

*From
Galileo (1939)
to*



*Santa
Clara (2001)*

*An update on the history of the
Northern California Section
Mathematical Association of America*

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Preface



Secure the shadow 'ere the substance fade." With that motto, photographers in Gold Rush California urged potential clients to preserve the likeness of loved ones through the new technology of the daguerreotype. A similar principle prompts the appearance of this volume which aims at preserving the story of the Northern California Section.

In 1988 *A History of the Northern California Section Mathematical Association of America 1939 – 1988* was printed, and distributed to Section members at our March 4, 1989 meeting at Sonoma State University.

This is an update on that history, and we begin with the minutes of the organizational meeting of the Section in Harold Bacon's own hand. We then proceed to an interview by Don Albers of the only two Northern California members who have served as Presidents of the Mathematical Association of America. It also happens that they both served as Secretary of the MAA, among only five in the MAA's history.

No history is ever complete or free from error and no claim of such is made for this history. On occasion we have had to rely on the memories of our membership and some details can no longer be obtained. We would appreciate hearing from readers about any errors or omissions that might be discovered.

I would like to thank those whose memories and files helped recall some of our history: Henry L. Alder, Gerald L. Alexanderson, Titu Andreescu, G. Donald Chakerian, Anne Fish, Lester H. Lange, Edward C. Keppelmann, Jean Pedersen, G. Thomas Sallee and Mary Sunseri. A special thanks goes to Don Albers for his interview, and to G. L. Alexanderson for reading the entire manuscript and offering suggestions and corrections.

Leonard F. Klosinski
Santa Clara, California

January 5, 2001



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Dates of Founding

1894	American Mathematical Society
1915	Mathematical Association of America
1915	Kansas Section
1915	Missouri Section
1915	Ohio Section
1916	Indiana Section
1916	Iowa Section
1916	Maryland-District of Columbia-Virginia Section
1916	North Central (formerly Minnesota) Section
1917	Illinois Section
1917	Kentucky Section
1917	Rocky Mountain Section
1920	Texas Section
1922	Southeastern Section
1923	Michigan Section
1924	Louisiana-Mississippi Section
1924	Nebraska Section
1925	Southern California Section
1926	Eastern Pennsylvania and Delaware (formerly Philadelphia) Section
1932	Wisconsin Section
1933	Allegheny Mountain Section
1933	Oklahoma-Arkansas Section
1936	Southwestern Section
1939	Northern California Section
1940	Seaway (formerly Upper New York State) Section
1941	Metropolitan New York Section
1945	Pacific Northwest Section
1955	Northeastern Section
1956	New Jersey Section
1967	Florida Section
1975	Intermountain Section

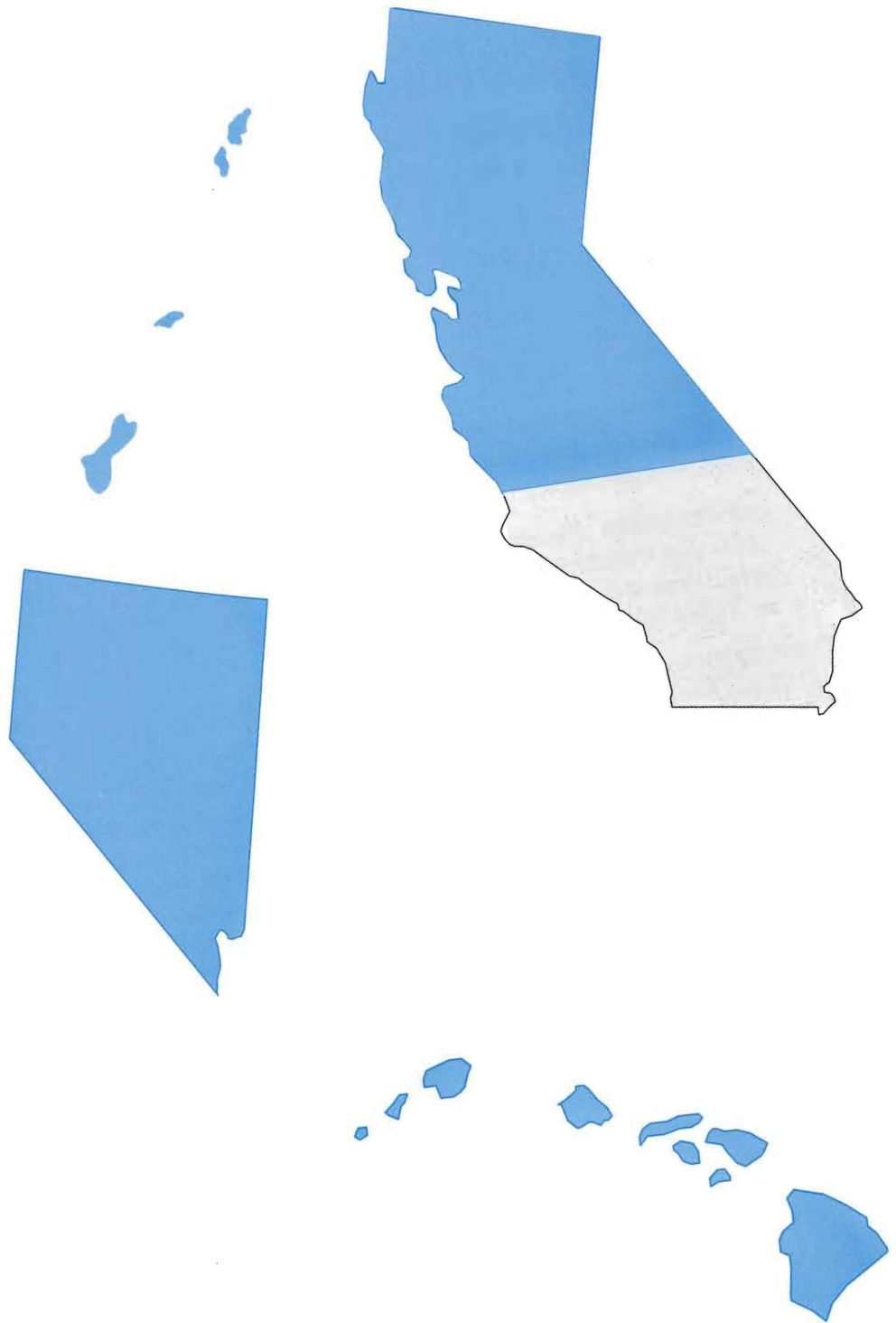
By-Laws

Northern California Section Mathematical Association of America



Approved by the Association

- I. **NAME.** The name of this Section shall be The Northern California Section of the Mathematical Association of America.
- II. **PURPOSES.** The purposes of this Section shall be to promote and conserve interest in mathematics, to provide meetings for the presentation and discussion of papers, to furnish an opportunity for fellowship to teachers of mathematics, and to carry out in this region any other purposes of the national organization.
- III. **MEMBERSHIP.** The membership in this Section shall be the membership of the national organization resident in this region; but other members of the Association shall be welcome at all meetings and person not members may be invited to attend meetings.
- IV. **OFFICERS.** The officers of this Section shall be a Chair, a Vice-Chair, a Secretary-Treasurer, and a Program Chair. The Executive Committee shall consist of the above named officers together with the Sectional Governor. The Chair shall be the Vice-Chair of the previous year and the Program Chair shall be the Chair of the previous year. The tenure of office shall be five years for the Secretary-Treasurer and one year for the Vice-Chair, Chair and Program Chair. The Secretary-Treasurer shall be elected every five years and the Vice-Chair each year at the first meeting of the calendar year. The new officers shall assume office upon adjournment of the first meeting of the year. Nominations may be made by a nominating committee appointed by the Chair, but this shall not prevent other nominations being made by any member at the time of the election. The officers are empowered to fill any vacancy which may occur. Officers other than the Secretary-Treasurer shall not be eligible to succeed themselves after a full term of office.
- V. **MEETINGS.** Meetings may be called at any time by a vote of the officers, or by resolution by the members at a previous meeting. There shall be at least one meeting, and preferably two or more, each year. The places, times, and programs for the meeting are to be arranged by the officers of the Section.
- VI. **AMENDMENTS.** These By-Laws may be amended by a majority vote of the members present at any regular meeting.



Our Geography and Membership

Of all the sections of the Mathematical Association of America, surely the Northern California Section covers the most territory. The Pacific Northwest Section is proud of its wide geographical spread and it certainly does include more square miles of dry land than any other section: Oregon, Washington, parts of Idaho and Montana, Alberta, British Columbia, Yukon, Northwest Territories, and Alaska. But the Northern California Section takes in that part of California north of San Luis Obispo on the coast and south of the Oregon border, including Fresno and Bakersfield in the San Joaquin Valley, all of Nevada, Hawaii, Guam, American Samoa and American protectorates in the South Pacific. The boundaries of the Sections are now specified by zip codes and according to the "Geographical Boundaries of the Sections of the Association" chart, the Northern California Section has the following zip codes:

California	93600 – 96199
Hawaii	96700 – 96899
Nevada	89000 – 89899
Pacific Islands	96900 – 96999

The most recent membership statistics indicate that our Section has 1,564 members; of these, 1,378 are in northern California, 103 in Nevada, 79 in Hawaii, 2 in Guam, and 2 in Saipan. In 1961, the Section had 502 members; of these, 486 were in northern California, 11 in Nevada, and 5 in Hawaii. In 1953, there were 169 members, 162 in northern California, 3 in Nevada, 4 in Hawaii.

There are twelve student chapters of the Association in our Section:

California State University, Fresno	San Jose State University
California State University, Chico	Santa Clara University
California State University, Turlock	Sonoma State University
Fresno City College	University of California, Berkeley
Humboldt State University	University of Nevada, Las Vegas
Olympia Institute	University of Guam

And there are twenty-one institutional members:

Butte Community College	St. Mary's College of California
California State University, Chico	Stanford University
California State University, Fresno	Truckee Meadows Community College
California State University, Hayward	University of California, Berkeley
California State University, Sacramento	University of California, Davis
College of the Redwoods	University of Guam
Humboldt State University	University of Hawaii
San Francisco State University	University of Nevada, Las Vegas
San Jose State University	University of Nevada, Reno
Santa Clara University	University of San Francisco
Sonoma State University	

Origins of the Section

The organizational meeting of the Section took place at Galileo High School in San Francisco on January 28, 1939. With only 30 members of the Association spread from Atascadero to Chico and to Reno, however, it took courage to try to organize a section of the Association in Northern California in 1939. But even more remarkable than the determination of that hardy band of 30 is the fact that 12 members of the Association actually managed to attend the first meeting. Remarkable too was the overall attendance at that first meeting, 60.

Sophia Levy of the University of California, Berkeley, served as Secretary *pro tem* at the first meeting, where A. L. McCarty of San Francisco Junior College was elected Chairman. Sophia Levy was elected Vice-Chair. Harold Bacon from Stanford was elected to the office of Secretary, a position he held for the next six years.

The by-laws for the Section were prepared by a Committee consisting of Griffith C. Evans of the University of California, Berkeley, McCarty, and Emma V. Hesse of University High School, Oakland. In 1959 the present system of electing only a Secretary-Treasurer and a Vice-Chair was introduced into the by-laws. In 1972 the national office of the MAA suggested revision of section by-laws for all sections. A Committee on the By-laws for the Northern California Section recommended that the system of electing officers not be changed even though the system did not fit the standard structure suggested by the national office. The Executive Committee and the membership accepted the Committee's recommendation.

Policy on Meetings and Officers

Over the past 30 years or so the officers of the Section have tried to adhere to a system of cycling the meetings of the Section both geographically and through campuses of various types of institutions. Occasionally the pattern has been broken due to various problems such as changes of site resulting from a breakdown in negotiations with the administration on a campus. But generally meetings have been cycled through institutions by category: (1) research universities (UC campuses, Nevada, Stanford, Naval Postgraduate School), (2) private colleges and universities, (3) campuses of the California State University system, and (4) two-year institutions.

Officers follow a similar rotation scheme but a fifth category is added, industry. The rotation scheme does not apply to the Section Governor nor to the Section Secretary-Treasurer.

With an occasional transposition of category, the actual rotation has been remarkably close to what tradition would dictate.

From the 1960 *Brief History of the Section* by Roy Dubisch

"Today, there is widespread realization of the importance of mathematics. In those earlier days however, the committee deemed it necessary to plead, in its reports, the value of continued study of mathematics for the war effort.

"This concern with public indifference as to the value of mathematics was also reflected in many of the wartime programs with papers presented on such topics as 'Mathematics In Our Schools And Its Contribution To The War Effort' and 'Graphical Methods In Exterior Ballistics.'"

Founders and Early Leaders of the Section

Among those who took the initiative in establishing an MAA section in Northern California in 1939 and who subsequently saw it through its early years were some outstanding mathematicians and teachers. Harold M. Bacon, the first Secretary, was a legendary teacher at

Stanford throughout his long career. Bacon received his Ph.D. at Stanford in 1933, where his dissertation advisor was officially J. V. Uspensky but was in fact the well-known Danish mathematician Harald Bohr, who happened to be visiting Stanford at that time. Bohr was a longtime collaborator of G. H. Hardy's and brother of the physicist Niels Bohr.



Griffith C. Evans

Early Section Chairs were Gábor Szegő and George Pólya, internationally known mathematicians who had produced some years earlier their classic problem books, the *Aufgaben und Lehrsätze aus der Analysis*. Szegő had come to Stanford in 1938 and chaired the Department there; Pólya came in 1942. Prominent among Berkeley mathematicians chairing the Section in those early years was Griffith C. Evans who had taken his Ph.D. at Harvard in 1910 and joined the faculty of Rice. In 1934 he

was brought to Berkeley to chair the Department and build it to the level of prominence that it has enjoyed ever since. Eight years prior to chairing the Section Evans had been president of the American Mathematical Society and had earlier been vice-president of the MAA.

Two of the Berkeley mathematicians who served as Section Chair

were later caught up in the infamous loyalty oath conflicts of the 50's at Berkeley: Pauline Sperry and Derrick H. Lehmer. Sperry had been a student and teacher at Smith before taking her Ph.D. at Chicago and subsequently an appointment at Berkeley. A Quaker, Sperry refused to sign the oath (along with 29 other Berkeley professors) and was fired. After the oath was ruled unconstitutional, she was reinstated but chose at that time to retire from the University. Lehmer, whose father had also been a professor at Berkeley, left the University in order to avoid signing the oath, but he eventually had to sign at UCLA as director of the Institute for Numerical Analysis. The move to Southern California did, however, force him to resign as Section Chair halfway through his term. He was replaced by Professor C. D.



Derrick H. Lehmer

Olds of San Jose State, as acting Chair. The Chair the following year was Raphael M. Robinson of Berkeley, another distinguished number theorist.



Pauline Sperry

January 28, 1939

Galileo High School, San Francisco.

A meeting to organize the Northern California Section of the Mathematical Association of America was held in the Galileo High School, San Francisco, on Saturday, January 28, 1939. A. L. McCarty of the San Francisco Junior College, acting chairman of the Section, presided. Sessions were held both in the morning and in the afternoon, and visitors & members lunched together during the recess.

The attendance at the two sessions was approximately sixty, including the following twelve members of the Association: H. M. Bacon, C. E. Corbin, J. C. Evans, Emma V. Hesse, R. D. James, Sophia H. Levy, A. L. McCarty, F. R. Morris, Falka G. Stenger, Jabor Szegö, R. K. Wackerling, Harriet A. Welch, and four applicants for membership: T. J. Bass, Jr., Adeline M. Scandrett, Ethel Spearman, Ruth J. Sumner.

The program for the meeting and a proposed set of By-Laws had been ~~previously~~ prepared by a Joint Program and By-Laws Committee composed of J. C. Evans, University of California; A. L. McCarty, San Francisco Junior College; and Emma V. Hesse, University High School, Oakland. The proposed By-Laws were reported by

Professor Evans and adopted by the Section, subject to the approval of the Trustees of the Association. Officers for the coming year were elected as follows: Chairman, A. L. McCarty, San Francisco Junior College; Vice-Chairman, Sophia H. Levy, University of California; Secretary-Treasurer, H. M. Bacon, Stanford University. On presentation of a request that the Section name a person to serve as associate editor of the California Journal of Secondary Education, the Secretary was instructed to cast a ballot for Mrs. Ruth G. Sumner, Oakland High School.

The main part of the program was given over to an address by Professor V. F. Lenzon of the department of Physics, University of California. The list of titles and speakers follows:

1. "Some adventures in teaching mathematics to freshmen" by Dr. M. J. Palissar, San Francisco Junior College.
2. "Physical geometry" by Professor V. F. Lenzon, University of California.
3. "Some qualitative properties of the solution of linear differential equations of the second order" by Professor Jabor Szegő, Stanford University.

4. "Contemporary viewpoints in the teaching of plane geometry" by J. W. Hoge, University High School, Oakland.

5. "The place of mathematics in secondary education" by Adeline M. Scandrett, Mission High School, San Francisco.

