



Southern California–Nevada Section
Mathematical Association of America
NEWSLETTER



Volume LII, Number 1

September 2010

**Southern California-Nevada Section to Meet Saturday,
October 16, 2010, at UC Irvine**

*Come join us for invited addresses on elliptic curves, symmetry
in chemistry, and the mathematics of golf and sailing!*

*Ivona Grzegorzczuk, California State University - Channel Islands
MAA Southern California-Nevada Section Chair*



*Ami Radunskaya of Pomona College
gave the AWM Falconer Lecture on
her research on cancer treatment at
MathFest in Pittsburgh, PA.*

Fall 2010 Meeting. Welcome to the new academic year. I hope your plans include attending our section meetings to discover new ideas and have fun with mathematics. This fall UC Irvine will host us and our lineup of distinguished speakers on October 16. Our program will begin with a scary tale of adventure on the high seas and life-saving knots by **Colin Adams** from Williams College. We will then ponder with **Karl Rubin** from UC Irvine how elliptic curves have aided progress on Hilbert's Tenth Problem, which asks for an algorithm to decide the solvability of polynomial equations. **Erica Flapan** from Pomona College will entertain us with topological symmetries of chemical molecules and related knots. Then we will improve our golf skills by applying mathematics recommended by **Roland Minton** from Roanoke College. You may also find our faculty and students' short talks on their research and teaching activities to be of interest, and

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**MAA So Cal-Nevada
Section to Meet ...** is
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Please see **MAA
Fall 2010 Meeting.**

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

MAA Fall 2010 Meeting, *continued*

enjoy friendships and good conversation over lunch. You will also find new and discounted books and information about other mathematical events in our region.

MAA MathFest in Pittsburgh, PA. Many of our section members attended the MAA MathFest in Pittsburgh, Pennsylvania, this past August and enjoyed the updates on fractals, biomathematics, and mathematical applications, as well as talks on revitalization of Klein's mathematics education program and other interesting topics related to pedagogy. Our section's own **Ami Radunskaya**, of Pomona College, delivered the Association for Women in Mathematics (AWM)–MAA Etta Z. Falconer Lecture on “Mathematical Challenges in the Treatment of Cancer.”

The meeting of section chairs revealed that some sections attract as many as 500 participants at section meetings, hence we need to study some of their secrets. Other issues, such as section management, funding, web pages, visitors programs, and national speaker programs were discussed, and we may implement some of the proposed changes. Since the weather was fabulous, evenings were spent outside problem solving and conversing while walking across 446 of the city's bridges over three rivers—the Konigsberg puzzle has only seven bridges!

Future Meetings. Please do not forget to mark your calendars for the Spring Meeting, to be held at Point Loma Nazarene University in San Diego, on April 16, 2011. We have another great lineup of speakers planned for that event and our annual student research poster exhibition as well. The registration has opened for the annual Joint Meetings of MAA and AMS, to be held in New Orleans, January 6–9, 2011.

Finally, on Friday, October 9, don't miss the opportunity to hear Fields medalist and UCLA professor **Terence Tao** discuss “The Cosmic Distance Ladder” at 6:15 p.m. in Schoenberg Hall on the UCLA campus. Tao's talk will be the Einstein Public Lecture offered in conjunction with the AMS Western Section Meeting Oct. 9–10 at UCLA. See pages 17-18 of this *Newsletter* for more information and more upcoming conferences.

Deadlines for 2010 Fall Section Meeting at University of California - Irvine:

Contributed paper for Fall Meeting: Friday, October 1, 2010

Mail-in pre-registration for Fall Meeting: Tuesday, October 12, 2010

Online pre-registration for Fall Meeting: Tuesday, October 12, 2010, 5 p.m.
(Online pre-registration begins Wednesday, September 15, at 8 a.m.)

Fall Meeting Schedule – see pages 3 and 4

Fall Meeting Call for Contributed Papers – see page 7

Fall Meeting Directions and Parking Information – see page 7

Fall Meeting Registration Information – see pages 8 and 9

Fall Meeting Schedule

Saturday, October 16, 2010

Donald Bren Hall, University of California, Irvine

- 8:15 – 12:00 **Registration** – Entrance to Donald Bren Hall
- 8:15 – 10:30 **Refreshments** – Entrance to Donald Bren Hall
- 8:30 – 2:30 **MAA Book Sale** – Donald Bren Hall
Organized by Michael Hoffman, Richard Katz, Cal State Los Angeles
- 9:00 – 10:00 **Invited Address by Sir Randolph Bacon III, cousin-in-law to Colin Adams, Williams College**
Donald Bren Hall, Room 1100

Blown Away: What Knot To Do When Sailing

Being a tale of adventure on the high seas involving great risk to the tale teller, and how an understanding of the mathematical theory of knots saved his bacon. No nautical or mathematical background assumed.

