



MINI-FOCUS

Issue 21

JANUARY 1996

THE NEWSLETTER OF THE NORTHERN CALIFORNIA SECTION, MAA

Edward M. Landesman Wins Sectional Teaching Award



In keeping with the resolve of the Mathematical Association of America to take substantive action each year to honor extraordinarily successful teaching at all post-secondary levels, the Northern California Section of the Association named Professor Edward M. Landesman of the University of California, Santa Cruz (UCSC), the 1995 recipient of the Award for Distinguished College or University Teaching of Mathematics (shown receiving the award from Betty Hinman, committee chair for the nominations by the membership). We quote, in part, Dr. Hinman's remarks.



Professor Landesman has been characterized by his colleagues and students as "a teacher the rest of us can only look upon

with awe." He has had a long and distinguished career in which he has effectively integrated research and teaching. He has inspired many of his undergraduate students to pursue the Ph.D. in mathematics and his graduate students to continue his tradition of excellence in teaching at other universities. His effectiveness as a teacher encompasses the full mathematics curriculum, from introductory to graduate courses and from large lecture classes to small advanced seminars. What sets him apart is his ability to recognize the individual needs of his students and his willingness to take the extra step to respond to those needs.

Professor Landesman's influence in mathematics extends far beyond the university classroom. He is widely recognized as a pioneer in the innovative use of media and technology in the teaching of mathematics. As director of the UCSC Community Teaching Fellowship Program, he supervises graduate students placed in elementary schools for the purpose of stimulating interest in mathematics among young students. His leadership in the Monterey Bay Area Mathematics Project has provided over 200 K-12 teachers with the opportunity to upgrade their mathematical and instructional skills. With support from the State of California and the University of California, he has created a specialized high school program for mathematically talented students in the area. Through his many and varied efforts, Professor Landesman is helping to improve the quality of mathematics instruction in the public schools.

This is the second national teaching award winner from the Northern California Section in the four years the awards have been given. Only one section has had more (the Northeastern Section with three) and only two others have had two (Indiana, and Eastern Pennsylvania and Delaware). Incidentally, the other Northern California national winner was Paul Halmos.

The 36th International Mathematics Olympiad

Competing against teams representing a record 74 countries, a team of six American high school students won six medals at the 36th International Mathematical Olympiad (IMO) held in Toronto, Canada, July 13-25. The top 12 teams were China, Romania, Russia, Vietnam, Hungary, Bulgaria, South Korea, Iran, Japan, United Kingdom, U.S.A., and India.

Mr. Titu Andreescu, from the Illinois Mathematics and Science Academy, the Leader of the team, said: "Even though our team ranked just 11th this year, all of our students and coaches did their best. We participated with a young and promising team of six Americans who gave everything they were capable of, and were outstanding representatives of our country. I am proud of them all. Three of our six contestants will have the chance to participate in next year's IMO. Taking into account other talented students who attended the Mathematical Olympiad Summer Program and improved their problem solving skills significantly, I am sure that we will be able to put together an excellent team next year. Student selection and hard work will be the key ingredients for our future shining performances".

The team was also accompanied by Professor Paul Zeitz (University of San Francisco), Deputy Leader of the Team, and Professor Walter E. Mientka, from the University of Nebraska-Lincoln, who was the Official Observer. The USA team was chosen on the basis of performance in the 24th annual USA Mathematical Olympiad held in April of 1995. USAMO Activities are sponsored by nine national associations in the mathematical sciences with arrangements made by the MAA. Financial support is provided by the Army Research Office, the Office of Naval Research, Microsoft Corporation, and the Matilda R. Wilson Fund. USA team members were: Christopher C. Chang, Henry Gunn High, Palo Alto, CA, bronze medalist; Jay H. Chyung, West High, Iowa City, IA, bronze; Andrei C. Gnepp, Hawken School, Gates Mill, OH, bronze; Aleksandr Khazanov, Stuyvesant High, NY, silver; Jacob Lurie, Montgomery Blair High, Silver Spring, MD, silver; and Josh Nichols-Barrer, Newton South High, Newton Center, MA, silver. Sponsors are: American Association of Pension Actuaries, AMATYC, AMS, American Statistical Association, Casualty Actuarial Society, MAA, NCTM, Mu Alpha Theta, and the Society of Actuaries.