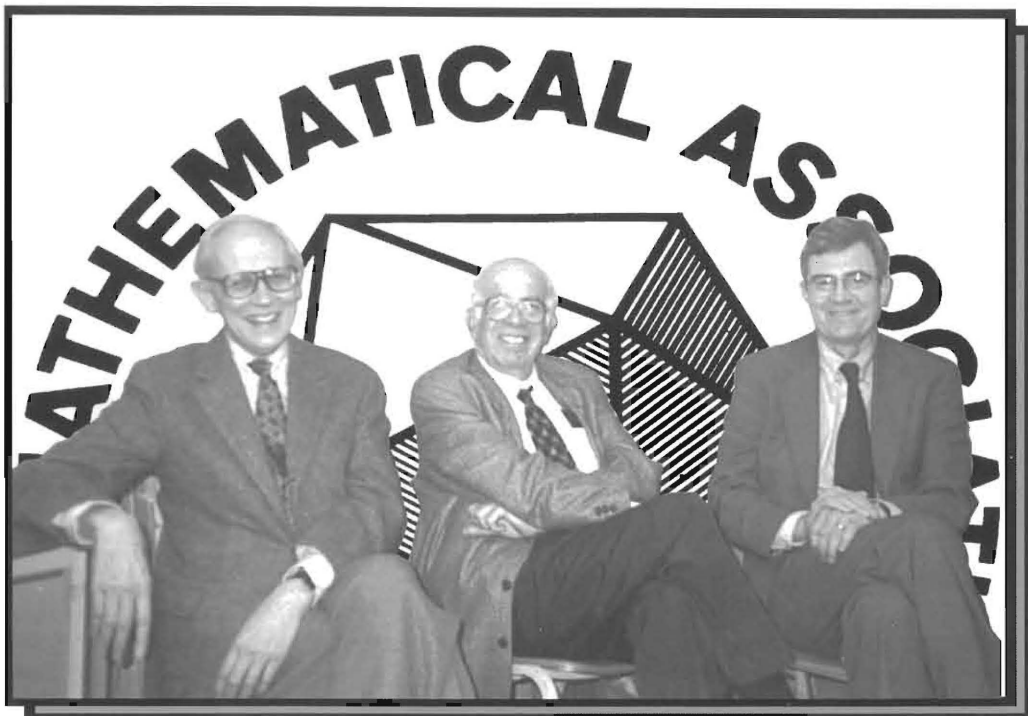
Abstracts of these papers are printed in the June-July, 1939, issue of The American Mathematical Monthly (vol. 46, no. 6), pages 315.

Respectfully submitted,
Sophia H. Levy, Secretary pro-tem.
(by HMB.)

A Harold M. Bacon Limerick

In his younger years, Harold Bacon exchanged limericks with Dunham Jackson, a well-known professor of mathematics at the University of Wisconsin. Here is an example of one of them:

A professor of things mathematical
Decided to take a sabbatical.
He intended to roam
While his wife stayed at home
But to this she demurred most emphatical.



From left to right: Gerald L. Alexanderson, Henry L. Alder, Donald J. Albers

HENRY AND JERRY

Transcript of Conversation (Edited)

Donald J. Albers, Henry L. Alder and Gerald L. Alexanderson

Friday, February 20, 1998

INTRODUCTION

Henry L. Alder and Gerald L. (Jerry) Alexanderson have much in common: both are tall, both are mathematicians, both are authors of well-known textbooks, both were Secretaries and Presidents of the Mathematical Association of America; and, most important to the readers of the interview that follows, both have been central to the activities of the Northern California Section for nearly a half century.

Henry was born in Duisburg, Germany, as a Swiss citizen, in 1922, moved in 1933 with his family to Switzerland, where he attended elementary and secondary schools and one semester at the ETH (the Swiss Federal Polytechnic Institute), and came to the U.S. in 1941. In 1942, he received his AB in Chemistry and Mathematics from UC Berkeley. Jerry studied high school chemistry, which as he recalls "was just enough to discourage me" from further study of the subject. It seems that Jerry had an encounter in the laboratory, which was as he describes it "very stupid, and I still have the scars to show for it."

Henry completed his doctorate in number theory at Berkeley under the legendary Dick Lehmer in 1947. One year later, he took a position at UC Davis, where he has remained ever

since. He is so highly regarded as an administrator that he was called back to serve as Chair of the Davis Mathematics Department – after he had officially retired. In 1980 Henry received the award for Distinguished Service to Mathematics, the MAA's highest award.

Jerry was born in Idaho in 1933, and moved to Eureka when he was seven. He received his BA from the University of Oregon in 1955, and then went to Stanford for graduate work, where he studied under George Pólya. Like Henry, Jerry has spent his entire professional life at one institution. In 1958, he joined the faculty of Santa Clara University, and in 1967, he was named Chair of the Mathematics Department, a position that he has held for the past thirty-two years.

Both Henry and Jerry like to write and it shows. In 1970, Henry received a Lester R. Ford award for his paper in the *Monthly*, "Partition Identities – from Euler to the Present." He has been a member of the Board of Governors of the *Pacific Journal of Mathematics* for 39 years. Jerry has written 13 books and 78 papers and articles, and he has served as Editor of *Mathematics Magazine*. The number of committees that Henry and Jerry have served on at the sectional, state, and national levels is boggling. By any measure, their combined service to mathematics and mathematics education is huge.

Over the years, it has often been said that the MAA is a grassroots organization, and that its strength is to be found in personal relationships at the sectional level. Henry and Jerry strongly agree, and Jerry summed it up very well when he said, "it is extremely satisfying going to a Northern California Section meeting because you get to see your old friends. Some of them you see only once a year, and it is just like old home week. Really, it's a grand reunion, and I'm very fond of so many of these people. The Section is emotionally a mathematical home."

Henry and Jerry were interviewed by Don Albers at Santa Clara University on February 20, 1998.

Roessler's Policy – Everyone is an MAA Member

DON ALBERS: It was 1955, Jerry, that you arrived at Stanford as a graduate student. In 1956, Henry, you became Chair of the Northern California Section, and went from that position to become secretary of the national organization in 1960.

HENRY ALDER: That's correct.

DON: That is a rather big jump. You served a 15-year term as Secretary. You received your Ph.D. from UC Berkeley in 1947 and went to Davis in 1948 as an instructor. After only one year at Davis, you gave your first Section talk. A few years later you gave your second talk, and in 1956 you were elected Section Chair. That's a fast start. How did you get involved in Section activities to begin with?

HENRY: Roessler was Chair at Davis at that time, and it was his policy to get everybody in the department to be a member of the MAA. I didn't become a member until 1950. I was not a member when I was a graduate student at Berkeley. No one at Berkeley had suggested that we become members of the MAA. All of us at Davis participated in Section activities. The person who spoke more often than anybody else at the Section was Curtis Fulton, a member of our department.

DON: I noticed that at the 1957 meeting, three talks were given by UC-Davis faculty. I'm not sure if the Section would let that happen anymore.

[Laughter.]

DON: So Roessler was a big champion of the MAA.

HENRY: Yes, he served as both Chair and Governor of the Section. It was a tradition that all

of us went to every Section meeting. So, for my participation in Section activities, there is nothing unusual there.

DON: You don't get to be Chair just on the basis of attending meetings. You weren't just a potted plant or a decoration at those meetings, were you?

[Laughter.]

HENRY: Quite frankly, I couldn't tell you how it came about.

DON: Oh, come on, Henry.

HENRY: No, I'm serious. I really don't know.

DON: You gave some talks at Section meetings.

HENRY: I gave a few talks, not very many. So what caused me to be nominated for Section Chair, I'm really unable to say, and I'm not trying to be modest.

DON: Well, you clearly did very well in that capacity because, four years later in 1960, you were secretary of the national organization, and that's quite a leap. You skipped over the Section Governor post altogether.

HENRY: Well, here, perhaps some history might be helpful. At that time Carl Allendoerfer was President of the MAA, and I knew Carl through my activities with the *Pacific Journal of Mathematics*. He was on the board of governors of the *Pacific Journal* and I was heading the exchange program for that journal. It was he who personally approached me to become national secretary. Carl explained to me the duties of the secretary, and I remember his telling me that the most important thing I would have to do as national secretary was the care and feeding of the president.

[Laughter.]

HENRY: I took that very much to heart.

[Laughter.]

The Mid-Fifties

DON: Before you moved up to the national post of secretary, what are your memories of the Section back in 1956? It was obviously smaller.

HENRY: It was very small. It was marked by good programs, and it was always a pleasure to come to these meetings, and to see old friends. It was a close-knit group, and everybody seemed to know each other.

What particularly struck me is the involvement from mathematicians from all institutions of higher education, universities, colleges, and community colleges. I was very impressed by their active involvement as officers. If you look at the officers at that time, they came from UC Berkeley, Stanford, UC Davis, San Jose State, San Francisco State, etc.

DON: I'm looking at the programs from 1956 and 1957, which can be found in this marvelous book, *A History of the Northern California Section*, by Jerry Alexanderson and Leonard Klosinski. It spans the fifty-year period 1939 to 1988, and on page 43, we see the 1956 program which had Ivan Niven, Raphael Robinson, Perry from the Naval Postgraduate School, Arnold from Davis, Fulton from Davis, Norton and Poffenberger from Davis, Torrance from the Postgraduate School, Mac Larsen from San Jose State, Vern Hoggatt from San Jose State, Lockhart from the Postgraduate School, Tornheim from Berkeley.

JERRY ALEXANDERSON: Quite a collection!

DON: The program for 1957 looks to be every bit as strong, David Blackwell, Schoenberg, Pólya, Robinson, Blakeslee, Alder, Sherman Stein, Clark from Oregon State, Arnold from UC Davis, Mac Larsen from San Jose State, Sussman from Santa Clara.

JERRY: It was a few years later at the 1965 meeting at Stanford where the young Fields medalist Paul Cohen reported on his work on the independence of the axiom of choice.

DON: Over the years, I have sometimes boasted that the Northern California Section with its great speakers frequently rivals our national meetings. It became harder to do that as the national meetings have expanded, but nonetheless, the quality at the Section level has been spectacularly high.

JERRY: I remember when Julia Robinson gave a talk on Hilbert's 10th problem at the USF 1971 meeting. That was a landmark talk. It was a case of reporting on big-time mathematics to the Section by a member of the local Section.

HENRY: We have a very good Section, you must admit.

DON: Jerry, you were laboring in the Stanford vineyards as a graduate student starting in 1955. Then in 1958 you drifted a few miles south to Santa Clara University, which was then a small Catholic university.

JERRY: I was going to stay for maybe a year or so at Santa Clara. I've been there for more than a year now – a bit over 40 years.

DON: How did you come to join the MAA?

JERRY: Of course, I had joined the MAA as an undergraduate, because that was the way it was done at Oregon. Moursund, the department head at Oregon, said that if you were a mathematics major, you joined the MAA. Period. I started getting the *Monthly* and then Pólya visited Oregon as an MAA Visiting Lecturer and gave some talks, which I liked a lot. So I was all primed to love the Association from undergraduate days on up.

DON: Did you start attending Section meetings right off?

JERRY: Oh, yes. I thought they were fun. A group of us graduate students at Stanford went to MAA meetings because it was really the thing to do. It was a bit later that I got involved in the MAA at the national level. That was when Henry, who was then National Secretary, got me appointed to the Committee on Secondary School Lecturers. Following that, I was named to CUPM. So, I'm involved with the MAA because of Henry.

DON: I trace my involvement to Henry as well.

JERRY: Henry has a lot to answer for!

DON: I attended some meetings, and you named me to the Sounding Board of what was then the Committee on Two Year Colleges. It was a very large group of people, and I don't know where you got my name from. I have another memory of traveling over to Davis one day to talk to Henry about a publications idea for the Dolciani book series. He listened patiently, and suggested the names of a few people I should contact. Henry has certainly gotten people involved.

DON: It was a few years later, Jerry, that you became Secretary-Treasurer of the Section, for the first time, in 1967. How did that happen?

JERRY: I really don't know.

[Laughter.]

JERRY: This is another example of where we really don't know how we got involved. I was replacing Joel Brenner. I can't remember who was really involved in arranging for anything like that, but I got the call somehow and went up and had an afternoon with Joel in his study and

took out the box of materials, and I was Secretary-Treasurer of the Section, which I remained for some years.

HENRY: It's not surprising that we don't know how we were selected as Section officers because some search committee selects you, usually without your knowledge. It's the same now when we find Section Chairs. They don't know how they get chosen.

DON: The system is still operating much the same way. Suddenly, you get a phone call.

HENRY: That's right.

DON: I got a call from Jerry. I remember that very clearly.

JERRY: I was Secretary-Treasurer at the time.

JERRY: Once you're Secretary-Treasurer of a Section, though, it wouldn't be so unnatural at some point to be asked to hold other Section posts.

DON: Particularly if you made the mistake of doing the job well.

[Laughter.]

JERRY: I wouldn't want to go that far.

DON: Do you two have any particular memories of interacting with one another that could ever be published?

[Laughter.]

JERRY: Well, in those days, it seemed to me that Davis played a very strong role in the MAA Section. Henry was there. There were several others from Davis as well: Charlie Hayes, Tom Sallee, Don Chakerian, Howard Weiner, and Ed Roessler.

JERRY: I remember many executive committee meetings in Davis, and largely at the time when I was Secretary-Treasurer of the Section. There was something of a center of gravity at Davis, which doesn't exist to that extent now, partly because the MAA has shifted and become much more the domain of the private colleges, the state colleges, the two-year colleges and so on. The UC system is no longer as visible as it once was. Of course, I remember those early meetings, too. There was a good representation from Berkeley – the Lehmers, the Robinsons, David Blackwell, R. S. Lehman, Leon Henkin, and others.

Four Points

DON: When I say that I think the Northern California Section has been particularly strong, I'm quite sincere about it. With the benefit now of visiting many other Sections, I feel quite justified in saying that. What do you think have been central ingredients to the strength of the Northern California Section over the years?

HENRY: I think there are four reasons why the Northern California Section has been strong. First of all, you need a strong Secretary-Treasurer. When there is not a strong Secretary-Treasurer, that Section does not thrive. That's number one. Number two, I think, is that the Northern California Section has benefited from having good representation of all of the institutions of higher learning in Northern California. We have had, until very recently, good attendance from UC campuses, Stanford, state colleges, and community colleges. Three, I believe we have always paid a great deal of attention to having quality. We have always worked very hard on programs. And finally, the fact that we have what is now called the executive board is quite important. It assures continuity in its operation, and it has been very beneficial. We have had a few people who have really looked out over long periods of time for the health of the Section. Most notable, of course, in the early days, even before I was on the scene, was Harold Bacon.

HENRY: He came to all of the meetings and he looked at the Section for things to be kept the way they were. There have been a number of people on the executive board who have filled that role over a long period of time.

JERRY: That's absolutely right, and one thing that makes it work is the fact that the executive board invites not only the current officers, but also to its meetings a large group of people with continuing interests in the Section who continue to attend, Henry most notably, and to some extent myself. There were those of us who were active in the Section early on and still continue to go to the executive board meetings.

HENRY: The precedent was established by Harold Bacon.

JERRY: Exactly. Harold was Secretary-Treasurer of the Section for a long time.

HENRY: This started much before my time.

JERRY: Any MAA tradition that started with Harold Bacon is probably a good one.

DON: His contributions to the history are just fantastic. We are very lucky to have his record.

JERRY: His record, his common sense, his organizational skills, his conscientiousness. He was just incredibly conscientious. The Section got off to a good start with Harold and the other people in that group.

The Alder Rule

JERRY: I want to follow up on Henry's Four Points. The business of the programs is so essential, and one absolutely critical part of that over the many, many years has been the Alder Rule. The Alder Rule is simple. If no one on the program committee present has heard a proposed speaker, move on.

[Laughter.]

JERRY: All too often, people are chosen to give talks because they are good mathematicians, but they can't talk to a group. There is another factor that has contributed to the success of our Section, and again, it's an elaboration on what you said, Henry. When you talk about the fact that we have all the groups, all the constituencies represented, that is done because of rules that we have set down, probably by you, but they are still followed. For example, we rotate Chair positions through the UCs, CSUs, private schools, industry, community colleges, and that rotation is also followed for meeting sites.

DON: I remember very fondly my first experience of your selecting officers. I took very careful note of the fact that this was a remarkably democratic group. You were paying attention to all segments of higher education, and that meant not ignoring, in particular, the two-year colleges.

You've alluded to what seemed to be moments of real fun in the Section. Are there any particularly amusing incidents that you can remember in conjunction with working on behalf of the Section?

JERRY: Oh, I'm afraid all the examples just got ruled out.

[Laughter.]

JERRY: There have been many priceless moments that we can't record.

DON: Well, how about moments of particular joy where something really nice happened, and was a little unexpected?

JERRY: I have been very pleased to see the Northern California Section well represented at the national level as winners of distinguished teaching awards. Our candidates seem to have been credible and good.

HENRY: Two of our Section winners have gone on to win national teaching awards, and for one Section, that's not bad. The key to that is the seriousness with which the Section takes the task in making these awards, not only in selecting winners, but also to be sure that they get properly recognized at the Section meeting.

JERRY: I think that we have sometimes done things with a bit more style and panache than some Sections I have attended. When we have an awards presentation, it is handled very well. They are dignified, in a suitable setting and in presentation.

HENRY: Yes, absolutely.

DON: Both of you have clearly had a great deal of fun working for the Section. We all know that there is no cash reward for it. Can you say just a little bit about the joys, if you will, and the rewards of working for the Section?

