Annual Section Program Announcement Becomes a Part of the Newsletter

Important Feature in this Issue

Occasionally, certain items of major importance need to be called to special attention of the reader. These are the occasions when one feels the need to shout from the rooftops until we can be assured the information reaches every reader in the Section.

Of primary importance, we note, 1991 was the only year the Newsletter failed to appear in print since 1975 when Ken Rebman founded this enterprise. We hope that members of the Section will understand that there is reason to this apparent madness -- as Alice would say.

With the constant rise in postal costs, the Executive Committee decided that one way to offset this increase would be to incorporate the mailing of the Newsletter with that of announcements and preregistration for the annual meeting as a single expense. This, in turn, pushes the Newsletter schedule closer to the meeting date, which, incidentally, puts more pressure on the individual members to act more quickly in response to sending in preregistration requests. We regret this necessity, and hope that the members will pitch in to help with the cause.

Les Lange,

a hacker he

The Executive Committee continues to do its best to provide an excellent program for the members. As an example -- and as a teaser we show the picture of the luncheon speaker for our February meeting (see above) -- someone whom members may recognize as a gentleman and scholar even before he joined the ranks of deanship -- and ultimately, Dean Emeri-

tus. Les Lange, erstwhile of San Jose State, intends to expound on *"Some Good Attitudes Learned from Euler and Pólya."* That he had learned at the knees of the Wizard of Basel and St. Petersburg (1707-1783), some of us only dared surmise; now it can be told.

For additional goodies to be offered at the same meeting, please turn to page 5, then react to our invitation on page 7, and proceed to the meeting at the University of Pacific, along routes provided courtesy of Walt Zimmerman of that institution. On, Stockton!

International Mathematical Olympiad

The 32nd International Mathematical Olympiad (IMO) was held on July 12-23, 1991. The top teams (out of 55 participating countries) and their respective scores are:

> 1st place - USSR (241)
> 2nd place - China (231)
> 3rd place - Romania (225)
> 4th place - Germany (222)
> 5th place - USA (212)

Participation by the USA team in the IMO followed a training session conducted by Professors **Cecil Rousseau** of Memphis State University, **Dan Ullman** of George Washington University and **Gail Ratcliff** of the University of Missouri at St. Louis at the US Military Academy at West Point.

Professor Rousseau asserted that "I was very pleased of our team's performance. We have a young team (only two seniors) and we knew that we would face strong teams from China, the new Germany, and such experienced competitors as the Soviet Union, Romania and Hungary." (Hungary placed sixth, just three points short of the USA.)

A perfect individual score on the IMO is 42 points. Team member **Joel Rosenberg** of West Hartford, CT won a gold

medal with 39 points; **Kiran Kedlaya** of Washington, DC (38 points), **Michail Sunitsky** of New York, NY (38), **Robert Kleinberg** of Elmer, NY (37), and **Lenhard Ng** of Chapel Hill, NC (34) received silver medals and **Ruby Breyda** of New York, NY (26) received a bronze medal. (The year before, Kiran Kedlaya received a gold medal with 39 points.

The Mathematical Olympiad activities in this country are sponsored by eight national societies in the mathematical sciences. Financial support was provided by **IBM**, the **Army Research Office**, the **Office of Naval Research, Hewlett-Packard**, and the **Mathilda R. Wilson Fund.**

Who's Doing What Where

Maurice Cohen was named Outstanding Professor at CSU Fresno.

Mi-Soo Smith of Chaminade University of Honolulu received the Campus Leadership Award in May, 1990.

CSU Fresno: The Department will be implementing computer labs in the third semester calculus and fourth semester differential equations courses this spring.

Chaminade University of Honolulu: Peer-tutoring by upper classmen is very active at the university.

University of Hawaii, Manoa: Visitors this year include **Greg Brumfiel, J. Jezek, V. Koryunov, M. Masuda, Donal O'Shea, Ted Petrie** and **Joel Shapiro.**

The University is actively promoting "writing-across-the-curriculum" with seven courses designated "writing-intensive".