Northern California Member Elected MAA President

As you have probably noticed in *Focus*, a Northern California Section member, Jerry Alexanderson, has been elected President of the MAA, effective January 1997. Prior to being President-elect, he served the MAA as Secretary from 1990 to the present and served the Section as Secretary-Treasurer (1967-70), Chair (1971-72) and Sectional Governor (1975-78). This is only the second time that a Northern California Section member has been elected MAA President; the other was, of course, Henry Alder, who served as President in 1977-78.

MINI-FOCUS

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Editor: **William G. Chinn**

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Governor: **John A. Mitchem**, San Jose State U

Remarks on this Edition

Inasmuch as the MAA headquarters provided us the roster of twenty-five year members, MINI-FOCUS decided to devote a couple of pages to print the list. Hereafter, the new additions can then be posted each year.

Below is a listing of all current members of the Northern California Section of the MAA who had attained twenty-five year status as of January, 1996. Bold face subtitles indicate the year the member joined the MAA; parenthesized numerals after name indicate number of years inactive since joining.

1932	Irving Kaplansky
George A. Baker	1943
1934	Lloyd A. Walker
Mable L. Beckwith	1946
Dorothy I. Sweitzer	Charles L. Clark
1936	W.R. Hanson
Robert E. Gaskell	R.B. Herrera
John V. Wehausen	George M. Muller
1940	1947
Frances C. Amemiya	Robert J. Levit
Edison Greer	Henry J. Osner
1941	Abraham H. Taub
Clarence M. Ablow	1948
Ralph Mansfield	William G. Bade
Angus E. Taylor	Daniel J. Ewy
1942	Ruth A. Fish
Samuel G. Bourne	James G. Wendel
Frank D. Faulkner	1949
Paul R. Halmos	Michael I. Aissen
Richard W. Hamming	Joel L. Brenner

Gordon R. Glabe
William H. Gregory
Charles A. Hayes
John G. Herriot
Lowell J. Paige
George B. Pedrick
Hartley L. Pond
Murray H. Protter
Ward C. Sangren
Mary V. Sunseri

1950

Henry L. Alder
Donald C. Benson
Harold Chatland
Shiing S. Chern
Robert J. Dickson
Paul W. Healy
Kenneth S. Phelan
Dmitri E. Thoro
Robert C. Wrede

1951

Donald G. Duncan
Gene Kerns
Lester H. Lange
H.S. Moredock
Joseph J. Schoderbek

1952

Dallas O. Banks
I.J. Christopher
Bernard Greenspan
Joe D. Hankins
Ronald E. Hill
Milton H. Hoehn
Robert C. James
Donald G. Miller
Edwin S. Shapiro
James E. Steinkraus
James W. Warwick
James E. Householder (1)

1953

David Blackwell
Tseng Y. Chow
William M. Lowney

1954

Gerald L. Alexanderson
Raymond A. Barnett
C. Stewart Brewster
Richard A. Dean
Leo F. Epstein
E.G. McNeil
George W. Peglar
Peter W. Zehna

1955

William G. Chinn
David Gale

Thomas C. Kipps
Patrick Suppes
1956

Joseph E. Billotti
Crosman J. Clark
Robert S. Dezur
Lester E. Dubins
Newman H. Fisher
Robert W. Hunt
Paul M. Kahn
Philip R. Monson
Robert K. Otnes
Norma P. Schmid

1957

Leonard Feldman
Federico Grabiell
Leon A. Henkin
Timothy H. Norman
I. Dale Ruggles
James R. Smart
William F. Whitmore
James T. Woolum
Ling-Erl E. Wu
Looy J. Simonoff

1958

Murray Berg
J. Michael Bossert
Ben B. Bowen
Richard W. Cottle
William Craig
Clement E. Falbo
David Friedman
John N. Fujii
Roy H. Holmgren
Donald E. Knuth
Fred Krakowski
Harry L. Nelson
Jean J. Pedersen
Dorothy K. Reed
William B. Rundberg
Hwa Tsang Tang
Donald H. Taranto
Stanley L. Taylor
Paul Aizley (6)

