



Southern California-Nevada Section Mathematical Association of America NEWSLETTER

Volume XLVIII, Number 2

February 2007

Dates to Remember:

Saturday, March 3
Spring Meeting
at Pomona College

Pre-registration
deadlines:

Mail-in: Monday,
Feb. 26, 2007

Online: Tuesday,
Feb. 27, 5 p.m.

Student Poster
Session deadline:
Tuesday, Feb. 20

Section NExT
deadline:
Friday, Feb. 23

Aug. 3-5, 2007
MathFest in
San Jose, CA

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

Southern California-Nevada Section to Meet at Pomona College

Rebecca Head, Section Chair

Fall 2006 Meeting. California State University, Long Beach was the perfect location for the activities of the day. Philip Straffin, of Beloit College, gave the first Invited Address titled, "Sona, Kolam and Celtic Knots: The Geometry of Mirror Curves." Phil demonstrated the art of story-telling and simultaneous curve drawing, then went on to explain the mathematical structure of the Tshokwe sona designs and the designs of Celtic knots. It is apparent that Professor Straffin's students have learned from him. He shared some beautiful student-created designs. The Contributed Paper Session had twenty-three participants and fifteen papers presented during three concurrent sessions. I had the pleasure of moderating Session III, which included such topics as the drama of Pythagoras Day, using digital images as linear algebra examples, probability in finite groups, and statistical methods on aggregated data. The sessions were polished and gener-

Spring 2007 Meeting. The spring meeting will take place at Pomona College on Saturday, March 3. Pomona College was established in 1887, and is the founding member of The Claremont Colleges. Claremont is a charming town just 35 miles east of Los Angeles. Bring your colleagues and students to this meeting at one of the premier liberal arts colleges in America!

Several captivating speakers are scheduled for the spring meeting. Ami Radunskaya will open the meeting with her talk on "Noisy, Self limiting Growth." Next on the schedule is the ever-popular Student Poster Session.

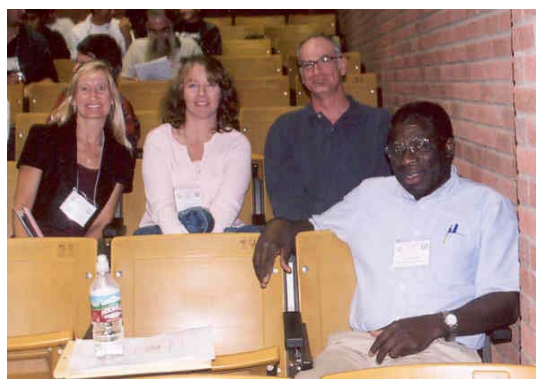
The afternoon speakers include Stan Wagon, who will present some surprises from the 100-digit challenge, and Michael Starbird, who will show how to make math fascinating for everyone. Finally, we will have a Math Digital Library presentation in which Robert Baker and Gizem Karaali will show us how to find classroom lessons, activities, projects, and mathlets online.

Inside this issue:

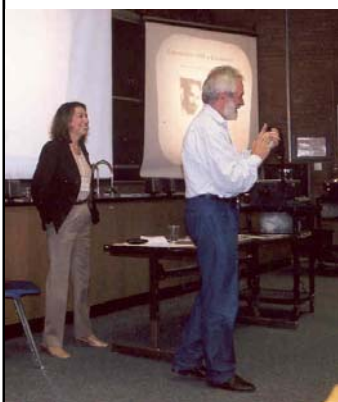
The Students' Column	2
News from New Orleans	3
Spring Meeting	
Program	4-5
Map and Directions	5
Spring Meeting Registration	
Information	7
Section Officers Ballot	8

ated interesting discussion. The gourmet luncheon and brief business meeting were followed by another Invited Address. Stanley Benkoski, of West Valley College, gave his talk titled, "Stranger in a Strange Land: Twenty-Five Years of Applied Mathematics." I was especially fascinated by his description of the process used to find the naval submarine, *Scorpion*.

Asuman Aksoy brought the meeting to a close with her energetic description of how "Metric Trees are Everywhere." Thank you to our Program Chair and Program Vice Chairs: George Jennings, Florence Newberger, and Perla Myers, for an impressive fall meeting.