HENRY: Well, I think the things I am most proud of occurred at the time I was Section Chair. I was very instrumental in the establishment of the high school mathematics contest in Northern California, and it has gone very well. The second was getting the Secondary School Lecture Program started. Of course, times have changed, but certainly, these two things for high school students gave me great pleasure.

JERRY: Absolutely. I couldn't agree more. There were times when I went out for a full week in the Central Valley, or the Sierra foothills, and so on, and gave talks at two high schools a day and drove hundreds and hundreds of miles, but it was extremely rewarding. And you encountered some wonderful kids in these tiny little schools, and they were so responsive and so enthusiastic. It was a great program. I'm sorry that we can't do it anymore, but, as you say, times change.

DON: Very few people have the privilege of seeing the difference between working at the section level and at the national level. Both of you have. Are there any big differences that you can cite – again, that we can record?

JERRY: I'd like to make one comment that may sound strange, but intellectually, I'm with the national. Emotionally, I'm with the Section.

[Laughter.]

An Emotional Mathematical Home

JERRY: That isn't to say that I don't have strong feelings, positive feelings about the national organization and great affection for a lot of the people involved and so on. I have to say that because Don is here, but, to me, it is extremely satisfying going to a Section meeting because, as Henry said earlier, you get to see your old friends. Some of them, you only see once a year, and it is just like old home week. Really, it's a grand reunion, and I'm very fond of so many of these people. The Section is one's emotional mathematical home. At the national meetings, you put 4,000 people together in a huge convention center, and it's not quite the same.

HENRY: I couldn't agree more.

JERRY: Well, I think we all say this, but I really believe that the strength of the MAA is in the fact that it is a grass-roots organization, and the Sections are where it is really happening.

HENRY: That's right.

JERRY: Of course we have all of these grants and projects in Washington. Washington is

essential to put out journals and publications and all the good things that come out of the Washington office, but for many people, I think that their MAA life is in the Section.

DON: Well, we know that the number of people who attend national meetings is really a small fraction of the overall membership, on the order of 10 percent if you take into account the different sites for meetings. So, certainly, Section identification has got to be a powerful factor.

Coffee Breaks

JERRY: All one has to do is stand in the lobby, over the coffee period, and watch the greetings, and the looks of delight that people have in seeing each other. It's very, very nice to see. And there are not all that many settings where this happens.

DON: I think I remember this correctly. Now that I'm over 30, I'm not always sure about my memory, but if I'm not mistaken, there were very serious discussions about actual placement and length of coffee breaks because of their importance at meetings.

JERRY: Absolutely.

HENRY: Right now we basically have one hour in the morning for either looking at the posters or chatting.

JERRY: A few years ago, a member of my department gave a talk at another Section, which shall remain nameless. When he got back from that, he said it wasn't a very pleasant meeting at all. He said they allowed five minutes between talks, and nobody had a chance to visit. He came back with a negative impression of the meeting. If people are so overly organized by the tightness of the schedule that they don't have time to have fun, that's not good.

DON: You two have both worked in the Section for a large number of years now, and you've seen some changes. We know that the mathematics professoriate is getting older and that we're not seeing a one-for-one replacement as retirements occur. What, if any, implications do you think that has for the future of the Northern California Section?

The MAA and Young People

HENRY: You've touched a very important point, and I think we should make a concerted effort to get the young people into Section activities.

JERRY: Absolutely.

HENRY: And I think things can be done to bring this about. Perhaps, this would be one of the things the executive boards should consider at an early time. What can we do to get more young people to come to the meetings, and to get involved in the Sections? When you look at Berkeley, basically only the retired people participate in the activities of the Section. This is also true of the other major universities in the Section. If we don't do something about it, it will have a bad effect on the Section.

JERRY: Increasingly, one senses that the Section and mathematical organizations in general are becoming more geriatric. On the other hand, the attendance at our Section meetings holds up very well. So we are pulling a number of younger people in for the meetings. Now, they are not necessarily people who would be willing to participate in keeping the Section going. I think it's going to be more of a problem to get people to commit time and energy. As institutions more and more require the impossible of young faculty, having high standards for research, high standard for teaching, high standards for service, and everything else — what we're asking of young faculty is outrageous. Thank God I was born when I was. I hate to think of going into the profes-

sion now. It's very scary. As those pressures increase, finding people who are willing to devote the kind of time and energy necessary to keep a Section going, that's going to be more and more difficult.

HENRY: One way of doing this, and we have done this to a certain extent — is getting younger people to speak to Sections. I mean, speaking for my own department, we have had Joel Hass. This is a way to get them involved, and I think this needs to be done on all the campuses, not just one or two. Another thing which we are also doing is to have meetings on campuses of the major institutions, such as Berkeley and Stanford.

DON: You can go through many departments today at research institutions and find relatively small numbers of MAA members. But in terms of where most graduate students end up or hope to end up, namely in an academic institution, I'm very impressed that no other organization better prepares them for the life that they are going into. It's the rare graduate student who goes to an academic institution who doesn't end up teaching.

JERRY: The days when there were faculty who could do their research and essentially worry about nothing else are going fast, and there will be very few such appointments in the future, if any. Concerns of the MAA are very much concerns or should be concerns of young faculty.

Worried – More than a Little Bit

HENRY: Perhaps the fact that things have gone so well in the Northern California Section could have the effect that it does not take sufficiently seriously some problems which may lie in the future. Perhaps the executive board should look at some longer-range problems, like those we have just identified, and identify what can we do about them. It's easy for the executive board to go through the routine agenda and do those things really well. But we should maybe set aside time at those meetings to consider what we should really be looking at for the future — how to strengthen membership of our younger people, how to get more people from the research institutions involved, etc. I think organizations, particularly those that are doing well, frequently get kind of complacent. "Complacent" is the right word. I'm a little bit worried about this — more than a little bit.

JERRY: We are very happy with our programs in the Northern California Section. Our programs differ quite sharply from programs in many other Sections. I think the reason that our programs have been consistently popular is that we assume that our members are interested in mathematics, and excited about good mathematics, well explained, with good expositors and I think that's one thing that explains the number that we have coming to Section meetings. They really feel they're going to get something out of it. It's true many of these people may not be teaching very much interesting mathematics, but they want that exposure at least once in a while, to see some really nice stuff, and I think that's been one of the keys to our success.

HENRY: That's very true. We have always taken the position at least that these programs are for the benefit of the audience, not for the benefit of the speaker.

JERRY: A good distinction.

HENRY: If we make these hypotheses, it makes a lot of sense to concentrate on mathematics.

DON: If you had it all to do over again, would you alter your commitment to the MAA?

JERRY: Oh no! I don't think I would refuse to take on any of the tasks I've done for the Association (well maybe one, when I tried unsuccessfully to do something about remediation)!

Northern California Section Award for Distinguished College or University Teaching of Mathematics

What is the Award?

In 1991, the Board of Governors of the MAA established the Section Awards for Distinguished College or University Teaching of Mathematics to recognize teachers of mathematics at the post-secondary level who have been widely recognized as extraordinarily successful. Their teaching effectiveness must be documented and must have had influence beyond their own institutions.

Each year the Northern California Section Teaching Award Committee, appointed by the Chair of the Section, chooses a recipient for the Section Award from nominations by the Section membership. The awardee is honored at the Spring meeting of the Section with certificate, citation and a check for \$250, and becomes the official Section nominee for the MAA Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics. The national awardees (at most three) are honored at the January meeting of the MAA and receive a \$1,000 check and a certificate.

Who can nominate?

Any member of the Northern California Section of the MAA may nominate any other member of the Northern California Section for this award. However, self-nomination is not permitted.

Who is eligible for the Award?

A nominee must:

- be member of the MAA
- be a college or university teacher assigned at least half time during the academic year to teaching a mathematical science in a public or private college or university (from two-year college teaching through teaching at the Ph.D. level) in the United States or Canada. Those on approved leave (sabbatical or other) during the academic year in which they are nominated qualify if they fulfilled the requirements in the previous year.
- have at least five years teaching experience in a mathematical science.

What are the guidelines?

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 own institution,
- foster curiosity and generate excitement about mathematics in their students.

Citations for the Recipients

February 29, 1992

"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 is pleased to identify

Gulbank Donald Chakerian

as the recipient of its M.A.A. Section Award for Distinguished College or University Teaching.

"Professor Chakerian of the University of California at Davis, has been chosen from a group of distinguished teachers whose nominations were submitted by our membership to a five-member committee appointed by the Chair of our Section.

"Professor Chakerian is a multiple threat. His students praise his teaching, and those students have gone on to their own high performance in our profession, thus providing a noteworthy measure of the correctness of their judgement. His colleagues praise him for that work with students at the university level as well as what their professional association with the charismatic professor means to them. His lectures, writings and his significant service to the broader community beyond his home campus have been witnessed not only throughout California, but throughout our country and at most levels of our profession.

"The Northern California Section of the Mathematical Association of America recognizes its good fortune in having this gifted, energetic, and well-disposed colleague in its midst. We are most pleased to exercise this opportunity to trumpet the extraordinary merit of this extraordinary teacher of mathematics."



February 20, 1993

Award for Distinguished College or University Teaching of Mathematics

Paul Richard Halmos

"Professor Halmos properly enjoys a truly global respect in our profession, not only as a creative practitioner of our art, but as one of our greatest expositors over many decades. Near our desks, surely all of us keep some of his writings; some are older, some are very new; all are classics that teach us. So, he continues to be a global teacher. What our award testifies to in happy addition to this magnificent reputation is that, up close, in the classrooms of a campus in our

neighborhood, he is recognized by students and colleagues alike as a superbly local teaching star as well. It is no surprise at all to find that his students regularly do well later in excellent graduate schools.

"Halmos once wrote and clearly continues to act on the belief that 'the major part of every meaningful life is the solution of problems.' It is no problem at all for the Northern California Section of the Mathematical Association of America to recognize its exceedingly good fortune in having this accomplished, energetic, widely respected, and well-disposed colleague in its midst. We are most pleased to exercise this opportunity to trumpet the extraordinary merit of this extraordinary teacher of mathematics."

Professor Halmos was chosen as one of the three winners of the MAA Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics in 1994.



February 12, 1994

"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 is pleased to identify

Jane Day

as the 1994 recipient of its MAA Sectional Award for Distinguished College or University Teaching.



"Professor Day, of San Jose State University, has been declared the award winner by a five-person committee appointed by the Chair of the Section to consider nominations submitted by the membership.

"There is testimony from students and from colleagues around the country that Professor Day 'epitomizes the professor we'd all like to be in the classroom.' In a long career marked by the intertwining of research and teaching, she consistently teaches highest quality mathematics in a highest quality way, unfailingly giving abundant help and encouragement to all students interested in doing their best in mathematics.

"Active in national curriculum and workshop activities, Jane Day has been a prime mover in local and regional mathematical programs as well, with

special interests in linear algebra. She became a principal architect of a new major in applied mathematics in her department. She established the Math Clinic at San Jose State University which undertakes mathematical projects in which students, under professorial guidance, attack a variety of problems brought to the clinic by the leading local industries of the Silicon Valley. Jane has been the invited speaker at SIAM conferences and, of course, she is nowadays a leader in the introduction of the benefits of MATLAB. She is helping to modernize the teaching of linear algebra throughout the country, to the benefit of future engineers, scientists, business leaders and mathematicians.

"We are most pleased to have this opportunity to trumpet the merit of this gracious and extraordinary teacher of mathematics."

October 21, 1995

"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 is pleased to identify

Edward M. Landesman

as the 1995 recipient of its MAA Sectional Award for Distinguished College or University Teaching of Mathematics



"Professor Landesman, Professor of Mathematics at the University of California, Santa Cruz (UCSC), has been declared the award winner by a four-person committee appointed by the Chair of the Section to consider nominations submitted by the membership.

"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 education 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 Fellow-

ship 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.

“We are most pleased to have this opportunity to recognize this extraordinary mathematics educator.”

Professor Landesman was chosen as one of the three winners of the MAA Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics in 1996.

March 2, 1996

“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 is pleased to identify

G. Thomas Sallee

as the 1996 recipient of its MAA Sectional Award for Distinguished College or University Teaching.



“Dr. Sallee, Professor of Mathematics at the University of California, Davis (UCD), has been declared the award winner by a four-person committee appointed by the Chair of the Section to consider nominations submitted by the membership.

“Professor Sallee has devoted his academic career to improving mathematics instruction at all levels, from elementary school through the university level. He is relentless in his commitment to enhance the learning experience of his students. He is widely recognized by them not only as an outstanding teacher but also as a mentor and a friend, a person with a great sense of humor who is there to stimulate learning and facilitate understanding. His influence on his students has been profound, with many of them pursuing advanced degrees and following in his footsteps as educators with a passion for creating and sustaining an environment in which students learn

mathematics.

“Professor Sallee's contributions to the teaching of mathematics have extended far beyond the university classroom. At UCD he has served as director of the Master of Arts in Mathematics Teaching program, as adviser to undergraduate mathematics clubs, and as a mentor to undergraduates participating in the NSF supported project Minority Undergraduate Research in the

Mathematical and Physical Sciences. Beyond the university walls, Professor Sallee is well known for his impact on teacher education through the Northern California Mathematics Project and through his leadership of the curriculum development project, College Preparatory Mathematics: Change from Within and Assessment: Change from Within. The revisions to the mathematics curriculum resulting from the latter project are reflected in the texts used by some 2,300 public school teachers throughout California, involving 150,000 students. As a result of his success with these innovative projects, Professor Sallee was awarded a \$1,000,000 grant from the Annenberg/CPB Math and Science Project for which he is the Principal Investigator of Making Algebra Accessible to All.

“As so succinctly stated by his nominator, Professor Sallee's involvement in experimental projects of this magnitude, his interest in preparation of teachers at the elementary and high school levels, his innovative teaching approaches and emphasis on problem solving, as illustrated in his book *Make it Simpler: A Practical Guide for Teaching Problem Solving* (coauthored with Carol Meyer) as a supplement to mathematics instruction in grades 5-7, are all reflections of his deep commitment to raising the teaching of mathematics to the highest possible level and imbuing all students with mathematical power as effectively as possible. He has pursued this commitment with an unselfish and dedicated zeal, establishing a reputation among colleagues and educators across the country as a distinguished mathematician and innovative educator.

“The Northern California Section of the MAA is pleased to honor this exceptional teacher for his outstanding contributions to mathematics education at all levels.”

February 22, 1997

“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 is pleased to identify

Jean J. Pedersen

as the 1997 recipient of its MAA Sectional Award for Distinguished College or University Teaching of Mathematics

“Professor Pedersen, Professor of Mathematics at Santa Clara University, has been declared the award recipient by a four-person committee appointed by the Chair of the Section to consider nominations submitted by the membership.

“As stated by her nominator, Professor Pedersen ‘is well-known on her own campus as an outstanding teacher. Her classes are always among the first to fill in any quarter and students are invariably happy with their experiences in her classes. In 1992 she was given the President’s Award for Excellence in Teaching, Research and Service at Santa Clara.’ She has been extremely successful in getting students with



various backgrounds involved in mathematics. Students comment that 'Professor Pedersen has made this quarter the best quarter in my entire life,' 'It showed me the beauty of math,' and 'You are excellent — very helpful in office hours.'

"Professor Pedersen's publication record includes more than 160 articles, seven books, and eight videotapes. In the last two years alone, she had papers (some with her longtime coauthor, Peter Hilton) in the *American Mathematical Monthly*, *Der Mathematik-Unterricht*, *The Mathematics Teacher*, *The Mathematical Digest*, *Zentralblatt für Didaktik der Mathematik*, and *The Australian Mathematics Teacher*, with eight more that have been accepted but not yet published. Among the books she has coauthored are a trigonometry text, *College Preparatory Mathematics* and *Mathematical Reflections — In a Room with Many Mirrors* (to be published very soon by Springer-Verlag).

"Activities in various mathematics organizations have made Professor Pedersen well-known at the local, regional, and national levels. She was one of the early proponents of the MAA Women and Mathematics Programs, has served as MAA Sectional Governor, has been active on various AMS committees, and has been President of the Santa Clara Valley Mathematics Association.

"Probably Professor Pedersen's 'most extraordinary feat as a teacher and expositor of mathematics and pedagogical matters is her indefatigable performance as a speaker at meetings of various organizations and at college and university colloquia.' Just since October 1989, she has given an almost unimaginable number of presentations around the globe. This has included speeches at eight major international meetings, 36 other meetings of teachers, three MAA Section meetings, and about 79 department colloquia in an amazing number of institutions in a great variety of nations. Furthermore, the above list does not include her frequent talks to groups of high school students.

"Not only is her performance as a teacher in her own department extraordinary, but Professor Pedersen continues to have an influence, internationally, on both teachers and students. The Northern California Section of the MAA is pleased to honor this exceptional teacher for her outstanding contributions to mathematics and to mathematics education at all levels."

February 21, 1998

"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 is pleased to identify

Donald C. Pfaff

as the 1998 recipient of its MAA Sectional Award for Distinguished College or University Teaching of Mathematics

"For nearly forty years Donald Pfaff has devoted himself to developing methods of effective teaching and problem solving. His techniques and memorable style are highly praised by undergraduate and graduate students, by his colleagues and by teachers he has trained. His courses aimed at the training of teachers attract large enrollments, including many students who do not have teaching as a career goal. His influence on his students persists long after graduation or completion of a workshop.