- 10:00 – 10:15 **Section Business Meeting** – Donald Bren Hall, Room 1100
- 10:15 – 11:10 **Contributed Paper Sessions**
Donald Bren Hall, Rooms 1200, 1300, 1500, and 1600
Organized by Christopher Towse, Scripps College
(See **Call for Contributed Papers**, page 7.)
- 11:15 – 12:15 **Invited Address by Karl Rubin, UC Irvine**
Donald Bren Hall, Room 1100

Elliptic Curves and Hilbert's Tenth Problem

An elliptic curve is a curve defined by a cubic polynomial in two variables. The rank of an elliptic curve is a measure of the number of solutions of the equation that defines the curve. Recently Bjorn Poonen found a surprising connection between ranks of elliptic curves and Hilbert's Tenth Problem. (Hilbert's Tenth Problem asks for an algorithm to decide the solvability of polynomial equations.) In this lecture we will introduce elliptic curves and some of the fundamental questions about them, and describe some recent joint work with Barry Mazur and its application to Hilbert's Tenth Problem.

MAA 2010 Fall Meeting Schedule is continued on page 4.

MAA 2010 Fall Meeting Schedule, *continued from page 3*

12:15 – 1:30 **Luncheon** – Donald Bren Hall or Aldrich Park

1:30 – 2:30 **Invited Address by Erica Flapan, Pomona College**
Donald Bren Hall, Room 1100

Topological Symmetries of Molecules

Chemists have defined the *point group* of a molecule as the group of rigid symmetries of its molecular graph in \mathbf{R}^3 . While this group is useful for analyzing the symmetries of rigid molecules, it does not include all of the symmetries of molecules that are flexible or can rotate around one or more bonds. To study the symmetries of such molecules, we define the *topological symmetry group* of a graph embedded in \mathbf{R}^3 to be the subgroup of the automorphism group of the abstract graph that is induced by homeomorphisms of \mathbf{R}^3 . This group gives us a way to understand not only the symmetries of non-rigid molecular graphs, but the symmetries of any graph embedded in \mathbf{R}^3 . The study of such symmetries is a natural extension of the study of symmetries of knots. In this talk we will present a survey of results about the topological symmetry group and how it can play a role in analyzing the symmetries of non-rigid molecules.

2:30 – 3:00 **Refreshments** – Entrance to Donald Bren Hall

3:00 – 4:00 **Invited Address by Roland Minton, Roanoke College**
Donald Bren Hall, Room 1100

G. H. Hardy, Bill James, and the Mathematics of Golf

An overview of several topics from the mathematics of golf will be presented. A simple conceptual model introduced by G. H. Hardy explores the importance of consistency in golf and illuminates a poorly understood aspect of the golf handicap system. Oddly enough, J. E. Littlewood also contributed to the mathematics of golf; his analysis of a lip-out will be discussed. The detailed statistics available from the ShotLink system should allow us to do for golf what Bill James did for the analysis of baseball statistics. Several simple examples will be provided, focusing on the dominance of Tiger Woods from 2004 to 2009.

Calling all faculty and students with mathematical and pedagogical ideas to share!

Submit a proposal for a 15-minute talk to be given during the Contributed Paper Session at the Fall Section Meeting. Deadline: Friday, October 1, 2010. See page 7 for details.

Fall Meeting Speakers

Sir Randolph Bacon III is a British adventurer and bon vivant, who was knighted for unspecified services to the crown. He has a wide variety of interests including cognacs of the world, sailing, and sailing knots.