Becky Head, Donna Starr, Rick Brantley, and Thomas Mieh from Bakersfield College enjoy the 2006 Fall Meeting at Cal State Long Beach.



Mario Martelli of Claremont-McKenna College introduces his colleague, Asuman Aksoy, winner of the Section's 2006 Distinguished Teaching Award, at the 2006 Fall Meeting.

Thank You. I am in the last stretch of my term as Section Chair for 2006-07. The time went by quickly. I enjoyed working with all of the past and present board members, made many new acquaintances, and learned a lot! The newsletter contains a ballot so that you can cast your vote for new section officers. As you are casting your vote, consider that you may be nominated in the future. Your experience as a board member will be rewarding and fulfilling. When you see the board members at the meetings, thank them for their energy and time.



The Students' Column

Cynthia Wyels, Student Chapters Coordinator

Plan to attend the Spring 2007 Meeting March 3 at Pomona College!

Get a group of students and faculty together from your school and attend the Spring 2007 Meeting – where else can you hear outstanding speakers, interact with enthusiastic poster presenters, and have fun with mathematics all day? Better yet: present a poster yourself! See the details below. Student registration for the Spring Meeting Saturday, April 8, 2006, at CSU San Bernardino is only \$8, and lunch for students is only \$12. See the registration form on page 7 of this newsletter. Presenting a poster earns you free registration and lunch at the meeting, as well as a free one-year MAA membership and journal subscription.

Student Poster Session at Spring 2007 Meeting

Begin preparing a poster NOW for the Spring Meeting at Pomona College – abstracts are due February 20. The Student Poster Session has become a highlight of the Spring Meetings. Posters may feature the results of any individual or group mathematics project, including:

- Results of honors, senior, or other 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 *American Mathematical Monthly* or other journals.

Past poster topics have included epidemiological modeling, scheduling issues, engineering problems, mathematical perspectives on art, and investigations in combinatorics, number theory, algebra, topology, and mathematics education. If you don't already have a project in mind, ask one of your professors for a project to present. Besides the challenge of working on the project, benefits to you include:

- the opportunity to share your work with other students and with mathematicians from both academia and industry in a friendly environment;
- free meeting registration and free lunch;
- free 1-year MAA membership, including a subscription to an MAA journal (or a free MAA book if you are already an MAA member);
- the chance to win awards;
- a great resume entry.

To submit a poster, send: 1) the name(s) of the poster creator(s), 2) the title, 3) a brief abstract, 4) the name of your institution, 5) your class year (frosh, soph, junior, senior, masters student), 6) the name of your advisor(s), and 7) the e-mail address of the presenter who will receive and pass on communications. Submission deadline: **Tuesday, February 20, 2007**. Electronic submission preferred. Put "student poster" somewhere in the subject header of your e-mail. Send to Prof. Cindy Wyels via cindy.wyels@csuci.edu or (via mail) to Dr.

Wyels, Mathematics, CSU Channel Islands, One University Drive, Camarillo, CA 93012.

Southern California – Nevada Students Present Posters in New Orleans

A record-breaking 25 students attending undergraduate institutions in Southern California and Nevada traveled to New Orleans for the 2007 Joint Mathematics Meetings and presented posters in the national MAA Undergraduate Poster Session Jan. 7. Congratulations to all the So Cal–Nevada students and their advisors: we hope to see your work at Pomona College on March 3! (Prize winners are indicated with an asterisk.)

Taijiro I Bernstein, CSU San Bernardino
Victor H. Camacho, Harvey Mudd College
Jay Daigle, Pomona College
Veselka Danova, Cal Poly Pomona
Christopher Duran, CSU San Bernardino
Christina M. Fernandez, CSU Channel Islands
America Flores, CSU Channel Islands
M. Heald, Harvey Mudd College
*Marie Jameson, Harvey Mudd College
*Masanori Koyama, Harvey Mudd College
Michael Martinez, Wabash College and CSU Fullerton
*Lisa Morales, Cal Poly Pomona/ GVSU REU
Estephan Adam Navas, UC Riverside
Juan Pablo Ortiz, California Lutheran University
Hernan Oscco, Cal Poly Pomona
Mary Therese Z. Padberg, Loyola Marymount University
Sean Saint Michael Plott, Harvey Mudd College
*Jacquelyn Rische, Whittier College
*Julie Siloti, Pomona College
*Ruffin Swain, CSU Dominguez Hills
Johanna Waiyee Tam, Cal Poly Pomona
George Tucker, Harvey Mudd College
Lynne Westfahl, Claremont McKenna College
Kamuela E. Yong, Loyola Marymount University
Laura K. Zirbel, Loyola Marymount University