New Chairs

Chaminade University of Honolulu: **Chuck Y. Wong**

CSU Fresno: **Larry Cusick**

CSU Sacramento: **Marcus M. Marsh**

Hartnell College (Salinas): **Gustavo Valadez-Ortiz**
  Dean of Instruction, Mathematics & Science

Mills College (Oakland): **Barbara Lisanti**

San Jose City College: **Jim Samuelson**

U of San Francisco: **Millie Lehmann**

William G. Chinn (retd):
  Com TYC, Com Ops in Mth Undrepresd Gps
Robert S. Cunningham (CSU Stanislaus): Bd Govs
Phil Daro (UCB): MAA-NCTM Am Math Proj Steering Com
Jane M. Day (San Jose State):
  CUPM Subcom on Service Courses
Hugh M. Edgar (San Jose State): Subcom Spectrum
Wade Ellis, Jr. (West Valley Col):
  1991 Nom Com, Com on Testing, Com on Mathl Edn of Teachers,
  CUPM Subcom on Serv Courses, CUPM, Subcom on Symb Comp
  Systems, CTYC, Com on Minicourses
Francis Flanagan (San Jose State): Assoc Ed.,TYC Math Journal
Paul R. Halmos (Santa Clara U):
  Com on Geo Polya Lects, Assoc Ed, Am Mathl Monthly
Leon Henkin (UCB):
  MAA-NCTM Am Math Proj Steering Com, MAA Prog Com
  Baltimore Mtg, US Commission Matl Instn
Aparna W. Higgins (Naval Postgrad Sch):
  Com on Student Chapters
Patricia Jacobs (Naval Postgrad Sch):
  AMS-ASA-AWM-IMS-MAA-NCTM-SIAM Com Women in
  Mathl Sciences
Alice J. Kelly(Santa Clara U):
  Com to Study Relnshp AWM and WAM (Co-Ch), WAM (Dir)
Leonard F. Klosinski (Santa Clara U):
  Com on Putnam Competn (Dir), Coord Coun Competn
Judith Kysh (UCD): MAA-NCTM Am Math Proj Steering Com
Patricia J. Leitner (Diablo Valley C): Com on Mtgs
Marjorie McCracken (UCSF):
  Com on Mathns outside Academia
Juan C. Meza (Sandia National Labs): Com on Career Materials
Ingram Olkin (Stanford U): Com on Math & Environment
Linda Petzold (Lawrence Livermore Labs):
  AMS-ASA-AWM-IMS-MAA-NCTM-SIAM Com Women in Mthl
  Sciences
Bjorn Poonen (UCB): Subcom on USAMO
Marc A. Rieffel (UCB):
  AMS-MAA-SIAM Com on Employment Opps
Peter Ross (Santa Clara U):
  CTUM Subcom Evaln of Teaching
Alan H. Schoenfeld (UCB):
  Com Awards for Col & Univ Teaching, Com on Research in
  Undergrad Math Edn
Terry Shell (Santa Rosa JC): Com on Am Comps
Evelyn Silvia (UCD):
  AMS-ASA-AWM-IMS-MAA-NCTM-SIAM Com Women in
  Mathl Sciences
Karl J. Smith (Santa Rosa JC): CTYC
Elizabeth Stage (UCB):
  MAA-NCTM Am Math Proj Steering Com
Uri Treisman (UCB):
  CUPM, CUPM Subcom Reform & First Two Yrs, CUPM Subcom
  Undergrad Research in Math, Com on Minority Participation in
  Math
Carroll O. Wilde (Naval Postgrad Sch):
  Com Beckenbach Book Prize, Com Math and Envirmnt, UME
  Trends Editorial Com
Eileen T. Wu (Menlo C): Com on Sections
Paul Zeitz (UCB): Adv Panel Am Math Comps

Sundry Items

Occasionally we have been asked to bring certain announcements of general interest to the attention of the membership. We regret that we have not always been able to cooperate fully on these matters due to questions either of timeliness or space. We hope that at least some of the following are not lost due to the late issue of our newsletter.

ICME-7

The Seventh International Congress on Mathematical Education (ICME-7) is scheduled to be held at Université Laval in the city of Quebec, Canada, from August 17 to 23, 1992. The Congress is organized on behalf of the International Commission on Mathematical Instruction (ICMI) by the Canadian National Committee for ICME-7.

An ICME provides a unique opportunity to find out what is happening in mathematics education in most parts of the world, to think again about responsibilities and achievements in the field, to identify problems and be introduced to innovations, to hear about recent developments in mathematics and in recent research on the learning and teaching of mathematics, and generally to exchange views and experiences about the practices and theories of mathematics teaching at all levels.