1959

Roland B. Di Franco
Edward M. Harris
R.S. Lehman
Norman G. Mouck
K.C. Ng
Hugh Noland
Ingram Olkin
Robert L. Pexton
Hans Samelson
Franklin F. Sheehan

John W. Summers
Henry S. Tropp
Allyn J. Washington
1960

Arnold O. Allen
George B. Brown
Gulbank D. Chakerian
Leonard F. Klosinski
Bernard L. Pardee
Sherman K. Stein
Takayuki Tamura
Kenneth P. Yanosko

1961

Peter B. Bjorklund
Allen K. Charnow
Paul R. Chernoff
Judith A. Clark
Ross L. Finney
Michael Friedman
Charles M. Geschke
John D. Hancock
George W. Heigho
Gerald W. Kimble
Anthony E. Labarre
Richard K. Lashof
James A. Maxwell
Wah Hin Ng
Donald C. Pfaff
Robert M. Richardson
Thomas C. Robbins
T.N. Robertson
H.E. Syrett
Ruth E. Wong
Margaret A. Raphael (4)
Paul R. Abad (8)

1962

J.W. Addison
Robert Arnold
Andrew Astromoff
Herbert S. Bear
Mario Benedicty
Vincent J. Bruno
Ralph L. Carmichael
Allan B. Cruse
Charles R. Fleenor
Sarah T. Herriot
Alan C. Hindmarsh
Emma Lehmer
William R. Nico
Chester F. Pinkerton
Arianna W. Rosenbluth
P.E. Thomas
Roseanna F. Torretto
Roy W. Tucker
George A. Van Buskirk

Donald D. Weddington
Virginia T. White
Russell E. Wright
Burke Zane
Rudolph B. Merkel (7)

1963

David W. Barnette
Nelson M. Blachman
Allen H. Brady
Frank E. Burk
Mark S. Fineman
Chaitan P. Gupta
Alexander Hurwitz
Richard A. Karp
Laura K. Kodama
Edwin R. Lassettre
Victor Meyers
Roy G. Sawtell
Arlo W. Schurle
J.K.M. Siu
Karl J. Smith
Peter W. Van Der Pas
Maurice D. Weir
Larry N. Lorenzoni (6)
George W. Dinolt (7)
Jerry A. Johnson (8)

1964

John P. Celenza
Jane M. Day
Robert P. Dickinson
Joseph H. Dorsey
Hal J. Forsey
Edward C. Hook
Robert E. Jewett
Thomas Kailath
Douglas A. Keeley
Frankyn L. Kerr
Adolf Mader
Charles J. Miller
Thomas O. Moore
G.S. Morris
Thomas C. Nelson
Veril L. Phillips
Donald E. Sarason
James M. Stakkestad
Frederick Stern
Tokihiko Suyehiro
Dale J. Underwood
A. Dean West
William S. Mutch (3)

1965

M.K. Ali
Robert M. Baer
Elwyn R. Berlekamp
Hugh M. Edgar

James E. Gehrmann
 Betty F. Hinman
 Jerry K. Kanno
 Alice J. Kelly
 Herbert Koller
 Andrew F. Long
 Marjorie Maher
 Peg Kem McPartland
 Donald M. Mintz
 David P. Mitchell
 Edward F. Schmeichel
 Martin E. Flashman (1)
 Lon A. Hacker (7)

1966

John W. Andrews
 Timothy R. Eaton
 Lloyd A. Gavin
 Dan Jurca
 Michael D. Kerwan
 Edmund V. Laitone
 Andrew C. Lyon
 Christopher L. Morgan
 Donald E. Rossi
 S. David Shapiro
 Ali Tabatabaian
 Thomas T. Cover (1)

Wallace A. Etterbeek (4)
 1967

James C. Curl
 Arthur P. Dull
 John T. Gill
 Timothy H. Jackins
 Peter L. Montgomery
 Walter J. Neath
 Leon D. Neidleman
 James T. Smith
 Dennis C. Smolarski
 Charles E. Snygg
 Henry L. Thaggert