For the complete list of prize winners together with the titles of their projects, their co-authors, and their advisors, see <http://www.maa.org/students/undergrad/07winners.html>

And yet more mathematics...

PCUMC, the Pacific Coast Undergraduate Mathematics Conference, will be held at Pepperdine University on March 31st, 2007. All levels of students interested in mathematics are invited to give talks; invited speakers and two panels round out the program. For more information, visit: <http://www.lclark.edu/~ncameron/PCUMC2/PCUMC.htm>

Finally, there are likely to be seminars, colloquia, and student presentations occurring right on your own campus: find out where notices are posted, listen to those in-class announcements, and ask your faculty what's going on.



News of the Southern California-Nevada Section

Governor's Report

Art Benjamin, Section Governor

This is my last report to you as Governor of this section. Soon you will be electing a new governor, Magnhild Lien or Ken Millett, either of whom will do an excellent job representing our section.

Much has happened over the last three years. We held our first section meeting in Las Vegas, which was a joyous two-day affair. We have put our newsletter online, which results in a tremendous savings of time and money for the section. With this savings, our section has been able to bring in more out of town speakers for its meetings (and for our active Section NExT members).



We selected three outstanding members for our Distinguished Teaching Award, and two of our members received national recognition for their teaching. Our meetings have been very well attended and we have one of the most successful student poster sessions of any section in the country.

On the national level, MAA is in a very strong financial position. Our books continue to do very well. (News flash: MAA has just selected a new Director of Publications for Journals and Communications, Ivars Peterson, a prolific mathematics author and columnist!) Thanks to a gift from Paul and Virginia Halmos, MAA has a brand new Carriage House in Washington, which will host many exciting mathematics events, and bring in more revenue to our organization. Speaking of national meetings, this summer's MathFest will take place in San Jose August 3-5, and the next joint meetings will be in San Diego, January 6-9. I hope to see many of you there!

More dates for future MAA national meetings:

Summer 2008	Madison, WI	July 31-Aug. 2
Winter 2009	Washington, DC	January 7-10

Southern California-Nevada Mathematicians Are Big Presence in Big Easy

Janet Beery, Newsletter Editor

MAA Southern California-Nevada Section members won awards, conducted minicourses, organized sessions, and gave talks at the Joint Mathematics Meetings held January 5-8, 2007, in New Orleans. **Jennifer Quinn** (pictured at left with **Art Benjamin**), formerly of Occidental College and now executive director of the Association for Women in Mathematics, was one of three winners of this year's MAA Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching. Jenny won the Southern California-Nevada Section Distinguished Teaching Award in 2001. She and Art Benjamin (of Harvey Mudd College) led an MAA minicourse titled "Combinatorially Thinking". Jenny and Art are about to complete their fifth and final year of editing the MAA's *Math Horizons* magazine. Art also is finishing his final year of service as MAA Southern California-Nevada Section Governor, but will keep busy during 2007 as the MAA George Polya Lecturer.

Curt Bennett and **Jackie Dewar** of Loyola Marymount University conducted the MAA minicourse, "A Beginner's Guide to the Scholarship of Teaching and Learning Mathematics" and organized an MAA Contributed Paper Session on the same topic. **Donald Saari** of UC Irvine led a minicourse on "Mathematics and Geometry of Voting" and **Patricia Hale** of Cal Poly Pomona helped organize an MAA Paper Session titled "Building Diversity in Advanced Mathematics: Models that Work". **Stacy Langton** of the University of San Diego was a presenter during the two-day MAA Short Course on Leonhard Euler held just before the meetings began and **Patti Hunter** of Westmont College helped organize an AMS-MAA Special Session on History of Mathematics.