The program includes working groups to involve participants in active study of an aspect of mathematics education and to provide an international up-to-date context for the study of that aspect. These working groups include those dealing with formation of elementary mathematics concepts, students' misconceptions and inconsistencies, students' difficulties in calculus, innovative assessment of students in the classroom, modeling activities, the impact of calculators on the curriculum, distance education, and other areas of interest.

As in previous congresses, various excursions will be available for pre- and post-congress tours to nearby sites such as Montreal, Toronto and the Niagara Falls from the Canadian side for additional costs. Registration fees for full participants are CAN $340 (approximately $300 US) before June15, 1992 and CAN $395 ($348 US) after June 15. Fees for associate participants are CAN $105 and $125 respectively. Interested parties can write to the following address for additional information:

Congrès ICME-7 Congress
Université Laval
Québec, QC
Canada G1K 7P4

> **The Section Program Announcement on page 5 is the only announcement that you will receive for the February 29, 1992 meeting at the University of the Pacific.**

Fibonacci Conference

The Fifth International Conference on Fibonacci Numbers and their Applications will take place at the University of St. Andrews, St. Andrews, Scotland from July 20 to July 24, 1992. This Conference is sponsored jointly by the Fibonacci Association and the University of St. Andrews.

Papers on all branches of mathematics and science related to the Fibonacci numbers as well as recurrences and their generalizations are welcome. Abstracts are to be submitted by March 15, and manuscripts are due by May 30, 1992. Abstracts and manuscripts should be sent in duplicate following the guidelines for submission of articles found on the inside front cover of any recent issue of *The Fibonacci Quarterly* to:

> Professor Gerald E. Bergum
> The Fibonacci Quarterly
> Department of Computer Science
> South Dakota State University
> P.O. Box 2201
> Brookings, SD 57007-0194

Athens

This summer, the course "Ancient Greek Mathematics" will be given in Greece. Lectures will cover the development of mathematics from its legendary beginnings with Thales and Pythagoras through the work of Euclid, Archimedes and Diophantus, all viewed in the context of Greek culture and history. The lectures will be given in Athens and on the island of Samos, with a trip also included to Miletus and some other important early Greek cities in Asia Minor. Three graduate or undergraduate credits are available for completing this three week course, July 6-27. Professionals who take the course may find that their expenses are deductible or that they will be defrayed by an employer.

The cost of the program is about $2000, including round-trip airfare from New York, lodging, transportation within Europe, and several tours. Most meals are not included, nor is tuition. For further information, call the instructor, Paul Wolfson, (215) 436-1081 or write to him at:

> Department of Mathematics and Computer Science
> West Chester University
> West Chester, PA 19383

New Teaching Awards

This year the Northern California Section will give its first Award for Distinguished College or University Teaching of Mathematics. The awardee will also be the official Section nominee for one of the national awards to be given in San Antonio. There will be seven national awardees, each of whom will receive $1000 and a certificate. These national awardees will be chosen from the list of Section awardees, except that one may be selected from another source.