"It is the opinion of his nominator that Dr. Pfaff has taught more topics at more different levels, using more different approaches, to more students, than any other faculty member at the University of Nevada. Beyond the classroom he has for many years (35) written the Nevada Prize

Exam for high school students. He has also distributed and scored the exam and presented the awards to the winners. He has lectured widely to high school students in Nevada and California.

“Don Pfaff is recognized as an extraordinarily successful teacher. A colleague writes: He is a master teacher, known and respected throughout Nevada and Northern California by those in the teaching profession. He has remained both constant and lively in his career for many years. A measure of student enthusiasm for Dr. Pfaff is given by some terms that they have coined, such as “Pfaffology” and the “Pfaff Experience”. One of the titles even appears on a license plate. It reads: PFAFFER.

“The Northern California Section of the MAA congratulates this exceptional teacher for his contributions to the profession.”



February 20, 1999

“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 is pleased to identify

Leonard F. Klosinski



as the 1999 recipient of its MAA Sectional Award for Distinguished College or University Teaching of Mathematics

“On his own campus Leonard Klosinski has been a respected and renowned teacher of mathematics and computer science since he joined the faculty of Santa Clara University in 1964. Nationally his name is known to thousands of students who have participated in the William Lowell Putnam Mathematical Competition, which he has administered since 1978.

“Although naturally a rather shy person, in front of a class he seems quite different: outgoing, theatrical, lively, humorous, and seemingly spontaneous, though this kind of spontaneity is usually no accident but is well planned in advance. He is an enormously popular teacher,

known for giving challenging courses. But his students rush back for more.

"A loyal following of alumni credit him with a good part of their success. One alumnus (currently a professor of mathematics in a West Coast university) wrote: 'I considered him the best teacher in Santa Clara's department, one known for priding itself on the quality of its teaching.' Further, 'The most memorable course I took was Advanced Calculus, during the start of my sophomore year. This was a difficult and challenging course, with exams that must have been inspired by the Putnam. I can still recall the feeling of accomplishment that came from doing well on those exams. This was the first mathematics course that ever challenged me, and it convinced me that I was right to choose mathematics as a career. It has also been influential in shaping my own teaching style.' Another former student, now a professor of mathematics and computer science, wrote, 'I think it was the enthusiasm of Leonard and similarly-gifted instructors for mathematics, rather than any particular area of mathematics itself, that led me to pursue graduate studies in the hope of becoming a college professor myself and I credit him with being one of my chief inspirations for my own classroom style.'

"On his own campus Klosinski practically single-handedly organized the effort to get a Pi Mu Epsilon chapter on campus and was the chapter advisor for many years. He continues to administer a mathematics contest for high school students, taken by 300 to 600 students per year. And for the past 21 years he has wisely and efficiently administered the national William Lowell Putnam Mathematical Competition, a longer tenure than any other director (the previous record of 16 years was held by L. E. Bush). During his administration the contest has been expanded to include additional prizes, including a prize for achievement by a woman in the Competition.

"The Northern California Section congratulates this outstanding teacher for these accomplishments, for his contributions to his own students and to the professional community and is pleased to present him its Award for Distinguished College or University Teaching of Mathematics."

Professor Klosinski was chosen as one of the three winners of the MAA Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics in 2001.

February 26, 2000

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 is pleased to identify

Evelyn Silvia

as the recipient of its MAA Sectional award for distinguished college or university teaching of mathematics.

Since 1973, Professor Silvia, of the Department of Mathematics at the University of California, Davis, has taught a remarkable spectrum of courses. Within the standard offerings of the University, they range from beginning calculus to graduate courses. She has extended that range in several directions. She has taught in the public schools – on a volunteer basis – a full year each of Algebra I, Geometry and Pre-Algebra; fifth grade special mathematics; and, three years of supplemental mathematics to 9 - 11 year old deaf children. At the other end of the spectrum, she arranged a series of seminars at which she presented the long, intricate proof of the famous Bieberbach conjecture. Labeled as a tour-de-force by a colleague, the seminars were attended by

faculty and graduate students.

Professor Silvia is unique in her focus on designing materials that stimulate thinking, clarify texts and actively engage students. They include such things as her “Working Excursion” series of text/workbooks. Titles to date include “Introduction to Abstract Mathematics,” “Complex Variables” and “Companion Notes for Advanced Calculus.” She uses such materials with her classes and in her efforts toward promoting the improvement of teaching. In that arena, she is coauthor of the “Handbook for Teaching in the Department of Mathematics”; she has served as Director of the UC Davis Teaching Resources Center and as Director of the Northern California Mathematics Project; and, she has participated in national and international conferences on teaching.



Former students show great appreciation for the way Professor Silvia has affected their lives. A survey of former UC Davis mathematics undergraduate majors and graduate students included the question, “What were the best aspects of your undergraduate mathematics training?” A surprising number of replies consisted of the two words, “Professor Silvia”.

The Northern California Section congratulates this exceptional teacher for her contributions to the profession and is pleased to present her its Award for Distinguished College or University Teaching of Mathematics.

Professor Silvia was chosen as one of the three winners of the MAA Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics in 2001.

Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics

- 1994 Paul Halmos, Santa Clara University**
- 1996 Edward M. Landesman, University of California, Santa Cruz**
- 2001 Leonard F. Klosinski, Santa Clara University**
- 2001 Evelyn Silvia, University of California, Davis**

Each year since the inauguration of these awards in 1993, three awards have been made. (The exception was the first year when seven were awarded.) The year 2001 is the first time in the history of the awards that two winners have come from the same MAA Section. And only one Section, the Northeastern Section, has had more winners than the Northern California Section.

Selection Committee for the Northern California Section Award for Distinguished College or University Teaching of Mathematics

- 1992 **Lester H. Lange**, San Jose State University(chair); **E. Maurice Beesley**, University of Nevada, Reno; **Betty Hinman**, Lockheed Missiles and Space; **Henry Osner**, Modesto Junior College; **Kenneth Rebman**, California State University, Hayward
- 1993 **Lester H. Lange**, San Jose State University (chair); **E. Maurice Beesley**, University of Nevada, Reno; **Betty Hinman**, Lockheed Missiles and Space; **Henry Osner**, Modesto Junior College; **Kenneth Rebman**, California State University, Hayward
- 1994 **Lester H. Lange**, San Jose State University (chair); **Don Chakerian**, University of California, Davis; **Betty Hinman**, Lockheed Missiles and Space; **Henry Osner**, Modesto Junior College; **Kenneth Rebman**, California State University, Hayward
- 1995 **Betty Hinman**, Lockheed Missiles and Space (Chair); **Don Chakerian**, University of California, Davis; **Paul Halmos**, Santa Clara University; **Henry Osner**, Modesto Junior College; **James Smart**, San Jose State University
- 1996 **Betty Hinman**, Lockheed Missiles and Space (Chair); **Don Chakerian**, University of California, Davis; **Anne Fish**, Foothill College; **James Smart**, San Jose State University
- 1997 **James Smart**, San Jose State University (chair); **Don Chakerian**, University of California, Davis; **Anne Fish**, Foothill College; **Ed Landesman**, University of California, Santa Cruz
- 1998 **Anne Fish**, Foothill College (chair); **Ed Landesman**, University of California, Santa Cruz; **G. Thomas Sallee**, University of California, Davis; **Franklin Sheehan**, San Francisco State University
- 1999 **Anne Fish**, Foothill College (chair); **Ed Landesman**, University of California, Santa Cruz; **Jean Pedersen**, Santa Clara University; **G. Thomas Sallee**, University of California, Davis; **Franklin Sheehan**, San Francisco State University
- 2000 **Franklin Sheehan**, San Francisco State University (chair); **Jane Day**, San Jose State University; **Jean Pedersen**, Santa Clara University; **Don Pfaff**, University of Nevada, Reno; **G. Thomas Sallee**, University of California, Davis.
- 2001 **G. Thomas Sallee**, University of California, Davis (chair); **Jane Day**, San Jose State University; **Jean Pedersen**, Santa Clara University; **Don Pfaff**, University of Nevada, Reno; **Ann Preston**, Santa Clara University.

(There are no records in the files of the Section which officially show who all the members of this committee have been. This list has been compiled by using the collective memories of the officers of the Section and the living members of this committee.)

Citations for Certificates of Meritorious Service

The Certificates of Meritorious Service are presented for service at the national level or for service to a Section of the Association. The first such awards were made in 1984. At each January meeting of the Association, honorees from roughly six Sections are recognized.

August 8, 1988
Providence, Rhode Island

Harold M. Bacon

"The first nominee of the Northern California Section for the Certificate of Meritorious Service is Harold M. Bacon, Professor Emeritus of Mathematics at Stanford University. Professor Bacon was a charter member of the Section, which was formed in 1939, and served as Secretary-Treasurer for the first six years of its existence. Later he served as Chair of the Section and twice on the Board of Governors as well as on a number of committees of the Section and of the Association itself.

"Harold Bacon graduated in 1928 from Stanford, the institution from which his father had graduated in 1902, and he received his A.M. in 1929 and his Ph.D. in 1933 at Stanford, having written his dissertation under the direction of Harald Bohr and J. V. Uspensky. After a short career in actuarial work — one year — he joined the Stanford faculty where he remained until his retirement in 1972, though he continued to teach part-time until 1980. Long renowned as one of Stanford's great teachers, he was awarded in 1965 the prestigious Lloyd W. Dinkelspiel Award for Outstanding Service to Undergraduate Education at Stanford. He is author of two widely used texts in mathematics.



"Between 1955 and 1974 he directed a series of institutes for high school and college teachers of mathematics at Stanford that were models for other institutions. In addition to Stanford's George Pólya, he attracted the following faculty to his institutes: Carl Allendoerfer, D. H. Lehmer, Morris Kline, Ivan Niven, I. J. Schoenberg, among others. In 1964 and 1965 he directed highly successful NSF-supported summer institutes in Switzerland for teachers of American students in the European area.

"For Harold Bacon's many contributions to the Section, spread over 50 years, and for his long service to mathematics and mathematics education both locally and nationally, the Northern California Section has nominated him for the Certificate of Meritorious Service."

January 15, 1993
San Antonio, Texas

Edward Maurice Beesley

"The state of Nevada is part of the Northern California Section but is separated from the rest of the Section by a formidable mountain range. Because of the much larger population in California, most Section activities have always taken place in California, usually in the extended San Francisco Bay Area. For many years, Maurice Beesley was the most influential force in keep-

ing Nevada active in the Section, bringing members of his department across the Donner Pass in February, no easy task, to attend Section meetings.



"Edward Maurice Beesley attended Lafayette College, receiving his A.B. in 1936. He went on to Brown University for his Sc.M. in 1938 and his Ph.D. in 1943. He joined the faculty of the University of Nevada in Reno as an instructor in 1940, where he became the chair of the department in 1947. He remained chair for 32 years and retired in 1980. His research has been in the field of functions of a real variable.

"Professor Beesley served the Section as Vice-Chair, Chair, and Program Chair in the period 1964–66 and was for many years in charge of the Section's Secondary School Lecture Program for Nevada and, for geographical reasons, that part of California on the Eastern side of the Sierra Nevada mountain range. At the national level he has served on the Committee on Sections (1965–68), the Committee on Visiting Lecturers (1966–74), the Program Committee for the Annual Meetings (1972), and as Chair of the Committee on Arrangements for the Annual Meeting (1972).

"For his many years of service to mathematics and to the Northern California Section of the Association, we are proud to present Professor Beesley for the Certificate of Meritorious Service."

Response from E. Maurice Beesley

"I am greatly honored by this unexpected formal recognition for pleasant activities in interesting places with stimulating colleagues. I wish to thank those who provided me with the opportunities to serve the Section and the Association in various ways and for the assistance that was always available. This award now adds honor to those memories."

January 8, 1998
Baltimore, Maryland

Henry L. Alder

"It would be difficult to think of a name more closely associated with the recent history of the MAA than that of Henry L. Alder. He served the Northern California Section as Chair in 1956, a few years before becoming Secretary of the MAA, a role in which he served between 1960 and 1974, a period of significant growth for the Association. At the end of his term he was named Secretary Emeritus. In 1977-78 he served as President of the MAA.

"Professor Alder received his Ph.D. from the University of California, Berkeley, where he worked under the supervision of the distinguished number theorist, D. H. Lehmer. He joined the faculty of the University of California, Davis, in 1948, and there he has remained, having served as Department Chair as recently as last year. He was the first president of Mu Alpha Theta and has served as a Governor of the *Pacific Journal of Mathematics*. For the MAA he has served on countless committees, one of the most important in recent years the committee charged with initiating the MAA distinguished teaching awards. In 1970 he was



awarded the Lester R. Ford Award for his paper "Partition Identities — From Euler to the Present," published in *The American Mathematical Monthly* 76 (1969), 733-746, and in 1980 he received from the MAA its highest award, the Award for Distinguished Service to Mathematics (now called the Gung-Hu Award for Distinguished Service). He has also served in various roles for the California State Department of Education.

"Within the Section he has been a tireless supporter of the work of the Section, attending almost every meeting of the Executive Committee within memory and providing wise counsel in every aspect of the Section's activities. This reflects the kind of contributions he has made over the years to the national organization as well. It is therefore with pride and pleasure that the Northern California Section nominates for its Certificate of Meritorious Service Henry L. Alder of the University of California, Davis."

Response from Professor Alder

"It is most gratifying to know that my peers in the Northern California Section believe that I have been able to contribute to the goals of that Section and those of the MAA sufficiently to deserve this award, and it is even more so when this action is taken by colleagues who themselves have distinguished themselves in so many different ways by furthering significantly the interests of mathematics both at the sectional and national levels.

"This award will serve as an incentive for me to continue efforts to improve the teaching of mathematics at all levels, from kindergarten through college, so that every student taking a mathematics class can experience the joy, the fascination, and the excitement of doing mathematics."

Citations for Certificates of Appreciation

February 20, 1999

Ohlone College, Fremont, California

Alice J. Kelly

Alice J. Kelly served the Section in a number of ways, but most visibly as the person in charge of book sales for thirteen years. In this role she not only provided a service to the members but also enhanced the treasury of the Section, which received a percentage of total sales to support activities of the Section.

Alice served the Association in other ways as well. She was a pioneer in the Women and Mathematics Program having served initially as a Regional Coordinator of this program and eventually as National Director. With a natural talent for organization, she solicited funds, found regional representatives nation-wide and was directly or indirectly responsible for hundreds of visits by women in mathematics to students in the schools, thus demonstrating that women indeed have productive and fulfilling careers in mathematics.



In various roles Alice attended many Section meetings and Executive Committee meetings over the years. Her participation continued without interruption until she moved away from Northern California to join two daughters in Colorado.

For her many contributions to the work of the Section over years, the Northern California Section is pleased to award to Alice Kelly this Certificate of Appreciation.

William G. Chinn

For eighteen years William G. Chinn has provided a chronicle of activities in the Northern California Section in his role as Newsletter Editor. After the founding of the revived Newsletter by Ken Rebman in 1975 (a newsletter had existed in the early years of the Section) and the three-year editorship of Henry Osner, Bill took over in 1981 and has seen it through very nearly all of its life, and indeed over a significant part of the life of the Section. During his editorship the newsletter expanded from four pages to eight, the appearance was enhanced by two-color printing, and through Bill's expertise with a camera, pictures proliferated, culminating in the January 1996 issue which featured 24 pictures!



Bill assiduously solicited news of departments from institutions throughout the Section, keeping track of newly appointed department chairs, honors bestowed on faculty and students, and regional and national offices assumed by Section members. He introduced many additional features to the newsletter such as covering each year's recipient of the Section Award for Distinguished College or University Teaching of Mathematics, giving the results of each year's International Mathematical Olympiad, and presenting obituaries of prominent members of the Section.

Bill's commitment to the Section goes back a number of years. He was Section Chair in 1978, serving as Vice-Chair and Program Chair before and after his term as Chair. He spoke at annual meetings in 1969 and 1972. Further, his participation in the Mathematical Association of America was not restricted to the Northern California Section—in 1981-82 he served as national Second Vice-President and he has served on numerous committees at the national level.

He graduated from the University of California at Berkeley and taught for many years at the City College of San Francisco. His contributions have not been limited to the Mathematical Association of America: he served as contributing editor of *Science World* for two years; he has authored several books, including *First Concepts of Topology* in the New Mathematical Library series, coauthored with N. E. Steenrod, *Arithmetic and Calculators: How to Deal with Arithmetic in the Calculator Age*, and *Three Point One Four One Six & All That*, coauthored with Philip J. Davis; and in 1986 he was a key figure in the public information effort for the International Congress of Mathematicians held that year in Berkeley.

For his many contributions to mathematics, to the profession and especially for his devoted efforts in providing this Section with an outstanding newsletter over many years, the Northern California Section of the Mathematical Association of America is pleased to present to William G. Chinn this Certificate of Appreciation.

March 4, 1989

At the meeting at Sonoma State University, a Sectional Certificate of Meritorious Service was presented to Gerald L. Alexanderson. A citation was read by John Mitchem, but the citation itself is not in the records of the Section.



