

History of the Pacific Northwest Section of the Mathematical Association of America

The following appears in *A History of the Department of Mathematics at the University of Washington, 1861 to 1991*. "On February 4, 1919, the Department discussed the possibility of organizing a Northwest section of the Mathematical Association of America. After some discussion, the idea was tabled."

In the fall of 1929, H. E. Slaughter (President of the MAA in 1919), inquired of the University of Washington mathematics department about the desirability of forming a Pacific Northwest Section of the MAA. J. P. Ballantine consulted his colleagues and the 26 other MAA members in Washington, Oregon, Idaho and Vancouver, Canada. The answers were "doubtless honest, but not over encouraging." Only 11 responded and only 7 of these favored the idea. The idea was dropped.

On June 24, 1936, Albert A. Bennett (Vice President of the MAA in 1934) wrote to F. L. Griffin at Reed College and inquired whether anyone had considered organizing a section of the MAA in western Oregon. Bennett wrote to Reed College because he understood "that there is a rather natural feeling of jealousy between the two state institutions in that part of Oregon, owing to a suspicion of political juggling of funds. It may be, therefore, that neither the University nor the Agricultural College could make a move without having its impulses open to suspicion." Bennett made a strong case. However, Griffin's response, if any, has been lost to posterity.

A petition, dated May 9, 1945, for the formation of a new section to be known as the Pacific Northwest Section was submitted to MAA President C. C. MacDuffee. There were eighteen signatures on the petition:

Daniel Buchanan, F. S. Nowlan, Walter H. Gage, D. C. Murdoch, and S. A. Jennings of the University of British Columbia;
Mary E. Haller, Ross A. Beaumont, A. R. Jerbert, Hermance Mullermeister, and Roy M. Winger of the University of Washington;
L. G. Butler, M. S. Knebelman, and Paul Nemenyi at the State College of Washington;
T. S. Peterson, A. F. Moursund, and Frank Edwin Wood of the University of Oregon;
W. E. Milne and G. A. Williams at the State College of Oregon.

Professor Knebelman acted as chair of the committee that petitioned for the new section and F. S. Nowlan evidently served as secretary. The new section received formal approval by the Board of Governors at its Chicago meeting on November 24, 1945.

Meeting. April 10-11, 1947, University of British Columbia

The first meeting was held on April 10-11, 1947 in Vancouver, British Columbia. S. A. Jennings gave the invited hour address, titled "Topological methods in algebra." There

were also 14 short papers. The President of the University of British Columbia, N. A. M. MacKenzie, welcomed the group. The question of joint meetings with the AMS arose, and many of the meetings were joint beginning in the early 1950's. Forty seven persons attended this meeting, including 30 members of the MAA.

Meeting. March 26-27, 1948, University of Oregon

The second meeting was held on March 26-27, 1948 at the University of Oregon. The invited address, given by Ivan Niven, was titled "The density of a set of integers." There were 16 other papers and a conference on the mathematical training of prospective secondary school teachers. 59 persons attended, including 43 members of the MAA. There was a conference on the "Mathematical training of prospective secondary school teachers." A committee, chaired by H. H. Irwin of State College of Washington and including high school teachers from various regions, was appointed to consider possible improvements in the Pacific Northwest. The committee was asked to report back at the 1949 meeting.

Meeting. March 25-26, 1949, Oregon State College

There were two invited addresses: C. M. Cramlet of the University of Washington spoke "On algebraic and differential invariants," and J. H. Curtiss of the National Bureau of Standards spoke on "The mathematical program of the National Bureau of Standards." There were 18 other papers. 47 AMS members attended and 58 MAA members attended.

One of the first issues faced by the section concerned the geographical extent of the section. Montana, Idaho, Alaska and Alberta were not included in the original bylaws. Idaho, Alaska, Alberta and Montana were added to the section at this meeting. Later, parts of Idaho and Montana were ceded to other sections. The Irwin committee, appointed in 1948, made a report. Numerous persons expressed opinions on this difficult problem. Finally a motion was adopted unanimously which asked the committee to continue "to act for another year in an effort to realize its objectives and implement its present findings."

