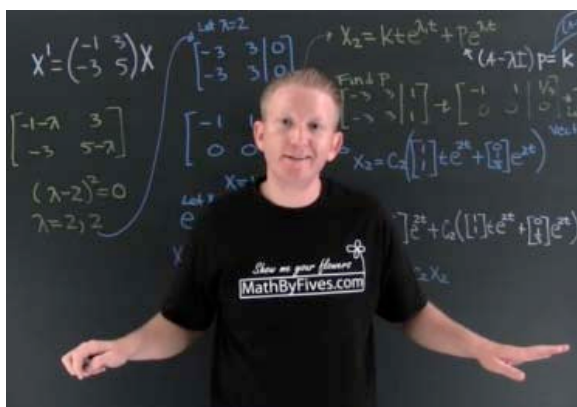
News of the Section, *continued*

The Department of Mathematics, Physics, and Computer Science at the **University of La Verne** is pleased to welcome two new faculty members beginning Fall, 2012.

Gail Tang, Assistant Professor of Mathematics, received her D.A. in Mathematics from the University of Illinois at Chicago in 2012, with a concentration in Mathematics Education. Her research is in the area of understanding how students perceive certain difficult mathematical concepts, the impact this has on their ability to work with the concepts, and how relevant pedagogies might be transformed to be more effective. Dr. Tang comes with teaching experience at both the university and middle grade levels, where she has focused specifically on the needs of Latino and African American students as well as other underrepresented populations, and brings a passion for social justice issues, particularly in relation to mathematics.

Frank Ives, Instructor of Mathematics, received his M.S. in Mathematics at Cal Poly Pomona in 2006. Frank's expertise lies in transforming methodologies in math classes for students who are underprepared for college mathematics, utilizing hundreds of dynamic videos of his own creation (mathbyfives on YouTube) and flipping classes to achieve results and connect with students in ways that far surpass the results achieved in a traditional classroom environment. He is also the co-principal investigator on a new $45,000 grant from the Ahmanson Foundation to develop and implement a new Math Emporium for use in conjunction with lower level math course transformation.

At Loyola Marymount University, Blake Mellor was promoted to full professor.

Serge Ballif (right) is a new mathematics professor in the Department of Physical and Life Sciences at Nevada State College in Henderson, NV. He received a B.S. degree in Mathematics with an emphasis in actuarial science from Utah State University in 2004 and an M.S. in mathematics from Utah State in 2007. He recently completed a Ph.D. in mathematics at the Pennsylvania State University. His research interests include finite fields, the partial latin square extension problem, and orthogonal colorings of graphs. Dr. Ballif is an enthusiastic teacher, and he is thrilled to be working in a warmer climate. He joins Dr. **Aaron Wong**, our other permanent mathematics faculty member, and together they are building a great program.

News of the Section, *continued*

After 32 years of tireless service to her students, Dr. **Carol Adjemian** (left) retired from **Pepperdine University** at the conclusion of the school year in spring 2012. Carol earned her Ph.D. in applied mathematics from UCLA and worked in industry prior to joining Pepperdine in 1980. During her time at Pepperdine, Carol also served our MAA Section as both president and governor.

While Carol is impossible to replace, we are very happy to announce the addition to our faculty this fall of **Courtney Davis** (right). Courtney earned her Ph.D. in mathematics at the University of Utah and most recently was a post-doc at the Center for Scientific Computation and Mathematical Modeling at the University of Maryland. Courtney's research expertise is in mathematical biology, specifically immunology.

Our best wishes to Carol in her retirement and to Courtney at the beginning of a productive and happy career.

Bruce Yoshiwara of **Pierce College**, **Joe Fiedler** of **Cal State Bakersfield**, and **Heather Dallas** of **UCLA** have been appointed by the California Department of Education (CDE) to the California Mathematics Curriculum Framework Evaluation and Criteria Committee (Math CFCC). This committee's task is to align the California K-12 standards (a.k.a. the Framework) with the Common Core State Standards. According to the CDE, "CFCC members include single-subject and multi-subject credentialed teachers; college and university personnel representing academic departments and schools of education; and representatives of citizen groups, educational organizations, industry, or other entities."

The **University of San Diego** Mathematics and Computer Science Department welcomes a new Assistant Professor, **Michael Shulman**. Professor Shulman will join the department after a year at the Institute for Advanced Study in Princeton.

Professor **Bill Jacob** of the **University of California - Santa Barbara** (UCSB) has been appointed to a two-year term on the UC Systemwide Academic Senate as Vice Chair next year and then Chair the subsequent year. This service includes an *ex officio* seat on the UC Board of Regents.

Dr. **Xu Yang** has joined the UCSB Mathematics Department as our newest Assistant Professor. Dr. Yang did his PhD in applied mathematics at the University of Wisconsin - Madison and just finished a postdoc at NYU's prestigious Courant Institute. His research interests include applied analysis and numerical computation of scientific problems arising from geophysical fluids, seismology, materials science, and biology. **Erik Brandt**, a 2012 PhD in theoretical physics at the Royal Institute of

Technology in Stockholm, Sweden, will come to UCSB as the Hiro and Masako Kozato Postdoctoral Fellow in Quantitative Systems Biology. **Jordan Schettler**, a 2012 University of Arizona PhD in number theory, will be a Visiting Assistant Professor.