Colin Adams is the Thomas T. Read Professor of Mathematics at Williams College. He received his Ph.D. from the University of Wisconsin-Madison in 1983. He is particularly interested in the mathematical theory of knots, their applications, and their connections with hyperbolic geometry. He is the author of *The Knot Book*, an elementary introduction to the mathematical theory of knots; co-author of the humorous supplements *How to Ace Calculus: The Streetwise Guide* and *How to Ace the Rest of Calculus: The Streetwise Guide*; author of *Why Knot?*, a

mathematical comic book with attached toy; co-author of *Introduction to Topology: Pure and Applied*; and author of the compendium of humorous math stories *Riot at the Cal Exam and Other Mathematically Bent Stories*. He appears in the MAA videos "The Great Pi/e Debate" and "The United States of Mathematics Presidential Debate." A recipient of the MAA Haimo National Distinguished Teaching Award in 1998, he was an MAA Polya Lecturer for 1998-2000, a Sigma Xi Distinguished Lecturer for 2000-2002, and the recipient of the Robert Foster Cherry Teaching Award in 2003. He is also the humor columnist for the *Mathematical Intelligencer*.

Erica Flapan received her Ph.D. from the University of Wisconsin in 1983. She was a post-doc for two years at Rice University and for one year at UCSB, and joined the faculty at Pomona College in 1986. Since 2006, she has been the Lingurn H. Burkhead Professor of Mathematics at Pomona College. In addition to teaching at Pomona, Flapan has taught at the Summer Mathematics Program for Women at Carleton College since 2000. She has done research in knot theory and the study of 3-manifolds. She is one of the pioneers of the study of the topology of graphs embedded in 3-space, and has published

extensively in this area and its applications to chemistry and molecular biology. In addition to her research papers, Flapan has published three books. The first, *When Topology Meets Chemistry*, was published jointly by the MAA and Cambridge University Press. She co-edited the second, *Applications of Knot Theory*, with Dorothy Buck. Most



Fall Meeting Speakers, *continued*

recently, she co-authored the textbook *Number Theory: A Lively Introduction with Proofs, Applications, and Stories* with James Pommersheim and Tim Marks. In the spring of 2010, she was awarded the MAA Southern California-Nevada Section Distinguished Teaching Award.



Roland Minton is Professor of Mathematics and Chair of the Department of Mathematics, Computer Science, and Physics at Roanoke College, where he has taught since 1986. He has a Ph.D. in mathematical sciences from Clemson University, home of the 2003 NCAA golf national champions. He has taught every mathematics course in the Roanoke College catalog, but primarily teaches calculus. He and Bob Smith have written a series of calculus books for McGraw-Hill. The fourth editions are in production, and have been translated into several languages. He is finishing up a book on the mathematics of golf. An article co-authored with Tim Pennings for *The College*

Mathematics Journal titled “Do Dogs Know Bifurcations?” won the 2008 George Polya Award for mathematical exposition. He received a Virginia Outstanding Faculty Award from the governor in 2005.

Karl Rubin is the Thorp Professor of Mathematics at the University of California, Irvine. His research deals with elliptic curves and other aspects of number theory. Rubin was a Putnam Fellow as an undergraduate at Princeton and received his Ph.D. from Harvard. He was a professor at Ohio State, Columbia, and Stanford before moving to UC Irvine in 2004. Rubin received the Cole Prize in Number Theory from the American Mathematical Society, a National Science Foundation Presidential Young Investigator award, a Humboldt Research Award, and Guggenheim and Sloan fellowships.



Great Books, Great Bargains at MAA Book Sale!

The 2010 Fall Meeting at UC Irvine 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. Among the new MAA books that will be for sale at the meeting are:

- *A Historian Looks Back: The Calculus as Algebra and Selected Writings*, by **Judy Grabiner** of Pitzer College, and
- *Biscuits of Number Theory*, co-edited by **Art Benjamin** of Harvey Mudd College and Ezra Brown of Virginia Polytechnic University.

Call for Contributed Papers for the Fall 2010 Meeting

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

Please email all submissions by Friday, October 1, 2010, to Christopher Towse at christopher.towse@scrippscollege.edu. Ideally, abstracts should be submitted in LaTeX format with an accompanying PDF file. If you do not use LaTeX, a PDF file will suffice.

Deadline for receipt of submissions: **Friday, October 1, 2010.**

Directions to University of California - Irvine

Directions to the UC Irvine campus: <http://www.uci.edu/freewaydirections.php>

Visitor parking map: http://today.uci.edu/pdf/UCI_09_map_vis_pkg.pdf

Campus map: http://today.uci.edu/pdf/UCI_09_map_campus_core.pdf

Local hotel information: <http://snap.uci.edu/viewXmlFile.jsp?resourceID=259>

Where to Park and Where to Register

Enter the UC Irvine campus from Campus Drive and turn right onto East Peltason Drive. At Anteater Drive, turn right into the Anteater Parking Structure (labeled APS on the campus parking map). Participants will need to purchase a parking permit for \$8 from the parking attendant in the structure.