According to the guidelines approved by the Board of Governors, the nominees should be widely recognized as extraordinarily successful in their teaching, have teaching effectiveness that can be documented, have had influence in their teaching beyond their institutions, and foster curiosity and generate excitement about mathematics in their students. Teaching is to be interpreted in its broadest sense, not necessarily limited to classroom teaching. It may include activities such as preparing students for mathematical competitions at the college level, for example, the Putnam Prize Competition or the Mathematical Contest in Modeling, or attracting students to become majors in a mathematical science or to become Ph.D. candidates.
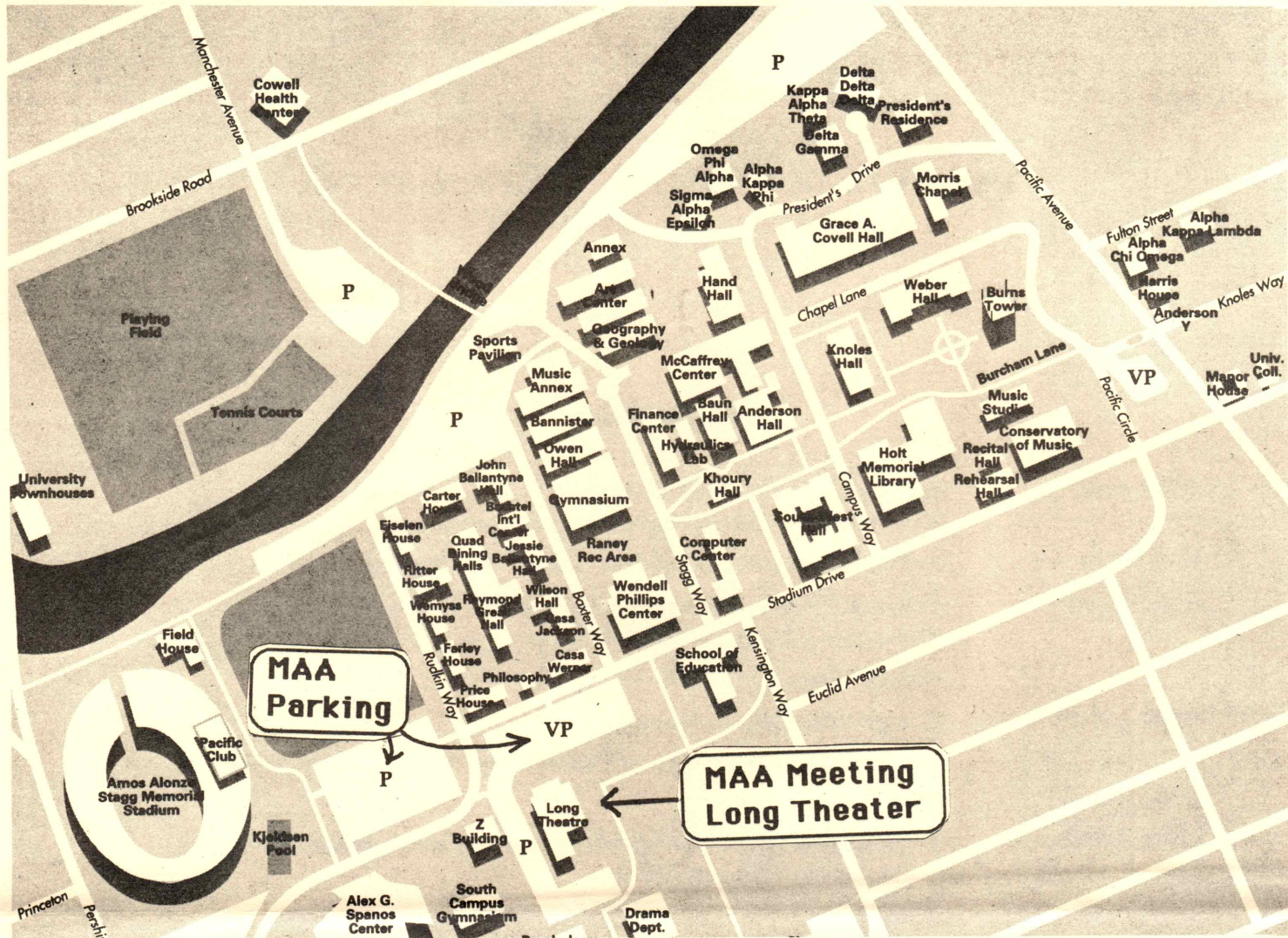
The section committee screening nominees for the Northern California award consists of: Maurice Beesley, Lester H. Lange (chair), and Kenneth Rebman.

MATHEMATICAL ASSOCIATION OF AMERICA
NORTHERN CALIFORNIA SECTION
Saturday, February 29, 1992
University of the Pacific, Long Theatre
Stockton