In 1949 it was determined that June was the best time for sectional meetings. Thus, beginning in June 1950, all sectional meetings were scheduled in June until 1993, after which some meetings are in June and some in the spring. That was also the first meeting at which a registration fee was assessed: \$1 per person. This fee was agreed upon without dissent at the 1949 meeting "after considerable discussion pro and con."

Meeting. June 16, 1950, University of Washington

The invited address, given by Howard M. Eves of Oregon State College, was titled "Dissections." There were five other papers. 48 persons attended, including 34 MAA members. The Irwin committee did not make a report and was discharged with the additional recommendation that the committee's final report be given as much publicity as possible.

Meeting. June 15-16, 1951, State College of Washington (Pullman)

The meeting was joint with AMS. The invited address, given by Z. W. Birnbaum of the University of Washington was titled "On estimating a probability distribution from a finite number of observations." There were seven other papers. 49 persons, including 35 MAA members, attended this joint AMS-MAA meeting. At this meeting a committee was appointed to look into the possibility of conducting mathematical contests in high schools in the section. After the meeting the section's bank balance was \$69.50.

Meeting. June 20, 1952, University of Oregon

The meeting was joint with the AMS, the Biometric Society, and the Econometric Society. The invited address was given by Carl B. Allendoerfer of the University of Washington, and was titled "Continuous vector fields". There were three other papers and a symposium (panel) on calculus teaching. Other hour talks included a talk by Adriano Buzzati-Traverso, which was sponsored by the Biometric Society; "On some discrete non-Markovian processes," by Mark Kac of Cornell University and the Institute for Advanced Studies and sponsored by the University of Oregon as part of its 75th anniversary; "Solving simultaneous equations is not trivial," by G. E. Forsythe of NBS and sponsored by the AMS; and "On distribution-free tests of fit for continuous distribution functions," by Z. W. Birnbaum of the University of Washington and sponsored by the Institute for Mathematical Statistics. 80 persons attended, including 61 MAA members.

There was no report from the contest committee, but Professor Ghent of the University of Oregon described the contest that was conducted in Oregon on May 1, 1952. At a symposium on calculus teaching, one young professor suggested the introduction of certain concepts which will allow for "an economy of time and thought in later courses since introduction of whole new set of concepts can be avoided." For example, the binary relation can be introduced before functions. The different kinds of limits can all be handled by introducing Moore-Smith limits, which are no more complicated than the limit of a sequence. Linear functionals can be used to clarify the maltreated differential and total differential. Etc.

Meeting. June 19, 1953, Montana State University, Missoula

The invited address was given by Leo Moser of the University of Alberta and was titled "The distribution of quadratic residues." There were five other papers as well as a symposium on The connecting link between college algebra and abstract algebra. There was also a joint dinner with the AMS. 57 persons attended the meeting, including 43 MAA members. Dormitory accommodations cost \$1.50 per person per night. There was a symposium on the connecting link between college algebra and abstract algebra. The contest committee reported on separate activities in British Columbia and Oregon. But the director of mathematics for the Seattle public high schools is opposed to any official contests. So it was agreed to discontinue the idea of a Pacific Northwest Contest, while retaining the Contest Committee.

Meeting. June 19, 1954, Reed College

The invited address, given by Cletus Oakley of Haverford College, was titled "Modern mathematics for freshmen." There were two other papers, a symposium on college mathematics, and a joint dinner with the AMS. 73 persons attended, including 55 MAA members. At the Business Meeting, a recommendation from the Board of Governors was discussed, namely that the sectional Governor be a member of the Executive Committee of the section. This posed a problem since the section had no such committee. There was considerable discussion as to how this recommendation could be implemented, including a motion to table which was seconded but failed. Finally a successful motion amended the bylaws as follows: "There shall be an Executive Committee . . . consisting of the Officers and the Governor of the Section."