From the parking structure, follow the signs to Donald Bren Hall. Registration will be at the entrance to Donald Bren Hall. All invited addresses and all contributed papers will be given in Donald Bren Hall. You will have the option of eating lunch in Donald Bren Hall or outdoors in Aldrich Park on the UC Irvine campus.

Please pre-register for the meeting: see pages 8 and 9.

Registration for Fall Meeting

University of California, Irvine

Saturday, October 16, 2010

Participants can register online (using a credit card) via the link at the section website <http://sections.maa.org/socalnv/Meeting2010Fall.html>. Online registration will be available from Wednesday, September 15, at 8 a.m., to **Tuesday, October 12, at 5 p.m.**

Participants also may register by mail by **Tuesday, October 12, 2010**. Either send the registration form on page 9 of this newsletter, or send your

Name

Affiliation

Address

E-mail address

Lunch preference (vegetarian or non-vegetarian)

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 luncheon:

MAA member: \$50

Non-member: \$55

Student: \$25

Registration only (no luncheon):

MAA member: \$35

Non-member: \$40

Student: \$15

Pre-registration deadline is Tuesday, October 12, 2010 (both mail-in and online).

Online registrations must be completed by Tuesday, October 12, 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

University of California, Irvine, Saturday, October 16, 2010

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	_____ @ \$35	_____ @ \$40	_____ @ \$15
Registration and Luncheon	_____ @ \$50	_____ @ \$55	_____ @ \$25
Registration and Vegetarian Luncheon	_____ @ \$50	_____ @ \$55	_____ @ \$25

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

The Students' Column

*Cynthia Wyels, Student Chapters Coordinator
California State University, Channel Islands*

Make Yourself Stand Out

“What are you going to do with your degree?” It seems it’s never too early for relatives and acquaintances to pose this question of students. And what with all the gloomy news about an economic recovery without corresponding job growth, and about reduced funding for higher education, the allegedly blissful years of undergraduate study can be

The Students' Column, *continued*

marred by worries about the future. The advice of all the employment counselors and even your faculty regarding grad school? “Make yourself stand out!” Below you’ll find a plethora of ways to learn and stretch yourself – and even have fun – beyond the classes you take for your degree.

Conferences, Conferences, Conferences

The Fall Meeting and Spring Meeting of our MAA Section provide great introductions to conference-going, as each are relatively inexpensive one-day affairs, with programs guaranteed to educate and entertain. Gather a group from your school and attend! Better yet, if you have a research project, consider presenting it at a conference. Our Fall Meeting (Saturday, October 16 at UC Irvine) has a great list of invited speakers scheduled. See the list below for conferences to consider.

- October 9–10, 2010, **Fall Western Section Meeting of the American Mathematical Society**, UC Los Angeles, CA. http://www.ams.org/meetings/sectional/2170_program.html
- October 16, 2010: **Fall Meeting of the So Cal-NV Section of the MAA**, UC Irvine. <http://sections.maa.org/socalnv/>
- November 20, 2010: **Southern California Conference on Undergraduate Research (SCCUR)**, Pepperdine University, Malibu. www.sccur.org
- January 6–9, 2011: **The Joint Mathematics Meeting**, New Orleans, LA. (More under “Upcoming Student Poster Sessions,” below.)
- March 12, 2011: **Pacific Coast Undergraduate Math Conference**, Loyola Marymount University, Los Angeles. www.pcumc-math.org
- April 16, 2011: **Spring Meeting of the So Cal-NV Section of the MAA**, Point Loma Nazarene University, San Diego. <http://sections.maa.org/socalnv/>

Other Ways to Enhance Your Education (and Your Career or Grad School Prospects)

Meetings and seminars, extra-curricular 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, enhance your resume, 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. Online, start with <http://www.maa.org/students/reustuff/pages/REU.html> for REUs, <http://www.maa.org/students/career.html> for lots of career information, and <http://www.maa.org/awards/putnam.html> to learn about the Putnam Exam.