PROGRAM

8:30—9:20	Registration, Coffee Hour, Book Sales Registration Fee: $8 ($2 student, retired, unemployed)
9:20—9:30	Welcome, JOSEPH SUBBIONDO, Academic Vice-President, University of the Pacific
9:30—10:20	DEBORAH TEPPER HAIMO, University of Missouri, President of MAA "Expansion in Power Series and in Series of Jacobi Polynomials" Presider: Eleanor Kendrick, San Jose City College
10:20—10:35	MAA Section Business Meeting Presider: Dennis Smolarski, S.J., Santa Clara University, Section Chair
10:35—11:00	Break
11:00—11:50	Mel Slugbate, Slugbate and Mossbutter Real Estate Brokers, sponsored by COLIN ADAMS, Williams College "Real Estate in Hyperbolic Space" Presider: Henry Alder, University of California, Davis
12:10—1:45	Luncheon*, Raymond Great Hall Presentation of the 1992 Northern California Section Award for Distinguished College or University Teaching of Mathematics Speaker: LES LANGE, San Jose State University "Some Good Attitudes Learned from Euler and Pólya" Presider: Dennis Smolarski, S.J., Santa Clara University, Section Chair
2:00—2:50	DON CHAKERIAN, University of California, Davis "All of Plane Geometry in One Picture" Presider: Tom Sallee, University of California, Davis
3:00—3:50	KEN REBMAN, California State University, Hayward "The Arithmetic of Apportionment—A Legacy of the Founding Fathers" Presider: Betty Hinman, Lockheed Missiles & Space Company, Section Program Chair
4:00—5:00	Meeting of Department Chairs and MAA Representatives The Wendell Phillips Center Topic: Revitalizing Undergraduate Mathematics Presider: Don Albers, Section Governor

* Advance reservation for luncheon is required.

MAA Parking

MAA Meeting Long Theater

PROGRAM ABSTRACTS

Deborah Tepper Haimo, University of Missouri, St. Louis, President of MAA
"Expansion in Power Series and in Series of Jacobi Polynomials"
It is well known that, through the Dirichlet problem in the unit disk, a connection exists between power series and Fourier series. Another connection can also be established between power series expansions and those in terms of the orthogonal polynomials of Jacobi.

Mel Slugbate, Slugbate and Mossbutter Real Estate Brokers, sponsored by **Colin C. Adams**, Williams College
Real Estate in Hyperbolic Space: Investment Opportunities for the 90's
Have you found the new investment climate a bit on the chilly side? Nervous about stocks, bonds and mutual funds? Afraid of risky investments in Euclidean space? Then real estate in hyperbolic space is for you. We will discuss the enormous potential of this new investment opportunity and describe the many fascinating properties of hyperbolic space that make it such an attractive place to live. This is the financial equivalent of the 1980's junk bond. Don't miss it. Bring your checkbook and credit references!

Les Lange, San Jose State University
"Some Good Attitudes Learned from Euler and Pólya"
What Condorcet said about Euler applies to Pólya for Euler was Pólya's hero. Their attitudes were infectious. Both delighted in seizing moments of excited curiosity wherever they found them, and that ebullient spirit of exploration is surely a childlike attribute much to be prized by even the most mature among us. Those men believed in sharing their working thoughts with us, and both, in their own ways and times, would insist that "we earn the right to pursue mathematics by our conscientious concern for good teaching."

Don Chakerian, University of California, Davis
"All of Plane Geometry in One Picture"
We discuss a long forgotten idea of Willy Weber, showing how a variety of classical properties of the triangle involving the circumcenter, orthocenter, nine-point circle, and so forth, can be seen in a single stroke by viewing the configuration as an appropriate projection of a cube.

Ken Rebman, California State University, Hayward
"The Arithmetic of Apportionment—A Legacy of the Founding Fathers"
Those unlikely collaborators, politics and mathematics, have each contributed in their own way to the lively, controversial, challenging, and surprising history of apportionment: politics provided the heat; mathematics shed some light. Elementary arithmetic analysis reveals what one astounded and irate legislator described as "this atrocity which mathematicians have elected to call a paradox."

MINI-FOCUS laments the passing of two particularly active members of the Section this past year.

UCB Professor Emeritus **Derrick H. Lehmer** died in Berkeley, May 25, 1991 at age 86 of natural causes. He was an authority on number theory and an early proponent of high speed computing devices and other computation aids. A 1927 graduate of UCB, he earned his Sc.M. and Ph.D. from Brown University in 1930. While still an undergraduate, he began designing and building a mathematical "sieve," a machine that could quickly factor very large numbers.

Professor Lehmer joined the Berkeley faculty in 1940 three years after the retirement of his father, Berkeley Mathematics Professor Derrick N. Lehmer. Like his father, he served on the faculty for more than thirty years, although there was an interruption during the son's tenure. During the loyalty oath uproar (1950), he resigned from Berkeley and served for several years as Director of the National Bureau of Standards' Institute for Numerical Analysis in Los Angeles. There he was in charge of the first fully automatic computer on the West Coast, known as the "SWAC."