Visiting Lecturer Program

In 1957–58 the Section started a Visiting Lecturer Program that sponsored lectures in the high schools by college and university level mathematicians or mathematicians from industry. In that first year 23 high schools were visited. At the height of the program, 1964–65, 87 high schools were visited. The directors of the program have been Gerald L. Alexanderson, E. Maurice Beesley, Roy Dubisch, Leonard F. Klosinski, Max Kramer, C. M. Larsen, Rick Luttman, and Donald Pfaff. The most recent directors have been: Donald Pfaff, University of Nevada, Reno, 1986 – 90, 1991 – 92; Rick Luttman, Sonoma State University, 1990 – 91, 1992 – 93.

In 1993 the program was suspended. Interest by the high schools in the program had waned. The Women and Mathematics (WAM) program was to some extent providing competition to the Section program and funding for the Section program which had largely come from the high school contest had also vanished.

High School Contest

The first high school contest sponsored by the Northern California Section was held in 1956. The test prepared by the Metropolitan New York Section was used and this procedure was repeated in 1957, but in 1958 the contest prepared by the national committee of the MAA was used. The Contest chairs in chronological order have been: David W. Blakeslee, John Hancock, Jesse K. Peckham, William H. Landis, Robert McFarland and Terry L. Shell (1992 –). The Contest chairs in Hawaii have been: R. K. Coburn, M. Watabe, Jack V. Johnson, Elaine Spendlove and David Furuto (1990 –). In Guam the chairs have been Gail Mullen and Peter E. Patacsil (1999 –). And in Nevada they have been Donald Pfaff and Harvey Lambert (2000 –).

Booksellers

Book sales have been an integral part of our annual Section meetings since 1984. And from their inception until 1997, they had been in the capable hands of Alice Kelly (Santa Clara University). When Alice left the Section for Colorado, they were handled in 1998 by Peter Ross (Santa Clara University), in 1999 by Mary Jackson (Santa Clara University) and in 2000 by Neville Robbins (San Francisco State University).

Section Newsletter

The newsletter of the Northern California Section, *MINI-FOCUS*, was started in 1975 under the editorship of Ken Rebman of California State University, Hayward. Ken was chair of the Section that year, and he and Don Albers, then of Mission College, were the prime movers for starting a newsletter. Ken accepted the position of editor although he always insisted that he would only be a temporary editor. In 1977, Henry Osner from Modesto Junior College became the editor; at the same time, the production and mailing of the newsletter moved to Santa Clara University under the direction of Leonard F. Klosinski, where it has remained. Henry produced issues 3, 4, 5 and 6. Issue number 7 of October, 1981 was the first issue to be edited by William G. Chinn of City College of San Francisco. That issue was the first to be called *MINI-FOCUS*. Bill served as editor through issue 24, January 1999. Gerald L. Alexanderson was appointed editor for a five year term beginning with issue 25 of January 2000.

That newsletter of 1975, which began with "This is the first meager attempt to produce a newsletter for the Northern California Section of MAA," was actually not the first newsletter for the section. There was an earlier newsletter in 1961 and the archives indicate that two additional issues followed the 1961 issue. That early newsletter is reprinted here in full.

Northern California Section
Mathematical Association of America
Fall 1961 Newsletter

ANNUAL MEETING

The next Annual Meeting of the Northern California Section of the MAA will be held on January 13, 1962 on the campus of the University of California, Davis. Highlighting the program will be a panel presentation of the MAA Committee on the Undergraduate Program in Mathematics (CUPM). Heading the panel will be Dr. Robert J. Wisner, Executive Director of the Committee.

The CUPM is organized into four Panels, each charged with a specific area of responsibility in recommending curricular changes and in efforts at realizing these changes: The Panel on Teacher Training (elementary and secondary); the Panel on Mathematics for the Physical Sciences and Engineering; The Panel on Mathematics for the Biological, Management, and Social Sciences; and the Panel on Pre-Graduate Training (for mathematicians).

Dr. Wisner's group will probably give more attention to the work of the last three Panels since more publicity has been given to the activity of the Panel on Teacher Training, e.g. the December, 1960 issues of the *Monthly* and the *Mathematics Teacher*.

Also, a presentation is planned to show the probable impact upon college course offerings of changes in high school mathematics curricula, such as the School Mathematics Study Group program. These two presentations will have a special significance for all members engaged in either secondary or college level teaching.

Complete details of the program will be mailed before January 1, 1962, but all members are urged to circle the January 13th date now for the MAA Section Meeting at Davis, California.

VISITING LECTURER PROGRAM TO SECONDARY SCHOOLS

This program is operating in Nevada and Northern California during 1961-62 with the aid of a grant of \$4,000 from the National Science Foundation. Max Kramer, San Jose, is acting as chairman of the committee carrying out this program. Other members are H. L. Alder, Davis; E. M. Beesley, Reno; P. W. Berg, Stanford; R. C. Campbell, Monterey; D. J. Ewy, Fresno; Gordon Glabe, Sacramento; S. P. Hughart, Berkeley; C. M. Larsen, San Jose; R. J. Levit, San Francisco; E. C. Riggle, Chico. A similar program will operate for the first time this year in Hawaii under the leadership of Mrs. Ruth E. M. Wong.

The committee will arrange to provide a capable mathematician to give lectures upon request by high schools in the section. Many of the students are ill-informed about the mathematics profession and the lecturer is expected to answer questions about opportunities in the field as well as give an informative talk on a mathematical topic. This is the fifth year in which the section has sponsored this program. During the 1960-61 year, eighty-two high schools were visited with a total audience of about 15,000 students. Members of the section can aid this effort by encouraging high school teachers to request a visiting lecturer.

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Does your school library have the American
Mathematical Monthly on its magazine rack? It should!

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ANNUAL HIGH SCHOOL MATHEMATICS CONTEST

This year will mark the 7th annual contest sponsored jointly by the Northern California Section and the Society of Actuaries. The participation has increased from 72 schools and 2100 students in 1956 to 252 schools and 12,176 students in 1961. This healthy growth is worthwhile when considered in light of the contest's objective to engender in high school students a sustained interest in mathematics, and to develop sound scholarship in the subject. The success of this activity is due in large measure to the energies of the Contest Committee Chairman, D. W. Blakeslee, San Francisco State College, who has carried most of the work of the committee for the past six years. His committee includes: W. R. Hanson, San Francisco City College; S. P. Hughart, University of California, Berkeley; A. C. Olshen, West Coast Life Insurance Company; E. H. Swift, El Cerrito High School. The contribution of the Society of Actuaries in providing prizes and in publishing the results is of great importance to the success of the contest.

While the Contest Committee makes no attempt to compare various schools on the basis of the results, it does award a beautiful permanent trophy to the school with the highest team score; the three highest individual scores from the school constitute the team score. In the 1961 contest, the trophy was won by the Kaimuki High School, Honolulu. Professor Blakeslee deeply regretted being unable to make a personal presentation, as he had done in each preceding year. The next highest schools in 1961 were Palo Alto H.S.; Menlo-Atherton H.S.; Cubberley H.S., Palo Alto; El Cerrito H.S.; Miramonte H.S., Orinda; Berkeley Senior H.S.; Harry Ells Senior H.S., Richmond; Bullard H.S., Fresno; Punahoe School, Honolulu.

The top student in each school is awarded a pin bearing the MAA seal. In addition, the Section awarded United States Savings Bonds to the top 50 students in the contest. Many of the very high scorers were also winners of slide rules or mathematics handbooks from the National Contest Committee. The top 10 students in 1961 included 3 from Kaimuki, 2 from Cubberley and one each from Bullard, Palo Alto, El Cerrito, Miramonte and Menlo-Atherton High Schools.

SECTION OFFICERS' MEETING

The Northern California Section was well represented at the Officers' meeting held during the Summer Meetings at Stillwater, Oklahoma. The section governor, C. D. Olds; the section chairman, D. W. Blakeslee; secretary-treasurer, B. J. Lockhart; and lectureship chairman, Max Kramer were among those in attendance.

The idea for a Section News Letter came from this meeting. Your comments to the secretary will be most helpful.

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How many of the senior mathematics majors in
your school have joined a professional organization?
You should urge them to join one, e.g. The Mathematical
Association of America.

* * * * *

Northern California Section — Meetings

The Northern California Section traditionally holds its annual meeting in February or March of each year. The executive committee determines the site of the meeting. Several factors are used in determining the site and among these are variation in geographical location and variation in type of institution (Ph.D granting universities, state universities, private universities or liberal arts colleges, community colleges).

The details of the first fifty years of meetings of this Section can be found in *A History of the Northern California Section*.

- * Denotes invited address
- † Denotes luncheon speaker
- ‡ Denotes student poster presentation

51. Sonoma State University (March 4, 1989)

Chair: Anne Fish, Foothill College; Vice
Chair: G. Thomas Sallee, University of
California, Davis; Program Chair: John
A. Mitchem, San Jose State University;
Secretary-Treasurer: Leonard F.
Klosinski, Santa Clara University;
Governor: Hugh Edgar, San Jose State
University

240 registered participants — Book sales:
\$2,487.08

“A student learns mathematics — a close-up,
frightening view,” ALAN SCHOENFELD, Univer-
sity of California, Berkeley*

“Computing examples worth repeating,” DONALD KREIDER, Dartmouth College*

“Memories of a half-gross mathematician,” RICHARD GUY, University of Calgary*†

“Trees and their uses: groups and graphs,” ROGER ALPERIN, San Jose State University*

“The beauty of fractals (the mathematics behind the images),”
H. O. PEITGEN, University of California, Santa Cruz*



Anne Fish



G. Thomas Sallee

52. Naval Postgraduate School (February 24, 1990)

Chair: G. Thomas Sallee, University of California, Davis; Vice
Chair: Betty Hinman, Lockheed Missiles and Space; Program
Chair: Anne Fish, Foothill College; Secretary-Treasurer: Leonard
F. Klosinski, Santa Clara University; Governor: Hugh Edgar, San
Jose State University

175 registered participants — Book sales: \$1,682.00

“Everybody counts: from vision to reality,” MARCIA SWARD,
executive director of MAA*

“The constructive approach to linear algebra,” WILLIAM GRAGG,
Naval Postgraduate School*

“Unreal analysis,” TONY BARCELLOS, American River College*†
 “A history of numerical linear algebra,” GENE GOLUB, Stanford University*
 “The games of dots and boxes,” ELWYN BERLEKAMP, University of California, Berkeley*

53. California State University, Hayward (February 23, 1991)



Betty Hinman

Chair: Betty Hinman, Lockheed Missiles and Space;
 Vice-Chair, Dennis C. Smolarski, S.J., Santa Clara
 University; Program Chair: G. Thomas Sallee,
 University of California, Davis; Secretary-Treasurer:
 Leonard F. Klosinski, Santa Clara University; Governor:
 Donald J. Albers, Menlo College

170 registered participants — Book sales: \$987.00

“Mathematics and computers: proliferation and
 fragmentation,” WADE ELLIS, JR., West Valley College*
 “The mathematics of identification numbers,” JO-
 SEPH GALLIAN, University of Minnesota, Duluth*
 “An amateur cartoonist looks at professional math-
 ematics,” DAVE LOGOTHETTI, Santa Clara University*†
 “The calculus as algebra: another look at Lagrange,”
 JUDITH GRABINER, Pitzer College*
 “Can we see the Mandelbrot set?” JOHN EWING, In-
 diana University at Bloomington*

54. University of the Pacific, Stockton (February 29, 1992)

Chair: Dennis C. Smolarski, S. J., Santa Clara
 University; Vice-Chair: James T. Smith, San
 Francisco State University; Program Chair: Betty
 Hinman, Lockheed Missiles and Space; Secretary-
 Treasurer: Leonard F. Klosinski, Santa Clara
 University; Governor: Donald J. Albers, Menlo
 College

150 registered participants — Book sales: \$1,650.00

“Expansion in power series and in series of Jacobi poly-
 nomials,” DEBORAH TEPPER HAIMO, University of Mis-
 souri, St. Louis, President of MAA*

“Real estate in hyperbolic space,” COLIN ADAMS, Williams
 College*

“Some good attitudes learned from Euler and Pólya,” LES
 LANGE, San Jose State University*†

“All of plane geometry in one picture,” DON CHAKERIAN,
 University of California, Davis*

“The arithmetic of apportionment — a legacy of the founding fathers,” KEN REBMAN, California
 State University, Hayward*



Dennis C. Smolarski, S.J.

55. University of California, Berkeley (February 20, 1993)

Chair: James T. Smith, San Francisco State University; Vice-Chair: Eleanor Kendrick, San Jose City College; Program Chair: Dennis C. Smolarski, S. J., Santa Clara University; Secretary-Treasurer: Leonard F. Klosinski, Santa Clara University; Governor: Donald J. Albers, Menlo College

185 registered participants — Book sales: \$1,855.90

“Ten years at MSRI,” IRVING KAPLANSKY, MSRI*

“Subfactors,” VAUGHAN JONES, University of California, Berkeley*

“Is research necessary after lunch?” PAUL HALMOS, Santa Clara University*†

“The legacy of Dido,” JANE SANGWINE-YAGER, St. Mary’s College*

“A couple of theorems on spotted owls: the interplay between simulation models and analytic results,” ROLAND LAMBERSON, Humboldt State University*



James T. Smith

56. San Jose City College (February 12, 1994)



Eleanor Kendrick

Chair: Eleanor Kendrick, San Jose City College; Vice-Chair: Maurice D. Weir, Naval Postgraduate School; Program Chair: James T. Smith, San Francisco State University; Secretary-Treasurer: Leonard F. Klosinski, Santa Clara University; Governor: John A. Mitchem, San Jose State University

210 registered participants — Book sales: \$3,352.85

“From geometry to number theory,” JEAN PEDERSEN, Santa Clara University*

“How do you know this is a title?” KEITH DEVLIN (Editor, *Focus*), St. Mary’s College*

“Searching for Eric Temple Bell,” CONSTANCE REID, author*†

“Light scattering from surfaces and volumes,” NELSON MAX, Lawrence Livermore Laboratory*

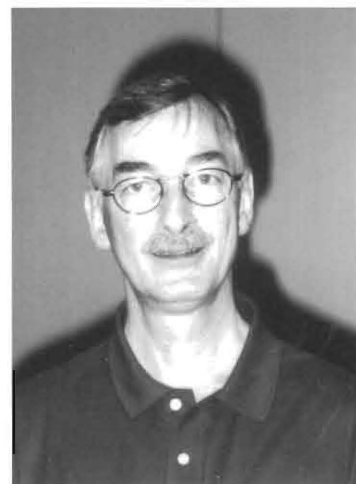
“Wiles’ proof of Fermat’s last theorem,” EDWARD F. SCHAEFER, Santa Clara University*

57. California Polytechnic State University, San Luis Obispo (October 20–21, 1995) (Joint Meeting with Southern California Section)

Chair: Maurice D. Weir, Naval Postgraduate School; Vice-Chair: Allan B. Cruse, University of San Francisco; Program Chair: Eleanor Kendrick, San Jose City College; Secretary-Treasurer: Leonard F. Klosinski, Santa Clara University; Governor: John A. Mitchem, San Jose State University

359 registered participants

- "Bringing up baby," DONALD J. ALBERS, Associate Executive Director, Publications and Programs, MAA*
- "Evaluating educational innovations," Panel Discussion, Moderator: David H. Carlson, San Diego State University; Panelists: Jane M. Day, San Jose State University; Mario U. Martelli, California State University, Fullerton; Patrick Thompson, San Diego State University
- "Old mathematicians and new technologies," TOM M. APOSTOL, California Institute of Technology*
- "Maclaurin among the molasses barrels: mathematics and society in 18th century Britain," JUDITH V. GRABINER, Pitzer College*
- "*Outside In* and the communication of mathematics," WILLIAM P. THURSTON, Mathematical Sciences Research Institute*
- "Naming nice knots," JOHN H. CONWAY, Princeton University*
- "Interactive differential equations: a preview," Jean Marie McDill, California Polytechnic State University, San Luis Obispo
- "Computer algebra systems in teaching differential equations," Bernard Banks, California State Polytechnic University, Pomona
- "Animated linear algebra with Matlab," Carlos Borges, Naval Postgraduate School
- "Why we should look for software independent computer problems for a first course in linear algebra and how to find them," Melvin Henriksen, Harvey Mudd College
- "Calculus labs with Maple V," David Canright, Naval Postgraduate School
- "The historical development of mathematical examinations," Agnes Tuska, California State University, Fresno; Lilian Metlitzky, California State Polytechnic University, Pomona
- "Now, what do I major in?" The importance of writing in the undergraduate curriculum," Sandy Lofstock, California Lutheran College
- "Mathematics across the curriculum," Jerry Johnson, University of Nevada, Reno
- "Encouraging women to pursue mathematics," Anie Chaderjian, Scripps College
- "Experiencing calculus concepts via the bottle exploration," Jackie Barab, California State University, Dominguez Hills
- "Mathematics on the internet," Claudia Pinter-Lucke, California State Polytechnic University, Pomona; Jim Pinter-Lucke, Claremont McKenna College
- "Image compression in visualizing matrix structure with Mathematica," Noel Harbertson, California State University, Fresno
- "Non-linear strings and the FPU problem," Ami Radunskaya, Pomona
- "Butterflies and caterpillars: the discrete cosine transform," George Senge, Hughes Aircraft Company
- "Self-similar traffic in high-speed data networks," Paul Kaschube, Pacific Bell Network Systems Engineering District
- "Charged beads on a wire," Thomas O'Neil, California Polytechnic State University, San Luis Obispo
- "Lucas partitions," Neville Robbins, San Francisco State University
- "Analytic and numerical solutions to the delay differential equation $y'(t) = Cy(t-d)$," Clement E. Falbo, Sonoma State University
- "Perfect shuffles, permutations, and spreadsheets," Robert S. Fisk, California State University,