Report on the Spring 2010 Student Poster Session

An outdoor poster session on a pleasant spring day at Harvey Mudd College featured 40 students presenting 33 posters at the 2010 Spring Meeting. Undergraduates and masters

The Students' Column, *continued*

students were joined by a high school presenter this year; poster topics ranged from sharing the results of very technical senior and masters theses to a visually edifying poster on crocheting hyperbolic planes and the more playful “Dancing Integrals.” Rather than attempt to distinguish between many fine posters, the organizers opted for an “interactor” approach: the faculty and community members who served as interactors are heartily thanked for their involvement. And of course, the poster session wouldn’t be possible without the students – and their faculty advisors – who produced such excellent work! For the listing of posters, see <http://faculty.csuci.edu/cynthia.wyels/posters.htm>.

Upcoming Student Poster Sessions: New Orleans (January) and Point Loma (March)

Join 5000 – 6000 mathematicians at the Joint Mathematics Meetings ... and share your work via the national Student Poster Session. (The entry deadline is Nov. 9; to enter, see <http://www.maa.org/students/undergrad/jmmposterindex.html>.) The JMM also includes technical research presentations, survey talks, poster sessions, often movie showings and musical performances, and much more. The list of activities geared specifically to students is at http://www.ams.org/meetings/national/jmm/2125_students.html and it keeps growing! If your research project won’t quite be ready by November, enter it in our section’s Student Poster Session! (You have until April 2, 2011 to enter.) Detailed guidelines and abstract submission information will be in the March newsletter. But start planning now: your poster could feature the results of any individual or group mathematics project. Need ideas? See below, and ask a professor.

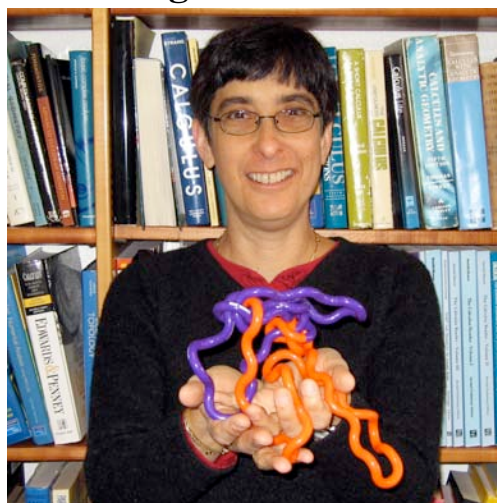
- Results of honors, senior, or independent study projects;
- Results of classroom projects or modeling contests;
- Results of REUs or other summer research programs;
- Historical investigations in pure or applied mathematics;
- Solutions of problems from the Putnam Exam or from the *American Mathematical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

Erica Flapan Wins Section Teaching Award

*Ivona Grzegorzczuk, Cal State Channel Islands
MAA Southern California-Nevada Section Chair
2010 Teaching Award Committee Chair*

The Southern California-Nevada Section of the MAA is pleased to announce that Erica Flapan, Lingurn H. Burkhead Professor of Mathematics at Pomona College, has received the section’s 2010 Distinguished Teaching Award.

Dr. Flapan’s gift for teaching has been recognized repeatedly, with colleagues and students praising her emphasis on and success



Flapan Wins Section Teaching Award, *continued*

with student participation in the classroom. They report that she pours much thought and creativity into the design of her courses and that she is a superb and dynamic lecturer who also is great at leading discussions. She has received, among other awards, an Exxon Award for Mathematics Teaching, the Irvine Foundation Distinguished Faculty Fellowship for mentoring students of color at Pomona College, and the “Magna Cum Laude Teacher” title at Rice University. She has been awarded grants in both mathematics education and mathematics research. She is a tireless advocate and one of the strongest voices students have in support of diversity of all kinds.

Erica Flapan received her PhD from the University of Wisconsin in 1983. She was a post-doc for two years at Rice University and for one year at UCSB. She joined the faculty at Pomona College in 1986. In addition to teaching at Pomona, Flapan has taught at the Summer Mathematics Program for Women at Carleton College, the Mills Summer Math Institute, the Canada-US Mathcamp, and the Park City Mathematics Institute Undergraduate Program.

Flapan has done research in knot theory and the study of 3-manifolds. She is one of the pioneers of the study of the topology of graphs embedded in 3-space, and has published extensively in this area and its applications to chemistry and molecular biology. She has produced three books that can serve as an ideal introduction to applied knot theory. The first, *When Topology Meets Chemistry*, was published jointly by MAA and Cambridge University Press. She co-edited the second book, *Applications of Knot Theory*, with Dorothy Buck, and co-authored the third, *Number Theory: A Lively Introduction with Proofs, Applications, and Stories*, with James Pommersheim and Tim Marks.