At Berkeley, he served as chairman of the Department of Mathematics (1954-57), and vice-chairman of the Department of Computer Science (1969-70). In the professional organizations, he served as vice president of the American Mathematical Society, governor-at-large of the Association for Computing Machinery, and vice president of the American Association for the Advancement of Science, but we could take pride in his chairmanship of this Section in 1951. His honors included a Guggenheim Fellowship in 1938 at Cambridge University and a Fulbright Lectureship in Australia in 1959. From 1962 to 1963 he was research professor of Berkeley's Miller Institute for Basic Research in Science.

Professor **David E. Logothetti**, luncheon speaker at this Section's 1991 meetings, died of cancer in Santa Clara, July 20 at age 56. Professor Logothetti graduated with honors from UCLA in 1957 and received his Master's and Ph.D. from the same institution. He had taught at every level from elementary through university, and at the University Extension at UCLA.

In addition, he was also a writer, an artist (as demonstrated in his luncheon talk), and an editor. He was editor of the California Mathematics Council, and assistant to the Editor and illustrator of the *Two-Year College Mathematics Journal*, as well as co-author with Don Chakerian of an article, "Cube Slices, Pictorial Triangles, and Probability," appearing as the lead article in the October, 1991, issue of the *Mathematics Magazine*.

Dr. Logothetti was President of the Santa Clara Joint Council on Science and Mathematics Education. He was Treasurer, and a member of the Board of Directors, of the Fibonacci Association; he was a member of the Publications Committee, and Chairman of the Educational Materials Committee, for the National Council of Teachers of Mathematics. He was a grader for the Putnam Competition and was twice President of the Santa Clara Valley Mathematics Association.

Dr. Logothetti was the first recipient of the annual Excellence of Teaching award presented by the Northern California Association of Phi Beta Kappa, the President's Faculty Recognition Award at SCU, and the award for Excellence in Student Advising presented by the College of Arts and Sciences.

Please make _____ reservation(s) for the MAA Luncheon. Enclosed is my check, payable to MAA, for $ _____ [$19.00 regular; $13.00 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
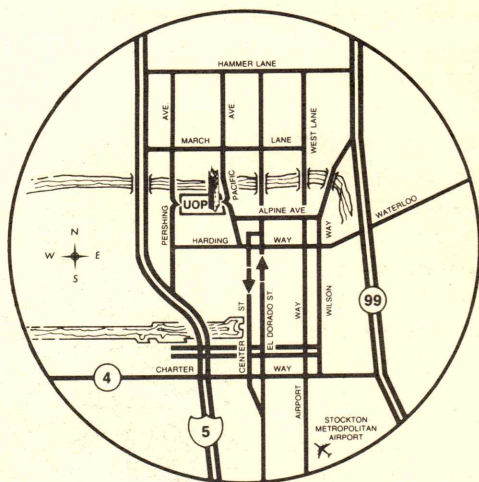Santa Clara University
Santa Clara, CA 95053

DIRECTIONS

From I-5 (North)
Take March Lane exit and drive east to Pacific Avenue; turn right onto Pacific Avenue; continue south to Stadium Drive. Turn right onto Stadium Drive.

From I-5 (South)
Take Pershing Avenue exit; continue north to Stadium Drive; turn right onto Stadium Drive.

Northern California Putnam Results

Northern California students were evident in the list of top students in the William Lowell Putnam Competition this past year. In the contest administered on December 1, 1990, the teams from the University of California, Berkeley, and from Stanford University, both ranked among the top ten. The University of California team consisted of Brian J. Birgen, Jordan Lampe, and Thomas S. Lumley; the Stanford team consisted of Daniel P. Cory, Gregory G. Martin, and Andras Vasy. In addition, Jordan Lampe ranked among the five highest ranking individuals. Honorable mention students included Mark T. Chrisman, University of California, Davis; Bryan F. Clair, University of California, Berkeley; and John C. Loftin, Gregory G. Martin, Andras Vasy, all of Stanford University. Additional students ranking among the top 100 included: Stephen P. Bard, Thomas S. Lumley, Max L. Shireson, and Zheng Yin from the University of California, Berkeley; Beesham A. Seecharan, Jay A. Shrauner, Garrett R. Vargas of Stanford University.

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Santa Clara University
Santa Clara, CA 95053

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