Finally, **Jim Hoste** of Pitzer College organized a panel discussion on "Katrina and Its Aftermath: Institutional Survival in New Orleans since the Storm" that included reports from four universities in New Orleans.

Please see page 9 for more News of the Section.

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!

Samuel I. Altwerger, Laguna Woods
Harvey Cohn, Laguna Woods
Ronald L. Graham, UC San Diego
Billy F. Hobbs, San Diego
Tung-Po Lin, CSU Northridge
Joseph M. Moser, San Diego

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

Alice C. Beckenbach, Hamilton, NY
Richard H. Elderkin, Pomona College

Mark Finkelstein, UC Irvine
Jan A. Grzesik, Valley Village
David Haberman, La Jolla
Joseph D. Hogg, Jr., Los Angeles
Joan T. Hallett, CSU San Bernardino
Don L. Hancock, Pepperdine University
Kristiana Odencrantz, Van Nuys
Linda M. Penas, UC Riverside
Paul Rejto, Carlsbad
Niles D. Ritter, Long Beach
Doris V. Schoon, Anaheim
Guy B. Shaw, Los Angeles
Virginia Stover, University of San Diego
Kathie A. Yoder, Malibu
Eugene R. Rodemich, Flintridge



Southern California-Nevada Section of the Mathematical Association of America

Spring 2007 Meeting Schedule

Saturday, March 3, Smith Campus Center, Pomona College, Claremont

- 8:15-noon **Registration**—Smith Campus Center, Southwest Entrance
- 8:15-10:30 **Refreshments**—Smith Campus Center, Southwest Entrance
- 8:30-2:30 **MAA Book Sale**—Smith Campus Center, Rose Hills Theater Lobby
Organized by Richard Katz, Michael Hoffman, Cal State Los Angeles
- 9:00-10:00 **Invited Address by Ami Radunskaya**—Rose Hills Theater, Room 15
Pomona College

Noisy, Self-limiting Growth

Many biological and physiological processes involve self-regulating mechanisms that prevent too much growth while ensuring against extinction: the rate of growth is somewhat random ("noisy"), but the distribution depends on the current state of the system. Cancer growth and neurological control mechanisms are just a few examples. In finance, as well, markets self-regulate since people want to "buy low" and "sell high". Some questions that we'd like to answer are: does the system have a well-defined average? How does this compare to the long-term behavior of the deterministic (not random) system? What can we say about the distribution of "survival times", i.e. the distribution of times until the system reaches a particular value? In this talk we will look at a simple example of a noisy, discrete dynamical system with "parametric noise" and explore ways to answer these questions analytically.

- 10:00-10:15 **Business Meeting**—Rose Hills Theater, Room 15
Presentation of Section Distinguished Teaching Award
Recognition of 25- and 50-year MAA members
- 10:20-11:25 **Student Poster Session**—Smith Campus Center Courtyard
Organized by Cynthia Wyels, California State University, Channel Islands
- 11:30-12:45 **Luncheon**—Edmunds Ballroom, Room 155, Smith Campus Center
- 12:55-1:55 **Invited Address by Stan Wagon**—Edmunds Ballroom, Room 155
Macalester College, St. Paul, Minnesota

Competitive Digit-Hunting: Surprises from the SIAM 100-Digit Challenge

In 2002, N. Trefethen and SIAM sponsored a world-wide contest that required computing 10 digits for each of 10 real numbers defined in various elementary ways, such as the value of an integral or the value of a parameter optimizing a certain function. Ninety-four teams entered and 20 of them achieved perfect scores of 100 digits. There were many surprises in the submissions, both in terms of the algorithms used and the results. Some traditional numerical algorithms were used, but symbolic computation also played a big role in the results. The talk will present some of the more unusual ways to solve the problems and discuss some surprises in the results as well.

- 1:55-2:10 **Refreshments**—Smith Campus Center, Southwest Entrance

Pre-register!