Maurice D. Weir

Stanislaus

- "Archimedes' quadrature of the parabola and generalizations," Larry W. Cusick, California State University, Fresno
- "Analyzing Mersenne prime interrelations using operation sequences," Thomas Richard McCalla, University of Science and Arts of Oklahoma
- "Leibniz' formulation of completeness of the real numbers and teaching calculus through infinitesimals," Todor Todorov, California Polytechnic State University, San Luis Obispo
- "Tetrahedronometry," Brian Hutchings, Santa Monica, CA
- "Mathematical proof and the reliability of DNA evidence," Don Thomas Fallis, University of California, Irvine
- "Populations structured by disease characteristics in individuals," Richard Elderkin, Pomona College, Claremont
- "How many ways are there to tile an m -by- n rectangle?," Silvia Heubach, California State University, Los Angeles
- "Charlotte Scott and the mathematical Tripos of 1880," Shawnee McMurrin, Providence College
- "Phillipa Fawcett and the 1890 Mathematical Tripos Examination," Jim Tattersall, Providence College
- "Four little-known techniques, from Eratosthenes to Newton," Barnabas Hughes, California State University, Northridge
- "Magic cubes and their generalization," David Y. Hsu, Pepperdine University and Litton Guidance and Control Systems

Student Poster Presentations

- "An investigation into knot theory," Felix Aburto, Robert Au, Oralia Loza, Manuel Salcido, Bill Thompson, University of California, Santa Barbara‡
- "A simple method for calculating polygonal areas," Carl T. Anhalt, California Institute of Technology‡
- "Statistical consulting at Sonoma State University," Elaine A. Belt, Sonoma State University‡
- "Steady states of structured populations," Jeffery C. Bradley, Pomona College‡
- "Chaotic dynamics in a three species food chain," Dennis Campbell, University of Redlands‡
- "Trisecting Angles," Nhan Do, Loyola Marymount University‡
- "Mathematical Visualization," Douglas A. Fidaleo, Pomona College‡
- "The number of cycles in a Hamiltonian graph," Brian S. Fisher, Pomona College‡
- "Crystallography, symmetry and group theory," Ruben Glueck, California State University, Northridge‡
- "Units in the ring of polynomials over Z_n ," Aaron Gray, California Polytechnic State University, San Luis Obispo‡
- "Bipartite graphs and the four color theorem," Sean Grettum, University of Redlands‡
- " q -derangement problems," Kyle Griffin, California Polytechnic State University, San Luis Obispo‡
- "Survey sample size determination using stratified random sampling," Sherry Johnson, Sonoma State University‡
- "Neural networks and triangular dynamical systems," Bethany J. Johnston, California State University, Fullerton‡
- "Periodic points of cubic functions," Anna P. Mariz, Pomona College‡
- "A survey on evaluating certain types of infinite series," Can Anh Minh, University of California, Berkeley‡
- "Critical graphs and matrix completion problems," Sanja Petrovic, San Jose State University‡
- "Chaos, noise and forecasting," Terry Redfern, California State University, Fullerton‡

“Resampling the way of the future or a thing of the past,” Steffanie Ries, University of San Diego‡
 “Statistical consulting,” James Robinson, Todd Cook, Sonoma State University‡
 “FPU problem study of non linear systems: vibration of a string,” Juana E. Rodarte, Pomona College‡
 “Statistical problems in backgammon,” Andrew M. Ross, Harvey Mudd College‡
 “Stability analysis for mathematical models of the *lac* Operon,” Emil S. Savev, San Diego State University‡
 “Knot theory,” Natalie Vowels, University of San Diego‡
 “An interactive visualization for message sequence charts,” Amy Ward, Claremont McKenna College‡
 “A case of irregularities — 3D,” Ken Waring, Clare Hupp, California State University, Chico‡
 “Factorization of almost-periodic matrix functions,” Darryl Yong, Harvey Mudd College‡

58. Sonoma State University, Rohnert Park (March 2, 1996)

Chair: Allan B. Cruse, University of San Francisco;
 Vice-Chair, Larry L. Hinman, HSH ATIS, Inc.;
 Program Chair: Maurice D. Weir, Naval Postgraduate School; Secretary-Treasurer: Leonard F. Klosinski, Santa Clara University; Governor: John A. Mitchem, San Jose State University



Allan B. Cruse

165 registered participants — Book sales: \$2,461.25

“Factorization in L_1 and other places,” KENNETH ROSS, University of Oregon*
 “Formulas for primes,” UNDERWOOD DUDLEY, DePauw University (Pólya Lecturer)*
 “The art of mental calculation,” ARTHUR BENJAMIN, Harvey Mudd College*†
 “Lovely theorems and conjectures in matrix analysis,” JANE DAY, San Jose State University*
 “Teaching mathematics in the 21st Century,” EDWARD LANDESMAN, University of California, Santa Cruz*

Student Poster Presentations

Elaine Belt, Heather Bristol, Sherry Johnson, James Robinson, Heather Trask, Sonoma State University‡
 Sanjo Petrovic, Winston Wheeler, San Jose State University‡

59. University of San Francisco (February 22, 1997)

Chair: Larry L. Hinman, Lockheed Martin Missiles and Space; Vice-Chair: Jean Bee Chan, Sonoma State University; Program Chair: Allan B. Cruse, University of San Francisco; Secretary-Treasurer: Leonard F. Klosinski, Santa Clara University; Governor: James T. Smith, San Francisco State University

165 registered participants — Book sales: \$2,695.85

“Seeing is believing: topics in visual complex analysis,”

TRISTAN NEEDHAM, University of San Francisco*

“The trouble with bubbles,” JOEL HASS, University of California, Davis*

“Mathematics on a distant planet,” RICHARD W. HAMMING, Naval Postgraduate School*†

“Eigenvalue inequalities and equalities,” ROGER A. HORN, University of Utah; Editor, *American Mathematical Monthly**

“Sets of constant width and their generalizations,” G. THOMAS SALLEE, University of California, Davis*



Larry L. Hinman

Student Poster Presentations

“An interactive computer simulation program for senior seminar,” Jason Lee, California Polytechnic State University, San Luis Obispo‡

“A predator-prey model: life, liberty, and the pursuit of a Tescelosaurus,” Jason Lee, Jeff Mintz, Warren Vander Laan, California Polytechnic State University, San Luis Obispo‡

“Why did the dinosaur cross the road?,” David Aardema, Aaron Gray, Thomas Sanborn, California Polytechnic State University, San Luis Obispo‡

“Mix well for fruitful decisions,” Mike McJilton, Amy Polos, Bernie Weston, Sonoma State University‡

60. Stanford University (February 21, 1998)



Jean Bee Chan

Chair: Jean Bee Chan, Sonoma State University; Vice-Chair: Frederick G. Schmitt, College of Marin; Program Chair: Larry L. Hinman, Lockheed Martin Missiles & Space; Secretary-Treasurer: Leonard F. Klosinski, Santa Clara University; Governor: James T. Smith, San Francisco State University

193 registered participants — Book sales: \$2,635.95

“Extending and generalizing the Pascal triangle,” JEAN J. PEDERSEN, Santa Clara University*

“Interactive geometry on the internet: where will it lead?” THOMAS F. BANCHOFF, Brown University*

“Do we really believe in proofs—and if so, why?” MORRIS W. HIRSCH, University of California, Berkeley*†

“Collision of infinitely many solitons and tiling of a surface,” MOTOHICO MULASE, University of California, Davis*

“Dirty children, unfaithful husbands and similar problems,” I. MARTIN ISAACS, University of Wisconsin, Madison*

Student Poster Presentations

“Stereotypical images: an algorithm for MRI data interpolation,” David Aardema, Aaron Gray, Thomas Sanborn, California Polytechnic State University, San Luis Obispo‡

“A tomography model: the case of the slanted slice,” Joel Fish, Jeff Mintz, Warren Vander Laan, California Polytechnic State University, San Luis Obispo‡
 “Cal Poly Mathematical Contest in Modeling Seminar,” Judy Fetcho, Andy Oster, California Polytechnic State University, San Luis Obispo‡
 “Modulation of low threshold oscillations,” William Ott, California State University, Bakersfield‡
 “Differential equations with memory,” Theresa Murray, California State University, Bakersfield‡
 “Infinite period oscillations in neuronal models,” Kyle White, California State University, Bakersfield‡
 “Possible permutations of the carbon-carbon distance in annulenes,” Clayton Dagler, University of California, Davis‡
 “The DNA computer,” Noah Rosenberg, Stanford University‡
 “Math education internships at Cal State Chico,” Dan Simard, California State University, Chico‡
 “Concepts for Fermat,” Amar Ahmedov, California State University, Fresno‡
 “A simulation of error correcting codes,” Hain Huang, Eric Nelson, Ted Lambert, University of Nevada, Reno‡
 “An algorithm for an adjoint action decomposition,” Faisal Khan, Santa Clara University‡
 “An Euler-type volume identity,” Scott Jankowski, California State University, Hayward‡
 “Mathematical model for grade analysis,” Nereo Loresto, Michael McJilton, Heather Shirley, Sonoma State University‡
 “Mathematical modeling for wine production,” Nereo Loresto, Sonoma State University‡

61. Ohlone College – Fremont (February 20, 1999)



Frederick G. Schmitt

Chair: Frederick G. Schmitt, College of Marin; Vice-Chair:
 Edward C. Keppelmann, University of Nevada, Reno; Program
 Chair: Jean Bee Chan, Sonoma State University; Secretary-
 Treasurer: Leonard F. Klosinski, Santa Clara University; Governor:
 James T. Smith, San Francisco State University

154 registered participants — Book sales: \$1,977.45

“Classifying knots in 3-manifolds,” ABIGAIL A. THOMPSON, University of California, Davis*
 “From Greece to Ticonderoga and beyond,” JAMES J. TATTERSALL, Providence College*
 “Some mathematicians I have not known,” GERALD L. ALEXANDERSON, Santa Clara University; Past President, MAA*†
 “Down with determinants!” SHELDON AXLER, San Francisco State University*
 “A look at decomposition of graphs and mathematical thought,” LINDA B. VALDES, San Jose State University*

Student Poster Presentations

“Irrotational inviscid flow around a circle,” Jeffrey Housman, Becky Shram, Sonoma State University‡
 “Borsuk’s conjecture in R^3 ,” Cindi Johnson, Evan Leach, California State University, Hayward‡
 “A statistical analysis on slot-machine players,” Hsin I. Huang, University of Nevada, Reno‡
 “A new type of algebra,” Patrick Crowe, University of Nevada, Reno‡

“Meteorites and earthquakes,” Adam Clark, Dick Farrell, University of Nevada, Reno‡
 “Water, heat and Antarctic thermodynamics: or massive asteroid: tiny hole,” Joe Fish, Nathan Royer, Ryan Tully Doyle, California Polytechnic State University, San Luis Obispo‡
 “An asteroid impact model: a tale of two ice shelves,” Jamie Gordon, Jeff Mintz, Andy Oster, California Polytechnic State University, San Luis Obispo‡
 “Clutching for survival: an eagle restoration simulation,” Sara Coleman, Judy Fetcho, Jeff Gray, Brian Miceli, California Polytechnic State University, San Luis Obispo‡
 “An integral equation model for a curve ball,” Barrett Drawdy, Ohlone College, Fremont‡

62. San Francisco State University (February 26, 2000)

Chair: Edward C. Keppelmann, University of Nevada, Reno; Vice-Chair: Leonard F. Klosinski, Santa Clara University; Program Chair: Frederick G. Schmitt, College of Marin; Secretary-Treasurer: Leonard F. Klosinski, Santa Clara University; Governor: Jean Bee Chan, Sonoma State University

181 registered participants — Book sales: \$2,256.10

“Please Help Me Solve These Problems,” SHERMAN STEIN, University of California, Davis*
 “Math Mag Morsels,” PAUL ZORN, St. Olaf College*
 “Tales of Technology in War,” W. KAHAN, University of California, Berkeley*†
 “Some Highlights in Conformal Mapping: 1750 – 2000,” ROBERT OSSERMAN, Stanford University and MSRI*
 “The Beauty of Soap Films,” HELEN MOORE, Stanford University and Bowdoin College*



Edward C. Keppelmann

Student Poster Presentations

“Assignment of Radio Channels on Hexagonal Grids: A Natural Solution,” Brian Miceli, Andrew Oster, Ryan Tully-Doyle, California Polytechnic State University, San Luis Obispo‡
 “A Channel Assignment Model: The Span without a Face,” Jeff Mintz, Aaron Newcomer, J. C. Price, California Polytechnic State University, San Luis Obispo‡
 “Constructing a Database for the California Condor Restoration Project,” Moses Alajajian, David Mintz, Andrew Oster, California Polytechnic State University, San Luis Obispo‡
 “Population Projection Computer Simulation Models for the California Condor Restoration Project,” Fima Leshinsky, Jeff Mintz, Aaron Newcomer, California Polytechnic State University, San Luis Obispo‡
 “Clutching for Survival: The California Condor Restoration Project and MathServe 1999,” Judy Fetcho, Joel Fish, Jeff Gray, Brian Miceli, David Mintz, Jeff Mintz, Andrew Oster, Ryan Tully-Doyle, California Polytechnic State University, San Luis Obispo‡
 “The LU-Factorization of Totally Positive and Strictly Totally Positive Matrices,” Anna Strong, San Jose State University‡
 “Poncelet’s Closure Theorem,” Loretta H. Silverman, San Jose State University‡
 “Perron Complements for Nonnegative Irreducible Matrices,” Angela Hang Tran, San Jose State University‡

"Sediment Deposition within a Cylindrical Pipe," Rory Kinoshita, Joe Latulippe, Sonoma State University‡

"Collision Alert and Avoidance System Guidelines," Emily Kendall, Aeron Ives, Angela Milano, Sonoma State University‡

At the business meeting, by a vote of 58 to 17, the members approved changing the name of the Section to **The Northern California, Nevada, and Hawaii Section**. The name change does not take effect until approved by the Board of Governors of the Association.

63. Santa Clara University (March 3, 2001)

Chair: Leonard F. Klosinski, Santa Clara University; Vice-Chair: David Sklar, Sola Optical;
Program Chair: Stephen Chiappari, Santa Clara University; Secretary-Treasurer: Edward C. Keppelmann, University of Nevada, Reno; Governor: Jean Bee Chan, Sonoma State University



Leonard F. Klosinski

"Nonpositive curvature and group theory," RICHARD A. SCOTT, Santa Clara University*

"Harmonic Numbers," HENDRIK W. LENSTRA, JR., University of California, Berkeley and the Universiteit Leiden, The Netherlands*

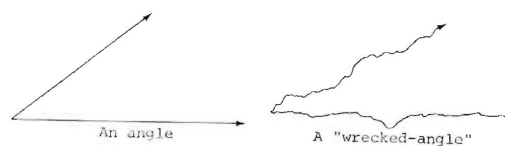
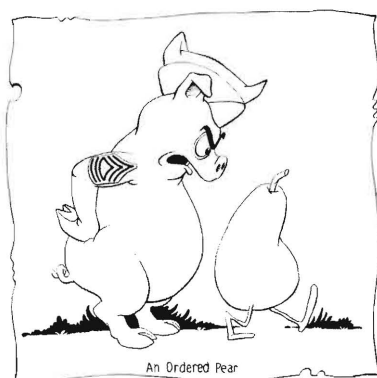
"Groups, Rings, and Fields in the MAA," ANN WATKINS, California State University, Northridge; President of the MAA*†

"Ranks of Elliptic Curves," KARL RUBIN, Stanford University*

"Breaking Drivers' License Codes," JOSEPH GALLIAN, University of Minnesota, Duluth (Pólya Lecturer)*

Some humor from the pen of the late Dave Logothetti

Dave Logothetti, a mathematician, gifted teacher, and a cartoonist spoke at our annual Section Meeting at California State University, Hayward in 1991; his talk was "An amateur cartoonist looks at professional mathematics." Dave died on July 20, 1991.



George Pólya and the Northern California Section

At the 63rd annual meeting of the Northern California Section in 2001, the members again heard a Pólya Lecturer, Professor Joseph Gallian of the University of Minnesota, Duluth. This lecture series, supporting a visiting lecturer to each Section of the Association roughly every five years, was established by the Board of Governors to honor a distinguished Northern Californian, Professor George Pólya of Stanford University. It also recognized a sizeable bequest that came to the MAA from Pólya's estate after his death in 1985.

Pólya had a longtime association with the MAA having served on a number of MAA committees and on its Board of Governors during 1958–60. He had been chair of the Section in 1947 and spoke at more meetings of the Section than any other person, 15 times in all between 1943 and 1979. Between 1946 and 1952 he spoke at every single Section meeting! In 1980 Pólya was awarded the title “Honorary Chairperson of our Section Meeting,” the only person ever to be given that title.