Flapan will receive the prestigious Franklin and Deborah Tepper Haimo Award for Distinguished College and University Teaching, awarded to three MAA members each year, at the Joint Mathematics Meetings in New Orleans in January 2010.

Call for Nominations for Section Teaching Award

Kathryn Leonard, Section Secretary

Preliminary nominations for the 19th 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.

Call for Teaching Award Nominations, *continued*

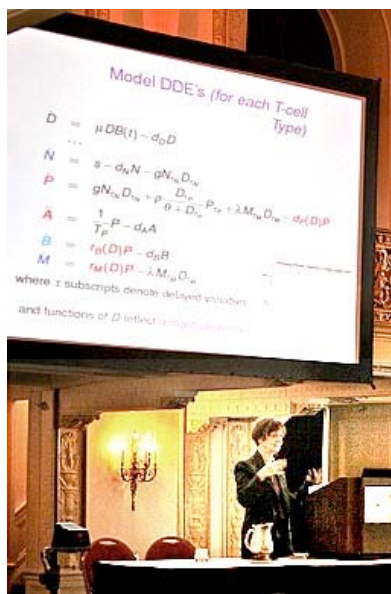
The winner of the award will be recognized at the Spring 2011 Meeting of the MAA Southern California-Nevada Section. The awardee will also be the official Section nominee for the MAA Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics. Successful nominees 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 Monday, November 1, 2010.**

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

Message from the New Southern California-Nevada Governor

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

First I would like to take this opportunity to thank you for electing me Governor of the Southern California-Nevada Section of the MAA. I am honored to serve in this capacity. As a member of the Board of Governors, I have a chance to learn the details about the organizational structure of the MAA. I will make every effort to keep you informed about



Ami Radunskaya delivered the Falconer Lecture at MathFest.

the latest news from the Association. Additionally, I would also like to hear from you. If you have questions or concerns that should be brought to the Board of Governors (BOG), please feel free to contact me via email at magnhild.lien@csun.edu, by phone at 818-677-6424, or by catching me at the section meetings.

MathFest 2010 in Pittsburg was my first meeting as Governor. I attended an orientation for the new governors two days before MathFest, and a daylong BOG meeting the following day. A fellow section member, **Francis Su**, First Vice President of the MAA, was also present at those two events. A milestone for the MAA was reached at the MathFest 2010 Business Meeting, with the passing of revised MAA Bylaws (see <http://www.maa.org/aboutmaa/bylaws.html>).

The Southern California-Nevada Section was well represented at MathFest. Several members gave talks in the invited and contributed paper sessions. The

AWM-MAA Etta Z. Falconer Lecture was given by **Ami Radunskaya**, Pomona College. She gave a very inspiring talk on “Mathematical Challenges in the Treatment of Cancer.”

Governor's Message from MathFest, *continued*

Congratulations to **Erica Flapan**, Pomona College, one of three recipients of the Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics. Erica received the MAA Southern California–Nevada Section Distinguished Teaching Award in spring 2010 and will be one of the speakers at the Fall Section Meeting on October 16.



What did I learn at the Board of Governors meeting? Much of the time was spent going over routine business and reviewing reports from various constituencies, including the MAA officers, the Washington office, and the editors. Here are some of the issues discussed or reported on during the meeting.

Ami Radunskaya (left) of Pomona College, who gave the Association for Women in Math (AWM)-MAA Falconer Lecture at MathFest in August in Pittsburgh; AWM president Georgia Benkart; and AWM executive council member Silvia Bozeman celebrate Radunskaya's splendid talk. (Photo by Laura McHugh, MAA)

- MAA's work on the NSF-DRL REESE grant, *Characteristics of Successful Programs in College Calculus*, is continuing and on-line surveys will go to calculus course coordinators, instructors, and students this fall. Five hundred and thirty colleges and universities have been randomly selected to participate in the survey. If your institution happens to be one of them, we hope you will take the time to participate.
- Attendance at both MathFest and the Joint Mathematics Meetings has seen a steady increase over the last decade. At MathFest we have seen an increase in the number of both student and non-student attendees, whereas at the JMM the boost is mostly due to increased attendance by undergraduate and graduate students. While student attendance is good and should be encouraged, the downward trend for non-students results in pressure on the budget. With that in mind, please consider attending the 2011 JMM in New Orleans, January 6–9. You may also want to put MathFest 2011 on your calendar. The meeting will be August 4–6, in Lexington, Kentucky, where Laura DeMarco, University of Illinois at Chicago, will give the first joint AMS-MAA Invited Address at MathFest.
- MAA is supporting numerous programs through grants from private and public sources http://www.maa.org/subpage_8.html. In addition to the NSF-DRL REESE grant mentioned above, I would like to call your attention to the WeBWork project, an online mathematics homework system developed by and for faculty. Through this project, the MAA will partner with the developers to create a “home” for WeBWork. You can learn more about WeBWork on the website <http://webwork.maa.org>.