Complete the registration form on page 7 and send it with payment by **Monday, Feb. 26**, to:

Ernie Solheid
Dept. of
Mathematics
CSU Fullerton
800 N. State College
Blvd. Fullerton, CA
92834

Or, register online at the section website
www.maa.org/socal
by **Tues., Feb. 27**,
5 p.m.

**MAA Southern California-Nevada Spring 2007 Meeting Program**—continued from page 4

2:10-3:10 **Invited Address by Michael Starbird**—Rose Hills Theater, Room 15
University of Texas, Austin

Math for Most People: What, Why, and How

Mathematical thinking has produced some of the greatest triumphs of human thought and is full of creativity, intrigue, and imagination. Most students and adults who are not technically oriented have an impression about mathematics, but ‘creative,’ ‘intriguing,’ and ‘imaginative’ are not the adjectives most use to convey that impression. So our delightful challenge is to make mathematical ideas accessible, fascinating, and inspirational to everyone.

3:20-4:20 **MAA Math DL Workshop**—Rose Hills Theater, Room 15
Presented by Robert Baker, University Senior High School, Los Angeles,
and Gizem Karaali, Pomona College

MAA Math Digital Library and Math Gateway Workshop

Although Google will find tens of thousands of hits for any topic we want, most are of no use. We will explore two NSF-sponsored portals, the Mathematical Sciences Digital Library and Math Gateway, managed by the Mathematical Association of America (MAA), that concentrate on dependable resources. We hope there will be ample time for you to play with these resources on your own.

Directions to Pomona College

Take Interstate 10 to Indian Hill Boulevard, Exit 47. Exit at Indian Hill Boulevard, drive north about one mile and turn right onto 4th Street (one block north of Bonita Avenue). Proceed on 4th Street past College Avenue onto campus. At the end of 4th Street, turn left into the parking lot east of Bridges Auditorium. You may park anywhere in this lot.

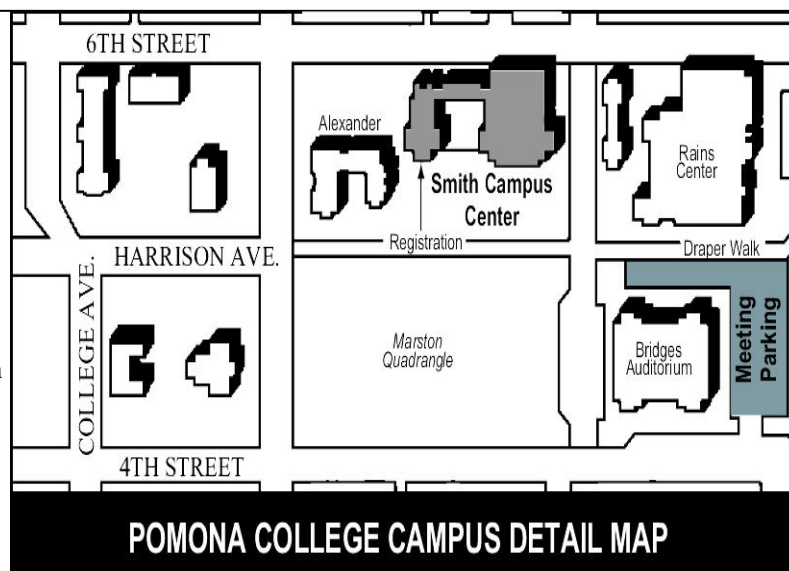
For those who would prefer to travel by rail, the Claremont Metrolink station is a few blocks from campus, an easy walk, at 200 W. 1st Street.

Registration and all programs are in the Smith Campus Center, 170 East 6th Street, Claremont, a block east of College Avenue. Smith Campus Center is north and west of Bridges Auditorium, along the east-west walkway north of the auditorium. The registration desk is at the southwest entrance to Smith Campus Center.

For more maps, see the campus website at
<http://www.pomona.edu/Welcome/ExplorePomona/HowToGetHere.shtml>

Where to eat: Kinsmith Fountain, a casual campus eatery in the Smith Campus Center, will be open for lunch (for those who do not purchase the luncheon).