Meeting. June 17, 1955, University of British Columbia

The invited address was given by E. S. Keeping of the University of Alberta and was titled "Statistical decisions." There were two other papers and a symposium (panel) on freshman mathematics.

1956 Meeting. There was no meeting because of the national meeting in Seattle.

Meeting. June 14, 1957, State College of Washington

The invited address, given by R. H. Bruck of the University of Wisconsin, was titled "New patterns in geometry." There was a joint dinner with the AMS. There was a symposium on Computing Machines moderated by Arvid Lonseth of Oregon State College. The titles of the speakers' talks were "The University of British Columbia computing centre," "Large scale industrial computers and the universities," and "The

computer and the curriculum." It was announced that the MAA was taking over the national mathematics contest that had been run by the New York section.

Meeting. June 20, 1958, Oregon State College

The invited address was given by A. Erdelyi of Cal-Tech and was titled "Operational calculus and generalized functions." There were five other papers and a joint dinner with the AMS. The Treasurer reported a bank balance of \$25.47 as of June 20, 1958.

Meeting. June 19, 1959, University of Oregon

The invited address, given by John L. Kelley of the University of California, Berkeley, was titled "Set theory and numbers." There were three other talks. 111 persons attended, including 69 MAA members.

Meeting. June 17, 1960, Montana State University, Missoula

The invited address was given by Paul Rosenbloom of the University of Minnesota on "Implications for colleges of the new school mathematics programs." Four other talks were presented. There was a report on the 1959-60 visiting lectures program for the high schools. "While in some cases inadequate publicity and poor local organization hindered the effectiveness of the program, it was generally agreed that the program was very worthwhile."

Meeting. June 17, 1961, University of Washington

The invited address, given by Wolfgang Wasow of the University of Wisconsin, was titled "Singular perturbations of differential equations." There were six other talks. 83 persons attended. It was reported that a sum of \$10,000 was made available for lectures in Oregon, Washington, Idaho and Alaska and that about 20,000 high school students and 500 faculty had heard the lectures.

1962 Meeting. There was no meeting held because of the national meeting in Vancouver.

Meeting. June 21, 1963, Western Washington State College

The invited address was given by Hans Samelson of Stanford University, and was titled "Vector fields on spheres." Six other papers were presented and 78 persons attended.

Meeting. June 19, 1964, Washington State University

The invited address was given by Roy Dubisch of the University of Washington, who reported on the work of Educational Services, Inc. in developing a modern mathematics

program in Africa. Three other papers were presented as well as a symposium on CUPM recommendations for the training of elementary school teachers. The meeting was joint with SIAM and 120 persons attended, including 62 MAA members.

Meeting. June 18-19, 1965, University of Oregon

Invited addresses were given by N. J. Divinsky of the University of British Columbia on "Rings and radicals," André Deprit of the Boeing Company on "Some aspects of celestial mechanics, with applications to space travel," and A. A. Goldstein of the University of Washington on "Control theory and mathematical programming." There was also a panel discussion on mathematics in the two-year college. 154 persons, including 95 MAA members attended this joint meeting with the AMS and SIAM.

Meeting. June 17-18, 1966, University of Victoria

Three invited addresses were given: E. A. Shoemaker of Simon Fraser spoke on "The uniqueness in the mathematical theory of plasticity"; R. S. Pierce of the University of Washington spoke on "Boolean algebras--some old and new problems"; and G. W. Burrows of Boeing spoke on "An application of Kalman filtering to passive ranging." Six other papers were presented as well as a panel discussion on CUPM report on a general curriculum in mathematics, and a panel discussion on mathematics at the two-year college--points of view. This was the largest meeting in the section's history. 179 persons, including 85 MAA members, attended the meeting which was joint with SIAM. The host of the meeting was the department chairman, S. A. Jennings, who gave the invited address at the first sectional meeting in 1947. By consent, the one dollar registration fee was waived for this meeting.