Governor's Message from MathFest, *continued*

- The option of e-membership for MAA took effect January 2010 and nearly 15% of members have converted and are now receiving MAA publications electronically. (See <http://www.maa.org/pubs/octnov09pg3.pdf> for more details.) Some e-members have asked for the option of obtaining *MAA Focus* in print form, which MAA may consider as a membership add-on for a nominal fee.
- Each year, every MAA section is eligible to have one person from among the Association leadership attend and participate in a section meeting, with all travel expenses borne by the MAA. Sections are not expected to provide the visitor with an honorarium or stipend. The purpose of this program is to maintain close links between the MAA leadership and the sections. (See <http://sections.maa.org/nationalofficersspeakers.html> for details.)
- MAA urges you to consider MAA publications when choosing textbooks for your classes. In the words of MAA Publications Director Ivars Peterson: "MAA textbooks are a good deal! It is still the case that every one of our books, textbooks or otherwise, is priced well below \$100."

News of the Section

Kathryn Leonard of **California State University – Channel Islands** has been awarded an NSF Career grant for \$417,000, with 5 years of funding for her research, student research, and outreach activities. The goal of her project is to develop theoretical results establishing selection criteria for skeletal models and to apply these results to shape-dependent industrial projects.

At **California State University – Los Angeles**, two faculty members, **Michael (Quimby) Krebs** and **Borislava Gutarts**, received tenure and promotion to Associate Professor. Sadly, **Rodolfo Tamez**, Professor of Mathematics, passed away unexpectedly on April 20, 2010. He received his Ph.D. from UC Berkeley in 1988, and became a faculty member at CSULA in 1989. He ran an NSF Young Scholars summer program for high school students for several years, and was also a program officer at NSF. His major impact was as a faculty mentor for minority students, introducing many to mathematics research and putting them on the path to graduate school and beyond.

California State University - Northridge congratulates **Bernardo Abrego**, **Kellie Evans**, **Silvia Bernardo**, and **Katherine Stevenson** on their promotions to Full Professor.

Bill Lucas, Professor of Mathematics at **Claremont Graduate University** from 1984 to 1998, passed away on June 7, 2010, after a series of illnesses. He was 77 years old. A widely recognized expert in game theory, operations research, and mathematics education, Lucas left Cornell University to join the Department of Mathematics at Claremont Graduate School in 1984. During his career, he supervised 21 Ph.D. students, including four at CGU. In 2006, the MAA established the William F. Lucas Fund < <http://www.maa.org/news/100206LucasFest.html> > for a Short Course in his honor.

News of the Section, *continued*

At **Pepperdine University**, **Kendra Killpatrick** has been promoted to Full Professor.

News from the **University of California – Santa Barbara**:

- **Maribel Bueno-Cachadina** has been promoted to Lecturer with Security of Employment (equivalent to tenure).
- **Chris Ograin** accepted a Lecturer position in Mathematics and Mathematics Education as part of the UC-wide Science and Mathematics Teaching Initiative. He will focus on teaching courses in our BA High School Mathematics Teaching track.
- Professor **Paul Atzberger** received an NSF CAREER five-year \$400K grant to recognize and support early career development activities for faculty members who are most likely to become the academic leaders of the 21st century.
- In June, we recognized Professor **Adil Yaqub**'s 50 years of service teaching at UCSB. Students initiated the “Adil Yaqub is My Hero” Scholarship Fund in his honor.
- Emeritus Professor **Ky Fan** died in Santa Barbara on March 22, 2010 at the age of 95. Born in Hangzhou, China on September 19, 1914, he received his BS from Peking University in 1936, and his D.Sc. under Frechet from the University of Paris in 1941, and joined the UCSB faculty in 1965. UCSB's Ky Fan Visiting Assistant Professorship recognizes his contributions to our department.
- The Kozato Graduate Fellowship in Quantitative Biology will offer competitive multi-year support comparable to the NSF Graduate Fellowship for a graduate student with an interdisciplinary thesis project that investigates a biological system using a combination of mathematical analysis and computational methods. The position is to begin in the Fall of 2011. The fellowship is funded by a generous donation from **Hiro Kozato**, a distinguished alumnus of the UCSB Department of Mathematics.
- Scholarships for Transfers to Engage and Excel in Mathematics (STEEM) is an innovative and comprehensive academic enhancement program to increase undergraduate student success and improve graduate school and teacher preparation for community college transfers who major in math at UCSB. STEEM is hosted by the UCSB Mathematics Department in collaboration with the Center for Science and Engineering Partnerships (CSEP) at the California Nanosystems Institute (CNSI).