Where to sleep: The Doubletree Hotel Claremont, 555 West Foothill Blvd, Claremont, is a few miles from campus. Telephone: (909) 626-2411. Website:
<http://doubletree.hilton.com/en/dt/hotels/index.jhtml?ctyhocn=ONTCLDT>

**Attention New Faculty Members!****Section NExT Wants You for
Its Spring Meeting Activities!**

The Southern California-Nevada Section NExT (New Experiences in Teaching) will run a parallel program of activities for its members at the Spring Meeting. If you are within the first three years of beginning full-time employment at the community college, college, or university level, please apply to join Section NExT and participate in its Spring Meeting activities **by Friday, February 23**. See page 8 for more information and application instructions.



Exciting Line-up of Speakers to Present at MAA Southern California-Nevada Section Meeting at Pomona College

The Spring Meeting of the Southern California-Nevada Section of the MAA will feature three exciting speakers, applied mathematician and “techno-clectic” cellist Ami Radunskaya of Pomona College, *Mathematica* expert and extreme skier Stan Wagon of Macalester College, and master teacher and super racquets champion Michael Starbird of the University of Texas. The meeting also will feature the Student Poster Session, organized by Cynthia Wyels of California State University, Channel Islands; along with a workshop on using the MAA’s Mathematics Digital Library and Mathematics Gateway presented by Robert Baker of University Senior High School and Gizem Karaali of Pomona College. The MAA Book Sale, offered throughout the day by Richard Katz and Michael Hoffman of Cal State Los Angeles, will have a larger-than-usual selection of new MAA books, along with almost all of the other titles in the MAA booklist. Even the Business Meeting promises to be exciting, with the highly anticipated presentation of the 2007 Section Distinguished Teaching Award and recognition of our section’s 25- and 50-year MAA members. The Southern California-Nevada Section NEXt (New Experiences in Teaching) will run a parallel program of activities for its members at the Spring Meeting; new faculty members who wish to participate should apply by Friday, February 23 (see page 8 for instructions). See you at Pomona College!

Spring Meeting Speakers and Presenters

Ami Radunskaya earned her B.A. from UC Berkeley and her Ph.D. from Stanford University, and currently is professor of mathematics at Pomona College. Her research interests include dynamical systems, ergodic theory, and stochastic processes. She recently has published a series of papers with colleague Lisette dePillis of Harvey Mudd College on mathematical models of tumor growth and immunotherapy. In December of 2005, she co-organized (with dePillis and Charles Wiseman) a conference on “Modeling Cancer Progression and Immunotherapy” at the American Institute of Mathematics Research Conference Center in Palo Alto. Radunskaya teaches a course in Mathematical and Computational Methods for the Life Sciences and, with dePillis, has written teaching modules on “Modeling Tumor-immune Interactions” and “Fourier Transforms, Fourier Series, and the FFT”.

Although her degrees are in mathematics, Radunskaya is an accomplished cellist and composer who has been a member of the Oakland Symphony and of the “techno-clectic” new music groups Arch Ensemble for Experimental Music and



the Muse and the Fuse. Her interest in connections between mathematics and music has resulted in such projects as “Dangerous Passions”, an interactive musical composition in which a cellist and a computer play a duet based on a chaotic dynamical system.

Stan Wagon was born in Montreal, educated at McGill and Dartmouth, and is now professor of mathematics at Macalester College in St. Paul, Minnesota. His recent interests have centered on the use of *Mathematica* to visualize diverse phenomena in pure and applied math. He has written 11 books including *The Banach-Tarski Paradox* and *Mathematica in Action*, and has won the MAA’s Lester Ford Award, Trevor Evans Award, and Chauvenet Prize for papers in the *American Mathematical Monthly* and *Math Horizons*. He has also participated for several years in an annual snow-sculpting competition at which he and his team have sculpted surfaces inspired by mathematics. Wagon has achieved some notoriety by building a square-wheel bicycle that rolls smoothly on a road made of inverted catenaries. He is very interested in endurance sports and is founding editor of *Ultrarunning* magazine. These days cross-country skiing, from tracked skiing for 50 miles or more, to steep skiing on the glaciers of British Columbia or the gullies of Colorado’s high peaks, are his main outdoor interest. Photos of all these endeavors are available at <<stanwagon.com>>.