       Jeffrey Stopple received the UCSB Chancellor's Award for Excellence in Undergraduate Research in recognition of his outstanding mentorship of undergraduate researchers. Professor **Larry Gerstein** retired on July 1, 2012, after more than 40 years of UC service. He will be greatly missed. As a former student of Larry's wrote: "Professor Gerstein is a fabulous instructor. He once said 'Algebra is like an old friend' to him. Well, he acquainted me so well with the material in this course that I feel like I've known his old friends forever."

       By decree of the President of Romania, on July 7, 2011, UCSB Professor **Mihai Putinar** was awarded the National Order of Merit, with the rank of Knight. This is one of the three highest national distinctions with which an individual or an institution can be "recognized for exceptional contributions to the Romanian state and people, for heroic military acts or for outstanding accomplishments in professional activity." The presidential decree was issued on the occasion of the 7th Congress of Romanian Mathematicians, "as a sign of high appreciation for all the work and efforts Dr. Putinar put in promoting, to the highest levels of scientific life, the Romanian school of mathematics."

       UCSB Mathematics Department faculty members have recently been awarded several large grants, including two different prestigious NSF Solar Energy Initiative grants. Professor **Hector Ceniceros** is co-PI on a $980K grant along with faculty from Materials and Chemistry. Professor **Carlos Garcia-Cervera** is co-PI on a $1.35M grant along with faculty from Chemistry as well as CSU Northridge Physics. The Solar Energy Initiative addresses the scientific challenges of highly efficient harvesting, conversion, and storage of solar energy. The intent is to encourage new collaborations in which the mathematical sciences are linked in a synergistic way with the chemical and materials sciences to develop novel, potentially transformative approaches. Carlos is also co-PI on an NSF Major Research Instrumentation grant, which will bring to UCSB's Center for Scientific Computing (CSC) a new, state-of-the-art, high-performance, $1 million computing cluster. The new Hewlett-Packard cluster has the computing power of 12 TeraFLOPS, or 1 trillion floating point operations per second. The CSC has provided more than 3.7 million hours of computer time to UCSB researchers over the last six months, for research projects in such diverse areas as Alzheimer's disease, earthquake modeling, and fuel cell design. This figure is expected to more than double with the new computing system.

       Professor **Paul Atzberger** is a co-PI on a new $1M grant awarded by the Keck Foundation: "Nanoelectrofluidic Systems: New Tools for Nanoparticle Analysis." Professors **Dai, Cooper, Long, Scharlemann**, and **Wei** are co-PIs on a $1.7M five year Research Training Grant (RTG) in Topology and Geometry. RTGs support activities of a group of faculty who have a common research interest, with the aim to increase the number of well-prepared U.S. citizens, nationals, and permanent residents who pursue careers in the mathematical sciences and in other NSF-supported disciplines.

News of the Section, *continued*

The **University of Nevada, Las Vegas**, Mathematics Department is surviving despite huge budget cuts over the past three years. Yet, the Department has creatively increased faculty travel allowances and incrementally upgraded all faculty and graduate assistant computers, including our statistics and computational labs. A new mathematics building is on the horizon: For nearly a year, Department Chair **Derrick Dubose** and University System Regent **Jack Schofield** have been working towards community support for a Mathematical Sciences Building. The proposed 84,000 square foot building is estimated to cost 40 million dollars. The entire focus is on potential donors. It is inspiring to see an 89-year old Regent working for Math!

UNLV hosted the Eighth International Conference on Scientific Computing and Applications, with over 170 participants from fourteen countries, April 1-4, 2012. This fall, the Graduate Program has 23 PhD and 40 MS students, including nine working in three joint programs with Electrical Engineering and Economics. There are active Graduate Seminars in Statistics, PDEs, Computational Math, and Set Theory. **Yanan Jiang** finished his Ph.D. in Financial Mathematics in May 2012 under the joint supervision of Drs. **C. H. Ho** and **Michael Marcozzi**. He is the sixth student to earn the Ph.D. in Financial Mathematics since the program started in 2005.
Dr. **Kaushik Ghosh** received tenure and was promoted to Associate Professor in July of 2012. Professor Emeritus **Michael Golberg** was one of six Nevadans to receive the 2012 **Distinguished Nevadans Award**. Unfortunately, he received the award posthumously. Finally, **Satish C. Bhatnagar** has published his book of philosophical *Reflections*: *Epsilons and Deltas of Life: Everyday Stories*, Volume I, Trafford Publishing, June 2012.

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

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

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 2013-14 is November 15, 2012. See curm.byu.edu for more information.

California Conference Calendar

Late-breaking conference announcement!

See page 13 of this newsletter for four other conferences.

Sat., Oct. 27, 2012   **Women in Mathematics Symposium**
University of Southern California (USC)
Keynote speaker: Erica Flapan, Pomona College
http://pages.pomona.edu/~kjs04747/WIMS_Oct2012/WIMS.html

Call for Nominations for Section Teaching Award

Kathryn Leonard, Section Secretary
Michael Krebs, Section Vice-Chair

Preliminary nominations for the 22nd 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/) and a 1-2 page description of the candidate's qualities and teaching successes. From the initial nominees, the selection committee will choose two to three semi-finalists. 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 2013 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 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 considered for the award. **Initial application deadline is Thursday, November 1, 2012.**

Questions? Contact Kathryn Leonard at kathryn.leonard@csuci.edu