

Southern California Section The Mathematical Association of America

<u>NEWSLETTER</u>

Volume XLII, Number 1

September 2000

Thoughts from the Chair

A few months ago John Dawson sent me this poem.

PARADOX

Not truth, nor certainty. These I forswore In my novitiate, as young men called To holy orders must abjure the world.

"If ..., then," this only I assert; And my successes are but pretty chains Linking twin doubts, for it is vain to ask If what I postulate be justified Or what I prove possess the stamp of fact.

Yet bridges stand, and men no longer crawl In two dimensions. And such triumphs stem In no small measure from the power this game, Played with the thrice attenuated shades Of things, has over their originals.

How frail the wand, but how profound the spell!

John did not know who wrote this poem, and neither do I, but it captures the essence of my fascination with mathematics.

The MAA is dedicated to fostering and spreading the love for mathematics that the poet so obviously felt. If you know someone who shares this passion, please introduce them to the MAA, or, better yet, help them become members. They need not be teaching at the college level. Many of you have brought students, usually but not always math majors, to our meetings, perhaps to present posters. They invariably seem to enjoy the experience and find it worthwhile. This past year, through a grant program, I had the privilege of introducing a dozen enthusiastic high school teachers to our section. They were enthusiastic about the UCLA meeting, which most of them attended, and they are eager to attend more meetings this year. There are surely many more people who would enjoy belonging to our section. Some of them teach in high schools and colleges, others are involved in other careers but still love mathematics. Still others are students, just starting out.

If you know any such people, please introduce them to the MAA. Take advantage of (Continued on page 2)

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Dates to Remember:

October 7, 2000 Fall Meeting Whittier College Registration deadline September 29, 2000 Contributed Paper Submission Deadline September 13, 2000

December 2, 2000 Putnam Exam

January 10-13, 2001 Joint Mathematics Meeting New Orleans, LA

March ?, 2001 Spring Meeting TBA

August 2-4, 2001 Mathfest Madison, WI

The Student's Column

Plan to attend the Fall 2000 Meeting at Whittier College!

Student admission to the Fall Meeting Saturday, October 7, 2000, at Whittier College is FREE, and lunch for students is only \$ 8. See the registration form on page 7 of this newsletter. The Fall Meeting will include several talks of interest to students, including nationally known author and speaker Underwood Dudley's "Angle Trisectors" and 2000 MAA Southern California Section Distinguished Teaching Award winner Thomas O'Neil's "Clutching for Survival: The California Condor Restoration Project." Students might enjoy the Special Session on Mathematical Modeling or playing the game "Who wants to be a Mathematician?" Organize a group of students from your school to attend the Fall Meeting, and encourage your Mathematics Department Chairperson to buy you lunch!

Spring 2001 Meeting Student Poster Session

Begin preparing a poster NOW for the Spring Meeting in March 2001! Time and location to be announced soon. Posters may feature the results of any individual or group mathematics project, including:

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

The 2000 student poster session featured 24 posters with topics ranging from statistical studies of bird and fish populations to investigations in combinatorics and number theory. If you don't already have a project in mind, ask one of your professors for a project to present.

Questions? Contact

Prof. Janet L. Beery Dept. of Mathematics Univ. of Redlands, 1200 E. Colton Ave. Redlands, CA 92373

(909)793-2121, ext. 3118 beery@uor.edu

(Continued from page 1)

the introductory reduced membership fees (as low as \$49 and including free registration at one section meeting) to bring them in. An organization such as ours **is** its membership. In the long run these new members will contribute much more than their dues; they will be sources of the ideas and energy on which our o r g a n i z a t i o n d e p e n d s.

Oh, and, by the way, if you know who wrote that lovely poem, please tell me!

Bob Stein Section Chair CSU San Bernardino bstein@wiley.csusb.edu

Prepare your poster early and bring it to the Joint Mathematics Meeting in New Orleans. There is an undergraduate poster session Friday January 12, 4:30-7 pm. Contact Mario Martelli mmartelli@mckenna.edu for submission details or visit the MAA website.