1968

Stanley J. Benkoski
 Phyllis Z. Chinn
 Robert J. Douglas
 Thomas C. Fall
 Thomas M. Green
 Roland H. Lamberson
 Barbara J. Pence
 Thomas A. Rike
 G. Tom Sallee
 Eugene K. Sargent
 Bruno O. Shubert
 Paraskevi Steinberg

Visutdhi Upatisringa
 Richard C. Vrem
 Edward T. Walsh
 Otto Plaat (1)
 Dan C. Boge
 Kyong S. Chung
 Karel L. De Bouvère
 Wynette L. Fowler

1969

David M. Furuto
 Howard B. Hamilton
 Robert C. Hooper
 Gerald F. Hudson
 Yul J. Inn
 Edward L. Keller
 Leon J. Luey
 Frederick W. Luttmann
 Martin J. McFadden
 Kenneth Pefkaros
 Juanita J. Peterson
 Norman T. Woo (2)

1970

Chris W. Avery
 Martin Billik
 Donald B. Charnley
 Solomon Feferman

James K. Finch
 Leonidas J. Guibas
 David F. Hayes
 Vincent Ho
 Paul W. Holland
 M. Vernon Johns
 John B. Lewis
 Norman Y. Luther
 Calvin C. Moore
 James B. Nation
 Harold Oxsen
 Peter Ross
 Michael Thibodeaux
 Timothy R. Wilson
 John R. Gilbert
 Bradley W. Jackson
 Victor M. Manjarrez
 Dennis R. Mar
 John A. Mitchem
 Richard F. Poppen
 Ernestine Reeves-Hicks
 Cynthia A. Speed

San Luis Obispo Meetings

Although not all members of both the Northern and Southern California Sections were able to participate in the joint meetings of the two sections at Cal Poly, San Luis Obispo, the number attending (359, including 137 students) was impressive given the distance to the site. The occasion was the 70th Anniversary of the Southern California Section. Those furthest from the meeting site were from Chico—including the students with posters. The success in arranging the many simultaneous sections came off very smoothly, and the student poster sessions went off so well that this event will be repeated at the next (Sonoma) meeting as well. MINI-FOCUS appreciates the extra space allocated for the special events. Instead of words, it will offer a collage of photos to capture the spirit of the combined meetings. A great deal of the burden in planning and operating the meetings fell on the Secretary/Treasurer/Editor of the Southern California Section, Barbara Beechler.

Rogues's Gallery: Presiders, Pianist

Speakers: the Backbones



Bill Watkins



D. Carlson



L. Gillman



J. Day



J. Becker



P. Thompson



M. Martelli

More Speakers



H. Alder



L. Henkin



T. Apostol



J. Grabiner



W. Thurston



J. Conway

Mob Scene – Fifteen Minute Break



D. Albers A. Watkins



T. O'Neil
(Local Coordinator)



M. Weir

B. Beechler

More Speakers



H. Alder



L. Henkin



T. Apostol



J. Grabiner



W. Thurston



J. Conway

Mob Scene – Fifteen Minute Break



D. Albers A. Watkins



T. O'Neil
(Local Coordinator)



M. Weir

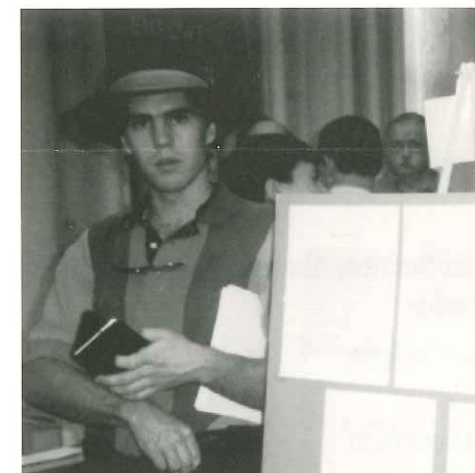
B. Beechler

Student Posters



Ruben Glueck (back), CSU Northridge
Faculty Sponsor: Ali Zakeri
Crystallography, Symmetry & Group Theory
(Shown with Linda Hill)

Kyle Griffin,
Cal Poly, San Luis Obispo
Faculty Sponsor:
Don Rawlings
 q -Derangement Problems



Bethany J. Johnston, CSU Fullerton
Faculty Sponsor: Mario Martelli
Neural Networks & Triangular Dynamical Systems