Michael Starbird is a University Distinguished Teaching Professor at The University of Texas at Austin and a member of UT’s Academy of Distinguished Teachers. He is a Pomona College graduate. He has received more than a dozen teaching awards including several that are awarded to only one professor at UT annually and including the 2007 MAA Deborah and Franklin Pepper Haimo Award for Distinguished College or University Teaching of Mathematics. In 1989, Starbird was UT’s Recreational Sports Super Racquets Champion.



Starbird wrote, with co-author Edward B. Burger, the award-winning textbook *The Heart of Mathematics: An Invitation to Effective Thinking* and, for the public, *Coincidences, Chaos, and All That Math Jazz: Making Light of Weighty Ideas*. His Teaching Company video courses in calculus, statistics, and probability annually reach thousands of people in the general public. He has served as an Associate Dean at UT and as a Member-at-large

Continued on page 8

**REGISTER FOR
THE SPRING
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

**by Monday, Feb. 26,
OR**

Register online at the
section website:

<http://www.maa.org/socal>. Click the online
registration link and
have your credit card
ready. Online registra-
tion will be available
from 8 a.m. on Thurs.,
Feb. 1, **through 5 p.m.
on Tuesday, Feb. 27.**

VOTE!!!**FOR
SECTION
OFFICERS**

**Use the ballot
on page 8.**

Pre-Registration/Luncheon Reservation Form

Spring Meeting at Pomona College

Saturday, March 3, 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.)

Name _____

Affiliation _____

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 \$ _____

On-site registration will be available at the meeting for \$5 more than pre-registration.

Questions? Contact Ernie Solheid, Meeting Coordinator
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
_____ 2-year college faculty	_____ 4-year college/university faculty
_____ High school teacher	_____ Business/industry/government
_____ Undergraduate student	_____ Graduate student



BALLOT FOR SECTION OFFICERS: PLEASE VOTE!!!

Position	Candidate	Write-in Alternative
Section Vice-Chair	<input type="checkbox"/> Michael Frantz University of La Verne	
Second Program Vice-Chair	<input type="checkbox"/> Michael Orrison Harvey Mudd College	
Secretary	<input type="checkbox"/> Shawnee McMurran Cal State San Bernardino	

Please return ballot to
Ernie Solheid,
Department of Mathematics,
California State University-
Fullerton,
800 N. State College Blvd.,
Fullerton, CA, 92834

by Monday,
Feb. 26, 2007.

Plan to attend the Spring Meeting at
Pomona College Saturday, March 3, 2007!

Join Southern California-Nevada 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 organized regional NExT programs.

Spring 2007 Meeting Speakers and Presenters

continued from page 6

of the AMS Council, and on the MAA Committee on the Undergraduate Program in Mathematics, the AMS Committee on Education, and the MER Board.

Robert Baker is a teacher at University Senior High School in Los Angeles, California. He earned his degree in physics from UCLA in 1970 and is a QuarkNet lead teacher. He enjoys biking and netsurfing, especially for new ways to present math and science topics. He believes that the NSDL, which contains MathDL, has fantastic potential to present math and science material.

Gizem Karaali is assistant professor of mathematics at Pomona College. She received her degree from UC Berkeley in 2004 and taught at UCSB for two years before moving to Pomona. She enjoys surfing on the net and loves Google, but thinks that the MathDL may come in handy during the times when one is looking for purely scientific or pedagogical content.

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, 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 Section NExT is now recruiting applicants for the spring 2007 meeting at Pomona College. The Section NExT activities at the meeting will include a session on Inquiry Based Learning by the charismatic and inspiring Michael Starbird of the University of Texas. The program accepts 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 Section NExT activities during the Saturday, March 3 meeting at Pomona College, please **apply by Friday, February 23, 2007.**

Section NExT Organizers:

Alissa Crans, Loyola Marymount University
Magnhild Lien, CSU Northridge
Ioana Mihaila, Cal Poly Pomona
Perla Myers, University of San Diego
Jenny Switkes, Cal Poly Pomona



Southern California-Nevada Section Now Has Four REUs

Students who wish to participate in Research Experiences for Undergraduates (REU) programs in Southern California now have at least five choices, four of them at institutions in our section.