The **University of Redlands** congratulates **Elizabeth Doolittle** on her promotion to Senior Lecturer in Mathematics.

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

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

Tao to Deliver AMS Einstein Public Lecture at UCLA

AMS Einstein Public Lecture in Mathematics: “The Cosmic Distance Ladder”

Speaker: Terence Tao, 2006 Fields Medalist and UCLA Math Professor

Saturday, October 9, 2010, 6:15 p.m.

Schoenberg Hall, UCLA campus

Poster announcement:

<http://www.ams.org/amsmtgs/sectionalcalendar/einstein-lecture-poster-10-web.pdf>.

Please RSVP for the reception afterwards at:

<http://www.math.ucla.edu/events/publicevents.shtml>

Hosted by the UCLA Department of Mathematics as part of the AMS Western Section Meeting, to be held Oct. 9-10, 2010, at UCLA

Southern California and Southern Nevada Conference Schedule

Saturday–Sunday, Oct. 9–10, 2010

American Mathematical Society Fall Western Section Meeting

University of California – Los Angeles

http://www.ams.org/amsmtgs/2170_program.html

Includes the the AMS Einstein Public Lecture, to be given by Terence Tao, UCLA, on “The Cosmic Distance Ladder,” Saturday, Oct. 9, at 6:15 p.m.

For more information, see above or http://www.ams.org/amsmtgs/2170_events.html

Saturday, October 16, 2010

MAA Southern California-Nevada Fall Section Meeting

University of California - Irvine

See this *Newsletter* for details.

<http://sections.maa.org/socalnv/Meeting2010Fall.html>

Saturday–Sunday, October 23-24, 2010

West Coast Conference, History and Pedagogy of Mathematics (HPM) Americas Section

California Institute of Technology (Caltech), Pasadena, CA,

and Huntington Library, San Marino, CA

<http://www.hpm-americas.org/>

Thursday, Oct. 28 – Friday, Nov. 5, 2010,

Eureka!, an educational math play

Various Southern California cities and Las Vegas, NV

Chamber Theatre Productions

<http://www.chambertheatre.com/ourshows/math>

Friday–Saturday, November 5–6, 2010

California Mathematics Council–South (CMC-South) Conference

Palm Springs, CA

<http://kcsos.kern.org/cmcmath/conferences>

So Cal and So Nev Conference Schedule, *continued*

Thursday-Sunday, January 6–9

AMS-MAA Joint Mathematics Meetings

New Orleans, Louisiana

http://www.ams.org/meetings/national/jmm/2125_intro.html

MAA Contributed Papers Sessions:

<http://www.maa.org/meetings/jmm.html>

Friday-Saturday, March 4-5, 2011

California Mathematics Council Community Colleges–South (CMC³-South) Spring Conference

Doubletree Hotel, Anaheim

<http://www.cmc3s.org/conferences.shtml>

Saturday, March 12, 2011

Pacific Coast Undergraduate Math Conference (PCUMC)

Loyola Marymount University, Los Angeles

<http://www.pcumc-math.org/>

Saturday, April 16, 2011

MAA Southern California-Nevada Spring Section Meeting

Point Loma Nazarene University, San Diego

Save these dates for future MAA national meetings!

Winter 2011	New Orleans, LA	January 6-9
Summer 2011	Lexington, KY	August 4-6
Winter 2012	Boston, MA	January 4-7
Summer 2012	Madison, WI	August 2-4
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	Washington, DC	August 5-8
Winter 2016	Seattle, WA	January 6-9
Winter 2017	Atlanta, GA	January 4-7