Ken Waring/Clare Hupp, CSU Chico
Faculty Sponsor: Jim N. Jones
A Case of Irregularities – 3D

**MATHEMATICAL ASSOCIATION OF AMERICA
NORTHERN CALIFORNIA SECTION**

Saturday, March 2, 1996

Sonoma State University

Rohnert Park

Theater

PROGRAM

- 8:15—9:15 Registration, Coffee Hour, Book Sales
Registration Fee: \$10 (\$1 student, retired, unemployed)
- 9:15—10:05 **KENNETH ROSS**, University of Oregon
“Factorization in L_1 and Other Places”
Presider: **Jean Chan**, Sonoma State University
- 10:05—10:20 MAA Section Business Meeting
Presider: **Allan Cruse**, University of San Francisco, Section Chair
- 10:20—11:00 Break and Student Poster Session
- 11:00—11:50 **UNDERWOOD DUDLEY**, DePauw University (Polya Lecturer)
“Formulas for Primes”
Presider: **Gerald Alexanderson**, Santa Clara University
- 12:10—1:45 Luncheon*, Faculty Club
Presentation of the 1996 Northern California Section Award for Distinguished College or University Teaching of Mathematics
Speaker: **ARTHUR BENJAMIN**, Harvey Mudd College
“The Art of Mental Calculation”
Presider: **Allan Cruse**, University of San Francisco
- 2:00—2:50 **JANE DAY**, San Jose State University
“Lovely Theorems and Conjectures in Matrix Analysis”
Presider: **Larry Hinman**, Vice-President, HSH ATIS, Inc.
- 3:00—3:50 **EDWARD LANDESMAN**, University of California, Santa Cruz
“Teaching Mathematics in the 21st Century”
Presider: **Betty Hinman**, Lockheed Missiles and Space Company
- 4:00—5:00 Governor's Meeting
Topic: “What Can University Mathematicians Do To Improve K – 12 Mathematics?”
Presider: **John Mitchem**, San Jose State University, Section Governor
Note: All interested participants are invited to the Governor's meeting.

***Advance reservation for luncheon required — \$15.00**

Program Abstracts

KENNETH ROSS, University of Oregon, "Factorization in L_1 and Other Places"

A gossipy historical story about a small corner of mathematics that was touched by several famous people. Cameo appearances include Raphael Salem, Walter Rudin, Paul Cohen, Jean Dieudonné, Edwin Hewitt, and N. Th. Varopoulos.

UNDERWOOD DUDLEY, DePauw University, "Formulas for Primes"

Formulas are fascinating and so are primes, whence formulas for primes ought to be doubly so. I will survey the field, prove exactly one theorem, make some moral judgments, and end with an exhortation.

ARTHUR BENJAMIN, Harvey Mudd College, "The Art of Mental Calculation"

When solving nontrivial multiplication problems mentally, the objective is to reduce memory demands as much as possible. Using mentally efficient left to right algorithms, it is possible (after a suitable amount of practice) to multiply 5-digit numbers together without using any external memory aids like pencil or paper. Furthermore, some problems (like squaring large numbers) can be done quite quickly. The lecture/demonstration will be informal, permitting ample time for answering questions from the audience.

JANE DAY, San Jose State University, "Lovely Theorems and Conjectures in Matrix Analysis"

This is about a few results and conjectures which seem beautiful to me: some classic, some contemporary. A remarkable variety of ideas are employed in proofs in matrix analysis, and the applications are also remarkably varied. Professor Day was the recipient of the 1994 Northern California Section Award for Distinguished College or University Teaching of Mathematics.

EDWARD LANDESMAN, University of California, Santa Cruz, "Teaching Mathematics in the 21st Century"

Professor Landesman was the recipient of the 1995 Northern California Section Award for Distinguished College or University Teaching of Mathematics. He also received the 1996 Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics at the Orlando meetings of the MAA.

**Advance reservation for lunch is required by February 12, 1996.
Complete the following, please.**

Please make _____ reservation(s) for the MAA Luncheon. Enclosed is my check payable to MAA, for \$ _____
[\$25.00 regular; \$16.00 students, retired, unemployed. (Check here _____ if student.)] The fee includes meeting registration and luncheon.