Pólya's influence extended far beyond the boundaries of the Northern California Section, or even the United States. A distinguished mathematician in Europe, he came to Stanford, by way of Brown, in 1942 from the Swiss Federal Institute of Technology in Zürich. He left his mark on mathematics by proving hundreds of theorems of lasting importance in mathematics—theorems on entire functions, probability, geometry, combinatorics, mathematical physics, number theory—and incidentally enriching the language of mathematics by introducing the term “central limit theorem” (in German, of course) and “random walk” (in French), for example. In the United States he developed a strong interest in mathematics education, largely felt in his advocacy of “problem solving” and “heuristics”. His books, notably the best-selling *How to Solve It*, have had wide influence here and abroad. *How to Solve It*, written in English, has been translated into 21 other languages—and new translations appear regularly. It was first published in 1945 and has never been out of print since.



Pólya wrote well over three hundred research papers and books during his long life, and still he found time for the Northern California Section. A renowned lecturer himself, it is appropriate that Pólya is still recognized by the Section through its featuring Pólya lecturers periodically at its meeting.

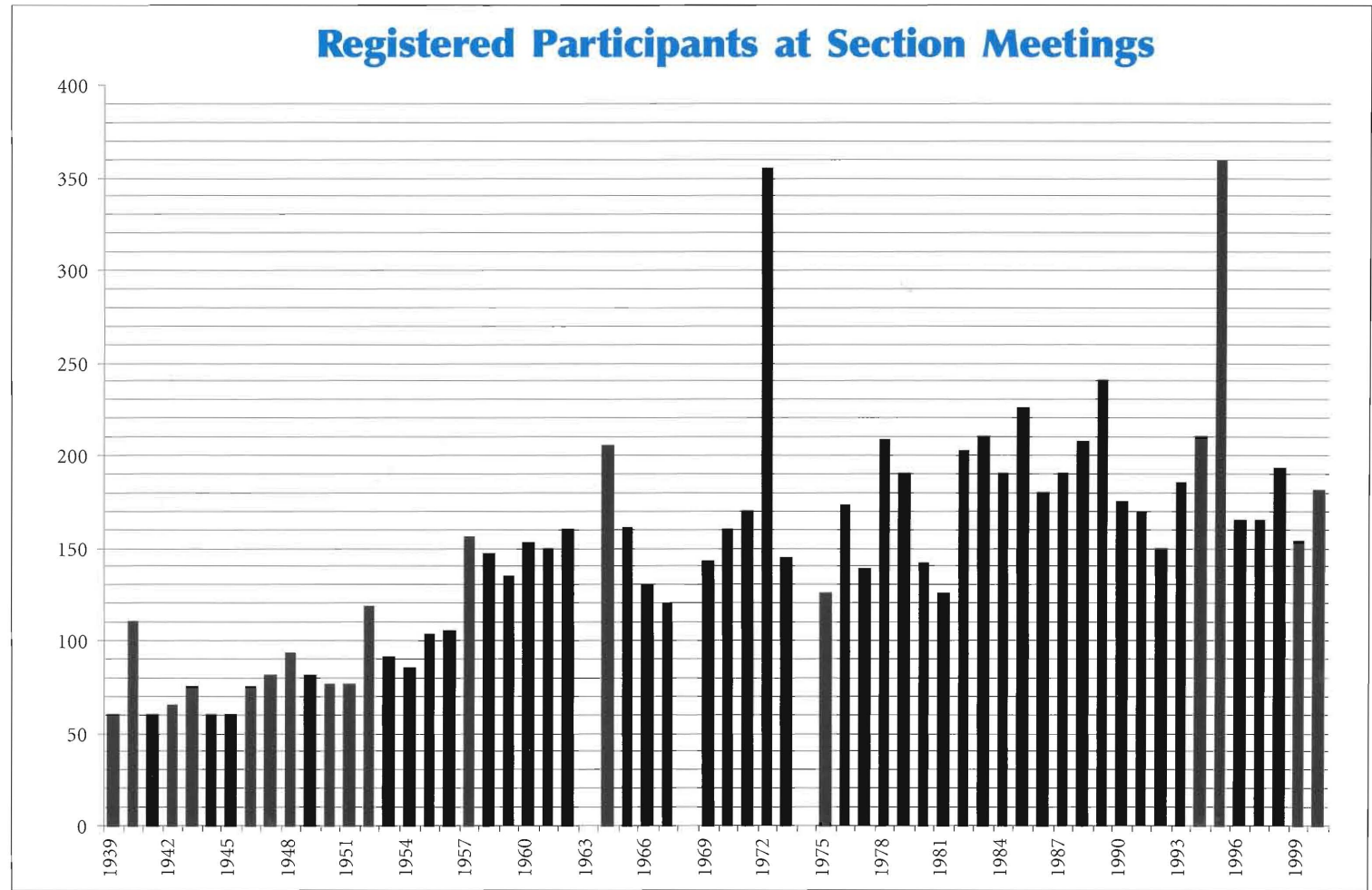
(The resolution of February 23, 1980 which conferred the honorary title on Pólya reads in full as:

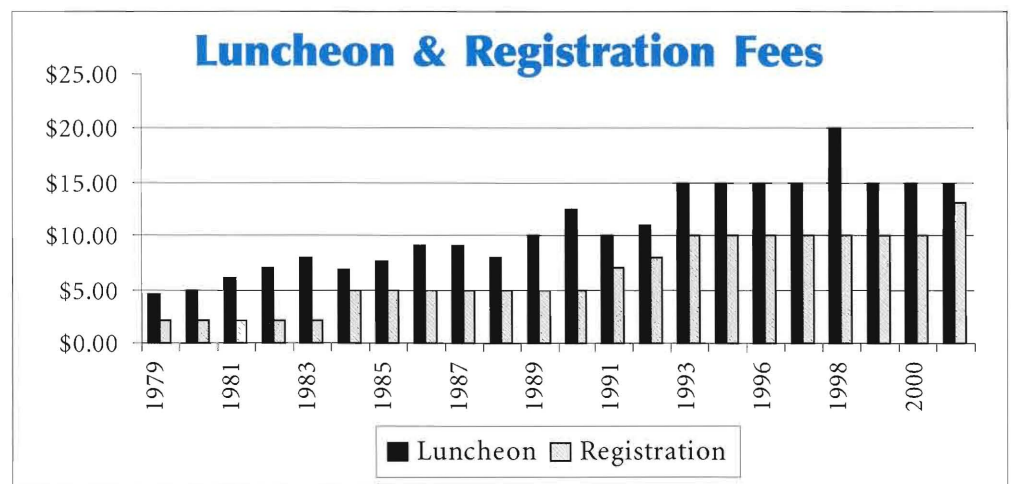
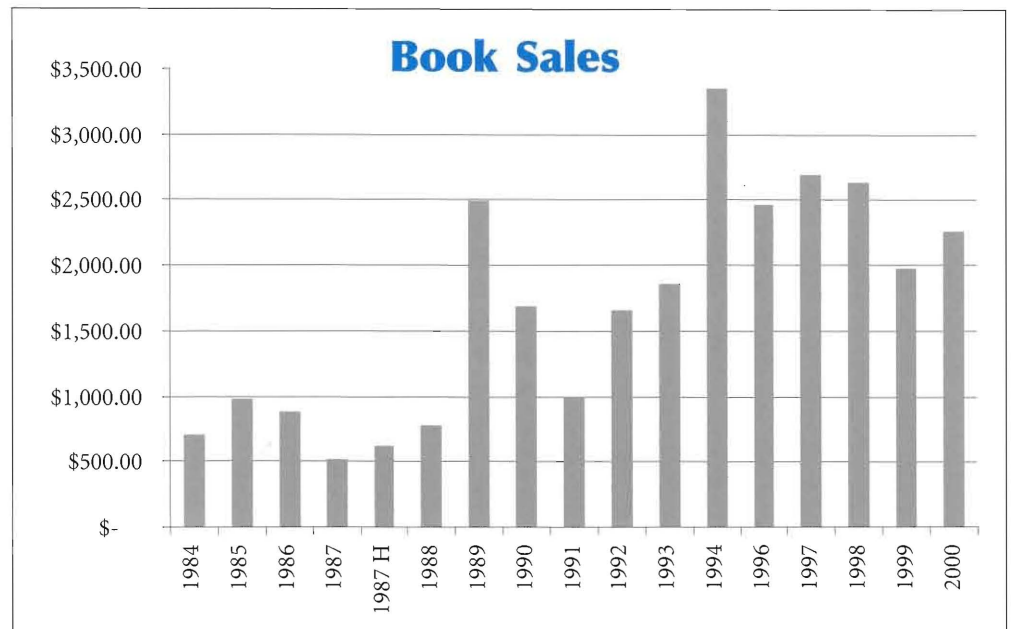
Whereas, The beauty and power of his mathematical creations inspire us, and

Whereas, His unique talent and love for teaching make him teacher of us all, and

Whereas, We are grateful for our good fortune in knowing him personally and for all the richness he has brought to the world of mathematics; therefore

Resolved, We hereby bestow on him the title of Honorary Chairperson of our Section Meeting.)





Officers of the Section

• Chairs

1939	A. L. McCarty, San Francisco Junior College
1940	Sophia H. Levy, University of California
1941	F. R. Morris, Fresno State College
1942	Fredrick Wood, University of Nevada
1943	E. B. Roessler, University of California, Davis
1944	Gabor Szegő, Stanford University
1945	Pauline Sperry, University of California
1946	W. H. Myers, San Jose State College
1947	George Pólya, Stanford University
1948	Griffith C. Evans, University of California
1949	Harold M. Bacon, Stanford University
1950	S. A. Francis, San Mateo Junior College
1951	D. H. Lehmer, University of California
	C. D. Olds (Acting Chair), San Jose State College
1952	R. M. Robinson, University of California
1953	Roy Dubisch, Fresno State College
1954	John G. Herriot, Stanford University
1955	C. C. Torrance, U.S. Naval Postgraduate School
1956	Henry L. Alder, University of California, Davis
1957	Harley Flanders, University of California, Berkeley
1958	B. J. Lockhart, U.S. Naval Postgraduate School
1959	Gerald C. Preston, San Jose State College
1960	Stanley P. Hughart, Sacramento State College
1961	David W. Blakeslee, San Francisco State College
1962	Gordon Latta, Stanford University
1963	Max Kramer, San Jose State College
1964	Daniel Coulter, Hartnell College
1965	E. Maurice Beesley, University of Nevada
1966	Lester H. Lange, San Jose State College
1967	Charles Hayes, University of California, Davis
1968	Henry Osner, Modesto Junior College
1969	Mary V. Sunseri, Stanford University
1970	Thomas Southard, California State College, Hayward
1971	Gerald L. Alexanderson, University of Santa Clara
1972	Leonard Tornheim, Chevron Laboratories
1973	Craig Comstock, Naval Postgraduate School
1974	Donald J. Albers, Menlo College
1975	Kenneth Rebman, California State University, Hayward
1976	David Barnette, University of California, Davis
1977	Jane Day, College of Notre Dame
1978	William G. Chinn, City College of San Francisco
1979	Carroll O. Wilde, Naval Postgraduate School
1980	Sr. Madeleine Rose Ashton, College of the Holy Names
1981	Hans Samelson, Stanford University
1982	Roy Ryden, Humboldt State University
1983	Michael Thibodeaux, Menlo College

1984	Howard Weiner, University of California, Davis
1985	Roseanna Torretto, State of California, Health and Welfare Data Center
1986	Jane Sanguine-Yager, St. Mary's College
1987	John Mitchem, San Jose State University
1988	Ruth Anne Fish, Foothill College
1989	G. Thomas Sallee, University of California, Davis
1990	Betty Hinman, Lockheed Missiles and Space
1991	Dennis Smolarski, S.J., Santa Clara University
1992	James T. Smith, San Francisco State University
1993	Eleanor Kendrick, San Jose City College
1994	Maurice D. Weir, Naval Postgraduate School
1995	Allan B. Cruse, University of San Francisco
1996	Larry B. Hinman, Lockheed Martin Missiles and Space
1997	Jean Bee Chan, Sonoma State University
1998	Frederick G. Schmitt, Jr., College of Marin
1999	Edward C. Keppelmann, University of Nevada, Reno
2000	Leonard F. Klosinski, Santa Clara University

- Secretary-Treasurers

1939–1945	Harold M. Bacon, Stanford University
1946–1950	E. B. Roessler, University of California, Davis
1951	Marjorie Hoffman, San Mateo Junior College
1952–1955	C. D. Olds, San Jose State College
1956–1960	Roy Dubisch, Fresno State College
1961–1963	B. J. Lockhart, U.S. Naval Postgraduate School
1964–1966	Joel Brenner, Stanford Research Institute
1967–1969	Gerald L. Alexanderson, University of Santa Clara
1970–1972	Newman Fisher, San Francisco State College
1973	Gerald L. Alexanderson, University of Santa Clara
1974–1978	Newman Fisher, San Francisco State University
1979–2000	Leonard F. Klosinski, Santa Clara University
2000	Edward C. Keppelmann, University of Nevada, Reno

- Section Governors

1941–1943	Harold M. Bacon, Stanford University
1945–1947	Sophia Levy McDonald, University of California
1948–1951	F. R. Morris, Fresno State College
1951–1954	E. B. Roessler, University of California, Davis
1954–1957	W. H. Myers, San Jose State College
1957–1960	George Pólya, Stanford University
1960–1963	C. D. Olds, San Jose State College
1963–1966	Irving Sussman, University of Santa Clara
1966–1969	David W. Blakeslee, San Francisco State College
1969–1972	Lester H. Lange, San Jose State College
1972–1975	Mary V. Sunseri, Stanford University
1975–1978	Gerald L. Alexanderson, University of Santa Clara
1978–1981	Kenneth Rebman, California State University, Hayward
1981–1984	Jean Pedersen, University of Santa Clara
1984–1987	Roy Ryden, Humboldt State University
1987–1990	Hugh Edgar, San Jose State University

1990–1993	Donald J. Albers, Menlo College
1993–1996	John A. Mitchem, San Jose State University
1996–1999	James T. Smith, San Francisco State University
1999–2002	Jean Bee Chan, Sonoma State University

Until 1947 the Association had regional Governors, not Governors from Sections. Those Governors listed above who served prior to 1947 were, therefore, regional Governors and there were years when there was no Governor from the Northern California Section.

Meeting Sites for the Northern California Section

California Polytechnic State University — 1995
 California State University, Hayward — 1972, 1991
 College of Notre Dame — 1978
 College of San Mateo — 1965
 Diablo Valley College — 1970
 Galileo High School, San Francisco — 1939
 Menlo College — 1975, 1985
 Naval Postgraduate School, Monterey — 1980, 1990
 Ohlone College, Fremont — 1999
 St. Mary's College — 1988
 San Francisco Junior College (City College of San Francisco) — 1941
 San Francisco State University — 1953, 1958, 1977, 1984, 2000
 San Jose City College — 1994
 San Jose State University — 1961, 1973, 1987
 Santa Clara University — 1969, 1981, 2001
 Sonoma State University — 1979, 1989, 1996
 Stanford University — 1952, 1956, 1959, 1964, 1983, 1998
 University of California, Berkeley — 1940, 1942, 1944, 1946, 1948, 1950, 1955, 1957, 1960, 1966, 1993
 University of California, Davis — 1962, 1967, 1976, 1982, 1986
 University of Hawaii, Manoa — 1987
 University of the Pacific — 1992
 University of San Francisco — 1943, 1945, 1947, 1949, 1951, 1954, 1971, 1997

Speakers at Section Meetings

- ◆ Contributed paper
- ‡ Student poster presentation
- ♣ Panel member

Aardema, David – 1998‡
 Ablow, Clarence M. – 1959
 Aburto, Felix – 1995‡
 Adams, Colin – 1992
 Aggarwal, H. A. – 1973
 Ahmedov, Anar – 1998‡
 Alajajian, Moses – 2000‡
 Albers, Donald J. – 1995
 Alder, Henry L. – 1949, 1953, 1957, 1958, 1976
 Alexanderson, Gerald L. – 1999
 Alperin, Roger – 1989
 Anhalt, Carl T. – 1995‡
 Apostol, Tom M. – 1995
 Arnold, Hubert A. – 1950, 1956, 1957
 Au, Robert – 1995‡
 Axler, Sheldon – 1999
 Bacon, Harold M. – 1948, 1967, 1986
 Baker, George A. – 1942, 1948
 Banchoff, Thomas F. – 1998
 Banks, Bernard – 1995◆
 Barab, Jackie – 1995◆
 Barcellos, Tony – 1990
 Barlow, Richard E. – 1962
 Barnette, David W. – 1972, 1985
 Barrett, Lida K. – 1988
 Beckenbach, Alice C. – 1987
 Becker, H. W. – 1945
 Beesley, E. Maurice – 1958
 Begle, Edward G. – 1964, 1967
 Bellman, Richard – 1964
 Belt, Elaine A. – 1995‡, 1996‡
 Benjamin, Arthur – 1996
 Benson, Donald C. – 1952
 Berg, Paul W. – 1962
 Berggren, W. P. – 1943
 Berlekamp, Elwyn – 1990
 Bernstein, Dorothy – 1980
 Bers, Lipman – 1986
 Bird, Marion T. – 1948, 1952, 1955
 Birkhoff, Garrett – 1983
 Blackwell, David – 1957, 1980
 Blakeslee, David W. – 1957, 1958
 Bleick, Willard E. – 1955
 Blum, Lenore – 1975, 1977
 Blumberg, Martin – 1964
 Boelter, L. M. K. – 1944
 Borges, Carlos – 1995◆
 Bourne, S. G. – 1955
 Bradley, Jeffery C. – 1995‡
 Brenner, Joel L. – 1959, 1960
 Bristol, Heather – 1996‡
 Bryant, Steven J. – 1959, 1960
 Burbridge, H. C. – 1942
 Burdette, Albert C. – 1941
 Bushaw, Donald W. – 1971
 Campbell, Dennis – 1995‡
 Canright, David – 1995◆
 Carlson, David H. – 1995♣
 Chaderjian, Anie – 1995◆
 Chakerian, Gulbank D. – 1966, 1973, 1977, 1984, 1992
 Chern, Shiing-Shen – 1981
 Chewning, William – 1972
 Chinn, William G. – 1969, 1972
 Clark, C. L. – 1957
 Cohen, Paul J. – 1964, 1981
 Conway, John H. – 1995
 Cook, Todd – 1995‡
 Cusick, Larry W. – 1995◆
 Dagler, Clayton – 1998‡
 Dantzig, George B. – 1985
 Davenport, Harold – 1948
 Davis, D. L. – 1973
 Day, Jane – 1977, 1995♣, 1996
 de Bouvère, Karel L. – 1973
 De Leeuw, Karel – 1977
 D'Esopo, Donato A. – 1965
 Devlin, Keith – 1994
 Diaconis, Persi – 1984
 Diliberto, Stephen P. – 1957
 Do, Nhan – 1995‡
 Dolby, James L. – 1971
 Douglas, Robert – 1972
 Doyle, Thomas C. – 1944
 Dreyfuss, Martin J. – 1964, 1966
 Drobot, Vladimir – 1986
 Dubisch, Roy – 1949, 1951, 1953, 1958
 Dudley, Underwood – 1996
 Dunton, Marguerite E. – 1962
 Durand, W. F. – 1940
 Dyson, Verena H. – 1961
 Efron, Bradley – 1985