News of the Section

UCSB welcomes **Hector Ceniceros** to its faculty and congratulates **Michael Cran-dall** on his election to the American Academy of Sciences.

Caltech is celebrating **Tom Apostol**'s fiftieth year on campus. He will give a colloquium and there will be a special dinner in his honor on October 4, 2000. **Tom Wolff**, Bocher prize winner and distinguished analyst was tragically killed in an automobile crash on July 31. An obituary and various tributes can be found at <http://math.caltech.edu/wolffobit.html>. A memorial service is planned at Caltech on October 11, 2000. For further information on eother event, contact Laura Cashion (cashion@its.caltech.edu or 626-395-4334).

News from *California State University Northridge*: **Terry Fuller** has received a 3-year research grant from NSF. **Kellie Evans** has been selected to be a Santa Fe Institute Fellow-at-Large 2000. Graduate student **Ann Davis** was one of ten graduate student participants in the AWM Workshop Poster Session held in conjunction with SIAM annual meeting in San Juan, Puerto Rico. Ann was the only master student chosen to attend this workshop.

Fred Feldon, Math Department Chair at *Coastline Community College*, was selected as "Teacher of the Year" for 1999-2000; additionally, **Fred Feldon** and **Hoa Nguyen**, Instructor at *Saddleback College*, received a grant from the California Virtual College Region 3 to develop an online Liberal Arts Math class. The class will be up and running September 5, 2000. Coastline's home page is http://coastline.cccd.edu.

The new full time instructors just hired in the Math Department of *El Camino College* are **Jeffrey Cohen, Lars Kjeseth, Trudy Meyer, Kristine Numrich**, and **Susan Tummers**. El Camino College is also the recipient of a MESA CCCP grant this semester.

Occidental College welcomes **Judith Prewitt** and **Donna Gabai** to its faculty this fall. Best wishes to **Mickey McDonald**, currently serving Occidental as Dean of Students.

Carl Farmer is joining the faculty at *College of the Desert* as director of the Math, Engineering and Science Achievement (MESA) program this fall.

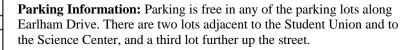
The Department of Mathematics, Computer Science and Physics at *Chapman University* is pleased to welcome **Dr**. **Mohamed Allali** to the department. Dr. Allali's research is on wavelets and signal processing. Department member **Dr**. **Shandy Hauk** will be continuing her second year of a visit to Arizona State University on an NSF fellowship. She is there primarily to investigate the implementation at a large institution of a "Mathematical Modeling" curriculum developed by Dr. Hauk at Chapman.

Victor Valley College welcomes two new tenure-track members of the department: **Michael Butros** and **J. Patrick Malone**. The recently tenured **Beth Doolittle** was named Victor Valley College instructor of the year and received an award from the community.

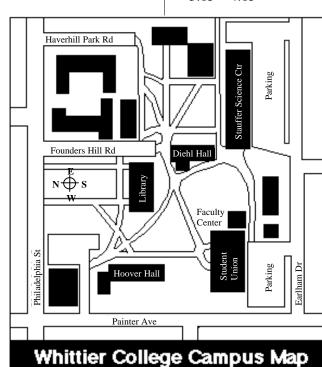
University of San Diego has hired a new tenure track member of the mathematics department **Dr. Jeff Wright**. Also **Dr. Perla Myers** continues on a temporary appointment and is part of project NExT.

Send news from your institution to Jennifer Quinn, jquinn@oxy.edu or Occidental College, Dept. of Mathematics, 1600 Campus Road, Los Angeles, CA 90041. Let us publicize your honors, events, and milestones