Name(s) _____

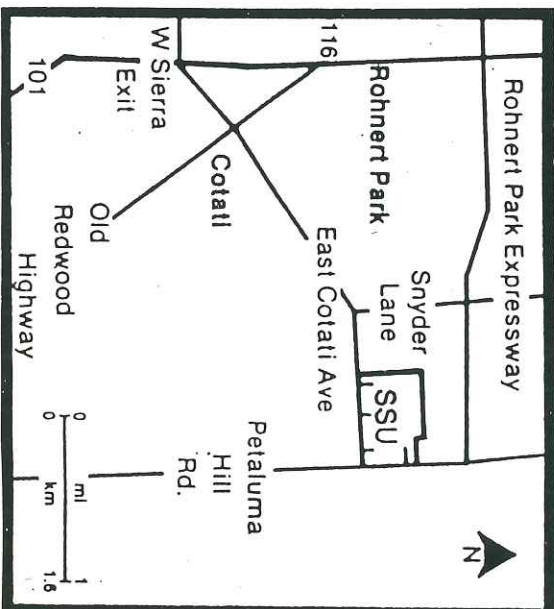
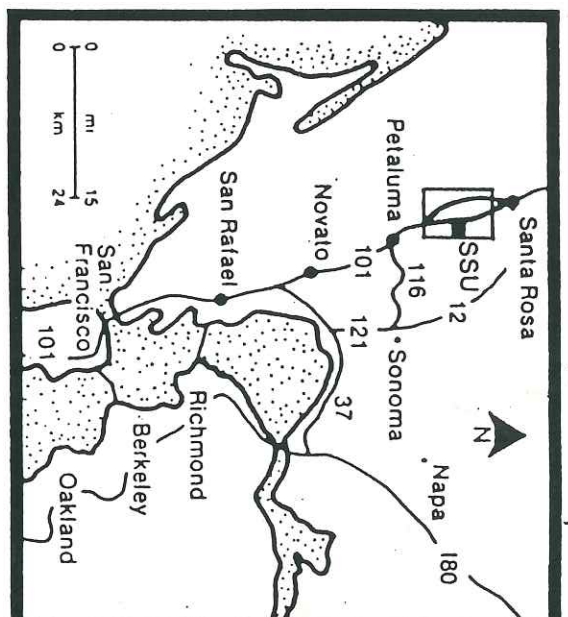
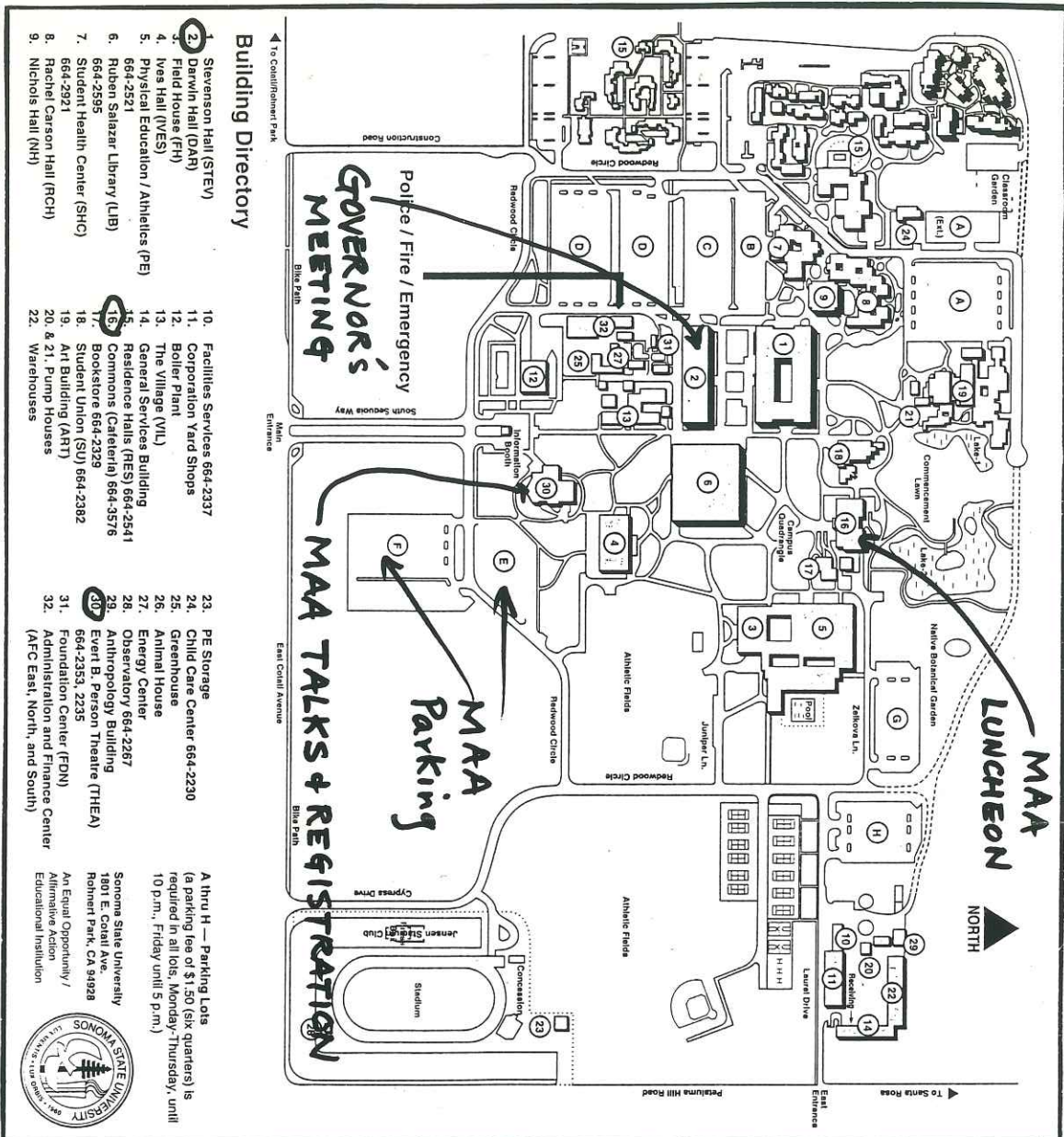
Affiliation (employer) _____