- Elderkin, Richard – 1995 ♦
 Ellis, Wade, Jr. – 1991
 Epstein, M. P. – 1955
 Erdős, Paul – 1946
 Evans, Griffith C. – 1940, 1946, 1951, 1953
 Ewing, John – 1991
 Faillace, Phil – 1977
 Falbo, Clement E. – 1995 ♦
 Fallis, Don Thomas – 1995 ♦
 Farrell, Edward J. – 1954
 Faulkner, Frank D. – 1955, 1962
 Feferman, Solomon – 1967
 Fetcho, Judy – 1998‡, 2000‡
 Fettis, Henry E. – 1975
 Fidleo, Douglas A. – 1995‡
 Finney, Ross – 1983
 Fish, Joel – 1998‡, 2000‡
 Fisher, Brian S. – 1995‡
 Fisk, Robert S. – 1995 ♦
 Flanders, Harley – 1955, 1959
 Florence, A. L. – 1972
 Forsythe, George E. – 1958, 1971
 Francis, Sam A. – 1947
 Friedman, Bernard – 1960
 Fulton, C. M. – 1948, 1950, 1952, 1954, 1956, 1958, 1960, 1962
 Gale, David – 1966, 1977
 Gallian, Joseph – 1991, 2001
 Gaskell, Robert E. – 1975
 Gilbarg, David – 1955
 Gillman, Leonard – 1981
 Glueck, Ruben – 1995‡
 Goldberg, Estelle – 1973
 Golomb, Solomon – 1982
 Golub, Gene – 1990
 Grabiner, Judith – 1991, 1995
 Gragg, William – 1990
 Graham, Ronald L. – 1978, 1986
 Gray, Aaron – 1995‡, 1998‡
 Gray, Jeff – 2000‡
 Green, G. B. – 1973
 Green, Milton – 1972
 Greenberg, H. J. – 1970
 Greer, Edison – 1958
 Grettum, Sean – 1995‡
 Griffin, Kyle – 1995‡
 Grünbaum, Branko – 1982
 Grünbaum, F. Alberto – 1981
 Guy, Richard – 1989
 Haimo, Deborah Tepper – 1992
 Hall, Arthur, J. – 1951
 Halmos, Paul R. – 1982, 1985, 1993
 Hamming, Richard – 1979, 1997
 Harbertson, Noel – 1995 ♦
 Hashisaki, Joseph – 1971
 Hass, Joel – 1997
 Hawkinson, Lawrence D. – 1967
 Hayes, Charles A. – 1961
 Hegewisch, Katherine – 1998‡
 Henkin, Leon – 1966, 1967
 Henriksen, Melvin – 1995 ♦
 Herriot, John G. – 1947, 1952
 Herriot, Sarah – 1964
 Heubach, Silvia – 1995 ♦
 Hill, L. J. – 1942
 Hille, Einar – 1942
 Hilton, Peter J. – 1974, 1984
 Hirsch, Morris W. – 1998
 Hoge, J. W. – 1939
 Hoggatt, Verner E., Jr. – 1956, 1962, 1964, 1973
 Holden, Herbert – 1975
 Horn, Roger A. – 1997
 Hsu, David Y. – 1995 ♦
 Huang, Hsin – 1998‡
 Hughes, Barnabas – 1995 ♦
 Hunter, Ulysses – 1965
 Hupp, Clare – 1995‡
 Huskey, Harry D. – 1958
 Hutchings, Brian – 1995 ♦
 Hwang, John – 1962
 Isaacs, I. Martin – 1998
 Ivanoff, V. F. – 1944
 Ives, Aeron – 2000‡
 James, Vern – 1940
 Jamison, Free – 1954
 Jankowski, Scott – 1998‡
 Jennings, S. A. – 1970
 Johnson, Jerry – 1995 ♦
 Johnson, Sherry – 1995‡, 1996‡
 Johnston, Bethany J. – 1995‡
 Johntz, William – 1969
 Jones, Vaughan – 1993
 Kahan, W. – 2000
 Kaplansky, Irving – 1993
 Kaschube, Paul – 1995 ♦
 Keller, Joseph B. – 1982
 Kelley, John L. – 1950, 1987
 Kendall, Emily – 2000‡
 Khan, Faisal – 1998‡
 Kinney, L. B. – 1944

- Kinoshita, Rory – 2000‡
 Kipps, Thomas – 1962
 Klawe, Maria – 1987
 Klee, Victor – 1969, 1987A
 Korevaar, Jacob – 1962
 Korsak, Andrew J. – 1973
 Kreider, Donald – 1989
 Labarre, Anthony E., Jr. – 1962
 Lamberson, Roland – 1993
 Lambert, Ted – 1998‡
 Landesman, Edward – 1996
 Lange, Lester H. – 1961, 1962, 1971, 1992
 Larsen, Charles M. – 1956, 1957, 1958, 1961, 1964, 1967
 Latta, Gordon E. – 1954, 1980
 Latulippe, Joe – 2000‡
 Leffler, William – 1970
 Lehmer, Derrick H. – 1944, 1947, 1967, 1972, 1979
 Lehmer, Emma – 1977
 Lenstra, H. W., Jr. – 1987, 2001
 Lenzen, V. F. – 1939
 Leshinsky, Fima – 2000‡
 Levit, Robert J. – 1967
 Levy, Sophia H. – 1943 (See McDonald, Sophia Levy)
 Lockhart, B. J. – 1956
 Loève, Michel – 1949
 Lofstock, Sandy – 1995♦
 Logothetti, Dave – 1991
 Loresto, Nereo – 1998‡
 Loza, Oralia – 1995‡
 Lumer, Günter – 1961
 Luttmann, Frederick – 1975
 Marcus, Marvin – 1976
 Mariz, Anna P. – 1995‡
 Martelli, Mario U. – 1995♣
 Max, Nelson – 1994
 McCalla, Thomas Richard – 1995♦
 McCarty, A. L. – 1940, 1943
 McDill, Jean Marie – 1995♦
 McDonald, J. H. – 1941, 1942, 1943
 McDonald, Sophia Levy – 1946, 1947 (See Levy, Sophia H.)
 McDowell, R. H. – 1966
 McJilton, Michael – 1998‡
 McMurrin, Shawnee – 1995♦
 Mead, David G. – 1970
 Merris, Russell – 1972
 Metlitzky, Lilian – 1995♦
 Mewborn, A. B. – 1954
 Miceli, Brian – 2000‡
 Milano, Angela – 2000‡
 Milgram, A. N. – 1960
 Minh, Can Anh – 1995‡
 Mintz, David – 2000‡
 Mintz, Jeff – 1998‡, 2000‡
 Moore, Helen – 2000
 Morrey, Charles B., Jr. – 1965
 Morris, F. R. – 1940, 1943, 1945, 1954
 Morton, P. L. – 1953
 Mulase, Motohico – 1998
 Murray, Theresa – 1998‡
 Myers, W. H. – 1941, 1950
 Needham, Tristan – 1997
 Nelson, Eric – 1998‡
 Newcomer, Aaron – 2000‡
 Newell, Gordon – 1973
 Niven, Ivan – 1956, 1965, 1980, 1983, 1987A
 Norman, Robert Z. – 1971
 Norton, D. A. – 1956, 1959, 1961
 Novikoff, Albert B., – 1960, 1961
 Olds, C. Douglas – 1946, 1950, 1951
 O'Neil, Thomas – 1995♦
 Orr, R. C. – 1964
 Osserman, Robert – 1979, 1988, 2000
 Oster, Andy – 1998‡, 2000‡
 Ott, William – 1998‡
 Owen, Guillermo – 1984
 Parlett, Beresford – 1988
 Patton, Brother Raphael – 1988
 Peckham, H. – 1975
 Pedersen, Jean – 1994, 1998
 Pedrick, George B. – 1971
 Peitgen, H. O. – 1989
 Perry, Clay L., Jr. – 1955, 1956
 Petrovic, Sanja – 1995‡, 1996‡
 Pinney, Edmund – 1947
 Pinter-Lucke, Claudia – 1995♦
 Pinter-Lucke, Jim – 1995♦
 Poffenberger, T. M. – 1956
 Polissar, M. J. – 1939
 Pollak, Henry O. – 1975, 1982, 1987A
 Pólya, George – 1943, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1957, 1958, 1964, 1969, 1971, 1976, 1979
 Price, J. C. – 2000‡
 Price, G. Baley – 1960
 Protter, Murray – 1962
 Pulliam, Francis M. – 1953, 1955

- Purvis, Colbert T. – 1962
 Radunskaya, Ami – 1995 ♦
 Raphael, Bertram – 1972
 Rawlins, C. H., Jr. – 1954
 Rebman, Ken – 1992
 Redfern, Terry – 1995 ‡
 Reid, Constance – 1978, 1985, 1994
 Reukema, L. E. – 1947
 Rhoades, B. E. – 1965
 Ries, Steffanie – 1995 ‡
 Robbins, Neville – 1995 ♦
 Robinson, James – 1995 ‡, 1996 ‡
 Robinson, Julia – 1971
 Robinson, Raphael M. – 1945, 1948, 1949, 1952, 1953, 1956, 1957, 1973
 Rodarte, Juana E. – 1995 ‡
 Romeset, Charles – 1972
 Roselle, David P. – 1984
 Rosenberg, Noah – 1998 ‡
 Ross, Andrew M. – 1995 ‡
 Ross, Kenneth A. – 1987, 1996
 Rubin, Karl – 2001
 Salcido, Manuel – 1995 ‡
 Sallee, G. Thomas – 1997
 Samelson, Hans – 1978
 Sanborn, Thomas – 1998 ‡
 Sangwine-Yager, Jane – 1993
 Savev, Emil S. – 1995 ‡
 Scandrett, Adeline M. – 1939
 Schaaf, S. A. – 1945
 Schaefer, Edward – 1994
 Schaeffer, A. C. – 1945, 1946
 Schattschneider, Doris – 1986
 Schiffer, Menahem Max – 1952, 1976
 Schipper, J. F. – 1967
 Schoenberg, Isaac J. – 1957
 Schoenfeld, Alan – 1989
 Scott, Richard A. – 2001
 Seidenberg, Abraham – 1946, 1955
 Senge, George – 1995 ♦
 Shafer, Robert E. – 1965
 Shaw, H. J. – 1944
 Shirley, Heather – 1998 ‡
 Shorb, Alan – 1975
 Silverman, Loretta H. – 2000 ‡
 Simard, Dan – 1998 ‡
 Smale, Stephen – 1978
 Smith, James – 1972
 Snell, J. Laurie – 1959
 Southard, Thomas H. – 1965
 Sperry, Pauline – 1941
 Spira, Robert S. – 1961
 Stein, Sherman – 1957, 1965, 1979, 2000
 Starkey, Robert – 1960
 Strong, Anna – 2000 ‡
 Strong, E. W. – 1949
 Sturges, Falka G. – 1941
 Sumner, Ruth G. – 1945
 Sussman, Irving – 1952, 1957
 Sward, Marcia – 1990
 Swinford, Lee H. – 1944
 Szegő, Gabor – 1939, 1942
 Szegő, Peter – 1973
 Tattersall, Jim – 1995 ♦, 1999
 Taylor, Angus E. – 1980
 Teller, Edward – 1978
 Thompson, Abigail A. – 1999
 Thompson, Bill – 1995 ‡
 Thompson, Patrick – 1995 ♣
 Thoro, Dmitri – 1961, 1964, 1967
 Thurston, William P. – 1995
 Todorov, Todor – 1995 ♦
 Tornheim, Leonard – 1956, 1965
 Torrance, C. C. – 1956, 1959
 Tran, Angela Hang – 2000 ‡
 Trask, Heather – 1996 ‡
 Tropp, Henry – 1983
 Tucker, Albert W. – 1950
 Tully-Doyle, Ryan – 2000 ‡
 Tuska, Agnes – 1995 ♦
 Uspensky, J. V. – 1941, 1943
 Valdes, Linda B. – 1999
 van der Corput, Jan G. – 1951
 Vander Laan, Warren – 1998 ‡
 Vowels, Natalie – 1995 ‡
 Waider, K. J. – 1943
 Wallace, George – 1965
 Wang, Peter C. C. – 1972
 Ward, Amy – 1995 ‡
 Waring, Ken – 1995 ‡
 Washburn, Dorothy – 1983
 Watkins, Ann – 2001
 Weinshenk, Ron – 1965
 Weinstock, Robert – 1949, 1954
 Welch, Harriet A. – 1940
 Wheeler, Winston – 1996 ‡
 White, Kyle – 1998 ‡
 Whittemore, Alice S. – 1981
 Wilder, Raymond L. – 1965
 Wilf, Herbert – 1988

Williams, A. R. – 1945, 1953
 Williams, D. G. – 1962
 Wisner, R. J. – 1962
 Wolf, Franticek – 1946
 Woodruff, R. L. – 1975
 Yff, Peter – 1958
 Yong, Darryl – 1995‡
 Youngs, J. W. T. – 1966
 Zane, Burke – 1965
 Zelinsky, Daniel – 1961
 Zorn, Paul – 2000

Necrology

In memory of the men and women who served as officers of our Section.

(Dates are dates of death)

A. L. McCarty, (Chair) June 20, 1947

F. R. Morris, (Chair, Governor) January 6, 1956

Sophia Levy McDonald, (Chair, Governor) December 6, 1963

C. C. Torrance, (Chair) May 2, 1967

Daniel Coulter, (Chair), July 2, 1967

Pauline Sperry, (Chair) September 24, 1967

Fredrick Wood, (Chair), December 4, 1970

David W. Blakeslee, (Chair, Secretary-Treasurer) November 25, 1971

Griffith C. Evans, (Chair) December 8, 1973

C. D. Olds (Chair, Secretary-Treasurer, Governor) November 11, 1979

Sr. Madeleine Rose Ashton, (Chair) January 31, 1984

Max Kramer, (Chair) March 30, 1984

Marjorie Ley Hoffman, (Secretary-Treasurer) August 1, 1985

Gabor Szegö, (Chair) August 7, 1985

George Pólya, (Chair, Governor) September 7, 1985

Irving Sussman, (Governor) February 18, 1990

Derrick H. Lehmer, (Chair) May 25, 1991

Harold M. Bacon, (Chair, Secretary-Treasurer, Governor) August 23, 1992

Stanley P. Hughart (Chair) January 1, 1993

Thomas Southard (Chair) January 14, 1993

Edward M. Roessler, (Chair, Secretary-Treasurer, Governor) July 12, 1993

Edward Maurice Beesley, (Chair) October 20, 1993

W. H. Myers, (Chair, Governor) August 13, 1994

Raphael M. Robinson, (Chair) January 27, 1995

B. J. Lockhart, (Chair, Secretary-Treasurer) April 27, 1995

Henry J. Osner, (Chair) May 11, 1996

Joel Brenner (Secretary-Treasurer) November 14, 1997

Craig Comstock, (Chair) date of death unknown

S. A. Francis, (Chair) date of death unknown

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LEONARD F. KLOSINSKI has been active in the activities of the Northern California Section since 1968 when he was a lecturer in the Section's Visiting Lecturer program. In 1970, he became director of that program and served until 1978 when he was elected Secretary-Treasurer of our Section, an office he held until 2000. In 1999 he became Vice-Chair of the Section and successively moved to Chair and Program-Chair. He has also served as production-editor of the Section newsletter (later called *Mini-Focus*) since 1977. Co-author of *A History of the Northern California Section*, he also edited *A Few Minutes with the Northern California Section*.