	FALL MEETING PROGRAM Whittier College		
	8:15 - 12:00 8:15 - 10:30 8:15 - 2:30	October 7, 2000 Registration Refreshment MAA Book Sale	
	9:00- 9:50	INVITED ADDRESS Clutching for Survival: The California Condor Restoration Project Thomas O'Neil, Cal Poly San Luis Obispo	
There is still time to submit an abstract for the contributed paper sessions. The	10:00 - 11:45	CONTRIBUTED PAPER SESSIONS (3 parallel sessions; a general session, one on mathematical modeling and another on the history of mathematics)	
submission deadline is September 13. Contact Herbert Medina: hmedina@lmumail.lmu.edu	12:00 - 2:00	LUNCHEON PROGRAM Food service followed by acknowledgements and welcome from Bob Stein , CSU San Bernardino MAA Section Chair	
Electronic submission of title and abstract (PDF, DVI, LaTeX, TeX, MS Word) is preferred.		1:00 – 2:00 INVITED ADDRESS Groups, Rings, and Fields in the MAA Ann Watkins, CSU Northridge	
	2:15 - 3:05	INVITED ADDRESS Angle Trisectors Underwood Dudley, DePauw University	
Haverbill Park Rd	3:15 – 4:15	Who Wants to be a Mathematician? A Mathematical Game Show Organized by your MAA Section Board Members	



Registration Desk: At the west entrance to Stauffer Science Center (facing the Student Union on the map).



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ABSTRACTS

Thomas O'Neil, Cal Poly San Luis Obispo Dept. of Math Clutching for Survival: The California Condor Restoration Project

For the last two years several Cal Poly students and I have been providing support to the Ventana Wilderness Society in their effort to establish a flock of California condors in the Big Sur area. Any attempt to develop a good recovery strategy requires an accurate population projection program. Unfortunately, there are several condor traits that make construction of such a program difficult. We will discuss these traits and how we have overcome many of the problems. Additionally, there is a lack of data. Critical to any population projection program is the survival rate data. No one knows the correct values, although there are estimates that can be used for first approximations. However, this data is based on observations of small populations of wild condors. No one wants to guess how the captive bred and reared birds will fare in the wild. To help in this area, we have created a database of every California condor in captivity or in the wild, living or dead since 1987 the year the last wild condor was brought into captivity. Here again, we will discuss the problems encountered in creating this database and getting it into a format that has made it a useful tool for the biologists in the condor recovery project.

Underwood Dudley, DePauw University Dept. of Math

Angle Trisectors

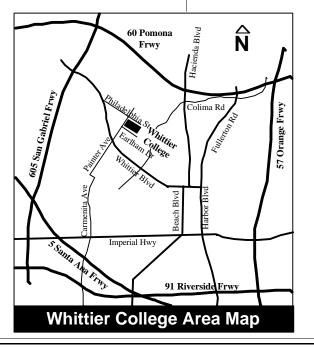
It has been known for a long time that it is impossible to trisect the angles with straightedge and compass alone. Nevertheless, some people try to do the impossible and some of them think that they succeed. This talk will survey the vast field of angle trisecting and give practical suggestions for dealing with trisectors.

Ann Watkins, CSU Northridge Groups, Rings, and Fields in the MAA

Abstract to appear on our web site <http://www.maa.org/ socal> once it is available. Thanks to the national office for the simplified URL!

Talk Locations:

Invited Addresses and Game Show: Hoover Hall 100 Luncheon and Luncheon talk: Faculty Center Contributed Paper Sessions: Deihl Hall, Rooms 004, 104, and 118 Refreshments & MAA Book Sale: Portico on west side of Diehl Hall



Call for Nominations for the Southern California Section Award for Distinguished College or University Teaching

The Distinguished Teaching Award Committee of the Southern California Section of the MAA is seeking nominations for the 2001 Distinguished College or University Teaching Award. They kindly ask you to submit the name(s) of faculty from your department who in your opinion have a distinguished teaching record. The winner of the award will be recognized at the Spring Meeting of the MAA (date and location to be announced soon) and will become the

Section's official representative for the national award. The act of nomination itself honors the nominee; those selected for the award are, of course, especially honored. Nominations are effective for two years.

Art Benjamin, Secretary-Treasurer of the Section, can provide you with all details needed to submit a nomination. He can be reached at benjamin@hmc.edu or (909) 621-8688. He will mail you all nomination materials that you need. Besides your supporting letter, two more letters from faculty and two from students are allowed. Letters must be no longer than a page. In addition, an outline of no more than three pages should list the nominee's activities related to the award. Art will be more than happy to help you with the nomination process, as will the Committee Chair, Wilhelmus Luxemburg. You can reach him at lux@cco.caltech.edu, and (626) 395-4344.