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

Site: Claremont Colleges
Directors: Jim Hoste (Pitzer College) and Mario Martelli (Claremont McKenna College)
Topics: Different topics each summer.
For more information: <http://www.pitzer.edu/mathREU/>

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.
For more information: <http://www.amssi.org/>

Site: Cal Poly San Luis Obispo (just outside our section)
Directors: Jonathan Shapiro and Joseph Borzellino
Topics: operator theory and topology

Another chance to explore MathDL!

Or, where can I find great lessons, class activities, projects, and computer mathlets?

If you are unable to attend the MathDL workshop during the Saturday, March 3 Southern California-Nevada Section Meeting, consider attending an expanded version of this workshop Friday, March 2, from 3 to 5 p.m. at the Doubletree Hotel in Anaheim, sponsored by CMC³ and the MAA.

Workshop leader Bruce Yoshiwara, of Los Angeles Pierce College, says, "Although Google will find tens of thousands of hits for any topic we want, most are of no use. We will explore two NSF-sponsored portals, the Mathematical Sciences Digital Library and Math Gateway, managed by the Mathematical Association of America (MAA), that concentrate on dependable resources."

To register, contact Bruce Yoshiwara by email at byoshiwara@hotmail.com or by snail mail at Los Angeles Pierce College, 6201 Winnetka Avenue, PMB 247, Woodland Hills, CA 91371-0001. Cost is \$10 to reserve a place at this limited-enrollment workshop, with the \$10 refunded to attendees of the workshop. Each participant must provide his/her own notebook computer with wireless card to be able to access the Internet during the workshop. More information is available at <http://www.cmc3s.org/MAA-AMATYC/>

For more information:
<http://www.calpoly.edu/%7Ejshapiro/reuinfo.html>

REU programs are sponsored by the National Science Foundation. The REU at CSU Channel Islands is funded through the MAA's Strengthening Underrepresented Minority Mathematics Achievement (SUMMA) Program. The REU at Cal Poly and LMU has additional funding from the National Security Agency.

More News from the So Cal-Nev Section

Terence Tao of **UCLA** has earned his third important prize in less than a year, the 2006 SASTRA Ramanujan Prize, worth about \$10,000. Tao also won the Fields Medal and a McArthur Fellowship in 2006.

Peter Ebenfelt, of the **University of California, San Diego**, advised **Michael Viscardi**, winner of the 2006 Westinghouse Science Competition. Viscardi's work on the Dirichlet problem earned him a \$100,000 college scholarship.

Also at UCSD, **Aurore Delaigle** won a Hellman Research Fellowship and **John Eggers** a Distinguished Teaching Award. **John Wavrik**, who has been a professor at UCSD since 1969, retired in 2006.

In Fall of 2007, UCSD began a brand-new Ph.D. program in Computational Science, Mathematics, and Engineering (CSME).

AMATYC Releases *Beyond Crossroads: Implementing Mathematics Standards in the First Two Years of College*

Bruce Yoshiwara, Los Angeles Pierce College

The American Mathematical Association of Two-Year Colleges (**AMATYC**) released *Beyond Crossroads: Implementing Mathematics Standards in the First Two Years of College* on November 2, 2006 at the AMATYC Annual Conference in Cincinnati. *Beyond Crossroads* builds on AMATYC's first standards document, *Crossroads in Mathematics*, released in 1995. *Beyond Crossroads* presents a renewed vision for mathematics courses offered in the first two years of college, as well as an *implementation cycle* to help mathematics faculty make needed changes in learning and the learning environment, assessment of student learning, curriculum and program development, instruction, and professionalism.

Beyond Crossroads is intended to stimulate faculty, departments, and institutions to examine, assess, and improve every component of mathematics education in the first two years of college. Electronic resources accompanying *Beyond Crossroads* are available at the *Beyond Crossroads Live* website www.bc.amatyc.org. These electronic resources extend and enhance the messages of *Beyond Crossroads*. Also visit this website to order a copy (or to download a copy) of *Beyond Crossroads*, to see the Executive Summary, or to obtain further information about *Beyond Crossroads*.