I am a member of

MAA ☐ AMS ☐ SIAM ☐

Check all that apply.

Copy, clip, and mail to:
MAA Luncheon
Mathematics Department
Santa Clara University
Santa Clara, CA 95053



Curtis M. Fulton

Mini-Focus laments the passing of Curtis M. Fulton, who died August 29, 1995, at the Beverly Manor Convalescent Home in Monterey, California, as a result of a heart attack. He was 85 years old.

Fulton was a Professor Emeritus of Mathematics at U.C. Davis. He was born in Stuttgart, Germany, on July 4, 1910, and received his Ph.D. in mathematics at the Institute of Technology in Munich, Germany, in 1936.

He joined the Department of Mathematics at the Escuela Normal Superior in Bogota, Colombia, from 1938 to 1946 and taught at UCLA in 1946-47.

He joined the Department of Mathematics at UCD in 1947 and remained until his retirement in 1978. His research interests were various areas of geometry. He taught a great variety of courses in mathematics and statistics, in particular, the upper division differential geometry and graduate course in Riemannian geometry.



He represented the University of California at the 1962 International Congress of Mathematicians in Stockholm.

He was also a member of UC's Agricultural Experimental Station working on a variety of problems of interest to agricultural scientists requiring mathematics expertise. One of these was a study of mathematical equations of grain drying. In 1955, he visited stations in Wageningen, The Netherlands; Bonn, Germany; and Silsoe, near London, to study with European mathematicians working on similar problems.

He served on many committees on the Davis campus including the Academic Council and the Academic Senate Committee on Courses, which he chaired in 1961-62 and 1964-65.

His favorite hobby was playing the piano. He became an accomplished player, giving piano recitals until very recently.

He married the former Blanche Marshall on September 24, 1975. They moved to Carmel Valley after his retirement from UC Davis. She preceded him in death on November 24, 1992. He leaves no known relatives. He was buried next to his wife at Davis Cemetery. There was no service.

Mathematical Association
of America
Santa Clara University
Santa Clara, CA 95053

Annual Program
Announcement
is included

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