The Committee consists of Wilhelmus Luxemburg, CalTech (Chair) Jim Friel, CSU Fullerton Joan T. Hallett, CSU San Bernardino Richard Zucker, Irvine Valley College

Treasurer's Report August 1, 2000

Balance on August 1, 1999	14,455.50
PFF Money Market	1772.62
PFF Spring CD	2043.43
PFF Fall CD	10421.45
Post office	218.00
Expenditures	7549.05
Chapman Meeting	1199.15
UCLA Meeting	4684.78
Newsletter	1489.79
Miscellaneous	175.33
Income	8100.93
2000-2001 Subvention	1700.00
Chapman Meeting	1941.00
UCLA Meeting	3214.00
Book Sales	351.82
Interest	894.11
Balance on August 1, 2000	15007.38
PFF Money Market	2322.50
PFF Spring CD	2144.05
PFF Fall CD	10540.83
Post office	0

Respectfully submitted,

Art Benjamin Secretary-Treasurer Harvey Mudd College

Past recipients of the Southern California Section Award are:

2000 Tom O'Neil Cal Poly San Louis Obispo 1999 Arthur Benjamin, Harvey Mudd College 1998 Ali Zakeri, CSU Northridge 1997 Lukasz Pruski, University of San Diego 1996 KatherineYoshiwara LA Pierce College 1995 Kuen Lee, Los Angeles Trade Tech 1994 Mario Martelli, CSU Fullerton 1993 David Cohen, UCLA 1992 Harris Shultz. CSU Fullerton

Southern California Speakers List being Compiled Have you run out of personal contacts to bring to your institution for seminars? Have you spent hours preparing a talk and then given it only once? Cindy Wyels is compiling a list of people who are eager and willing to speak about mathematical topics in colloquia or seminars at institutions in Southern California. People could use the list to advertise talks they're willing to give and find people to give talks. See <http://public.clunet.edu/~wyels/ speakers.html> for a sample list, or e-mail Cindy Wyels (wyels@clunet.edu) if interested. **Pre-Registration/Luncheon Reservation Form** Fall Meeting at Whittier College October 7, 2000 Enter the number of registrations of each type in the appropriate blank in the table below. Make checks payable to Southern California MAA. (Attach a separate page for multiple registration information.) Name_____ Complete the form and Affiliation send it with payment to: Address Ernie Solheid E-mail Address Dept. of Mathematics CSU Fullerton Attention new members of the MAA: You are qualified for free registration at your first 800 N. State College section meeting. Blvd., Fullerton, CA 92834 Registration deadline is New MAA September 29, 2000. Nonmember **MAA Member** Member Student First Meeting @ \$12.00 **Registration Only** @ \$14.00 @ FREE @ FREE Registration and @ \$30.00 @ \$28.00 @ \$16.00 @ \$8.00 Luncheon Registration and @ \$30.00 @ \$28.00 @ \$16.00 @ \$8.00

Total Enclosed \$_____

Questions or problems? Contact:

Vegetarian Lunch

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



Recognize an excellent teacher from your institution. Nominate them for the *Southern California Section Award for Distinguished College or University Teaching.* Details can be found of page 6.

See what's happening at Southern California colleges and universities. Read *News of the Section* on page 3 and be sure to share your news in the next issue of our Newsletter.



The URL for the Section Web page is easier to remember http://www.maa.org/socal.

Thanks to the National MAA Office for the simplification!

Plan to attend the Fall Meeting at Whittier College on October 7!

Program and directions on pages 4-5. Registration form on page 7. Registration is free for students.

Registration is free for new MAA members attending their first Southern California Section Meeting.

Newsletter

Mathematics Association of America Southern California Section Jennifer Quinn, Newsletter Editor Occidental College 1600 Campus Road Los Angeles, CA 90041 Nonprofit Organization U.S. Postage PAID Los Angeles, CA Permit No. 21357