Meeting. June 16-17, 1967, University of Montana, Missoula

Three invited addresses were given: D. C. Barnes of Washington State University spoke on "Bounds on the eigenvalues of nonhomogeneous strings"; Bertram Yood of the University of Oregon spoke on "Structure theorems for Banach algebras"; and J. W. Weber of Washington State University spoke on "The application of biharmonic eigenfunctions to a plate problem." Seven other papers were presented in a meeting of junior and community colleges. 67 MAA members attended this meeting.

Representatives of the junior and community colleges of the section met for a program specifically designed for instructors of mathematics at two-year colleges. J. Knutson, Portland Community College, chaired this session. At the Business Meeting, the bylaws were amended to provide for a Second Vice-Chairman, who shall represent the two-year colleges on the Executive Committee. The new position was immediately filled by Theodore White of Everett Junior College. After 1976, the First and Second Vice-

Chairmen were replaced by the Vice Chairman for 4 year colleges and the Vice Chairman for 2 year colleges.

Meeting. June 14-15, 1968, Reed College

Five invited addresses were given: Joseph Hashisaki of Western Washington State College gave a talk titled "Arithmetic in community colleges"; Alex Rosenberg of Cornell University spoke on "CUPM recommendations for qualifications of college teachers and for a university parallel mathematics curriculum for two-year colleges"; W. J. Firey of Oregon State University gave a talk titled "Existence theorems for convex surfaces"; Thomas Hungerford of the University of Washington spoke on "Special topics in linear algebra"; and Melvin Torseth of Everett Community College spoke on "Optimal instruction: fact or fantasy?" It was agreed to award prizes of \$30, \$25 and \$20 and a free MAA membership to those students who ranked first, second and third respectively among participants in the Putnam Competition from institutions in the section. In 1971 the first prize went to Joe Buhler, Reed College.

1969 Meeting. This meeting took place in conjunction with the national meeting at the University of Oregon, August 25-27, 1969. The Business Meeting was August 25, 1969. It was agreed to join in the sponsorship of the Northwest Mathematics Conference at an annual expenditure not to exceed \$150. [This policy was dropped in 1981.]

Meeting. June 18-19, 1970, Pacific Lutheran University

There were two invited addresses at this joint meeting with AMS and SIAM: Richard M. Koch of the University of Oregon gave a talk titled "Why contour integration leads to a hefty dose of topology in modern differential geometry," and Emilio Gugliardo of Oregon State University spoke on "The lack of mathematical vitamins in the development of artificial intelligence." There was a special program for community colleges including a panel discussion on the in-service training program for community college mathematics teachers at the University of Oregon. There were ten other talks and a panel discussion on the purpose and content of upper division courses in geometry. There were 120 persons in attendance.

Meeting. June 18-19, 1971, Oregon State University

There were two invited addresses given: Keith Yale of the University of Montana spoke on "Fourier analysis and the origins of set theory," and Victor Klee of the University of Washington spoke on "Shapes of the future." There were four panel discussions: Should the standard freshman calculus course be taught with the aid of computers?; Teaching occupational math; An instructional system for occupational and developmental students; and Using the audio-tutorial approach. There were 168 persons who attended this joint

meeting with the AMS, including 113 MAA members. The treasurer reported that annual expenditures were exceeding annual income and suggested that the section adopt an annual budget. This wasn't done, but in 1972 it was agreed to raise the registration fee from \$1 to \$2, students exempted as before.

Meeting. June 16, 1972, University of Washington

There were three talks on Friday: Frederick C. Johnson of Boeing spoke on "An algebraic look at Kalman filtering and recursion estimation"; T. G. Ostrom of Washington State University spoke on "Linear algebras and geometries"; and David Ragozin of the University of Washington spoke on "Why Lagrange failed to discover the Weierstrass approximation theorem." There was also a panel discussion on student evaluations of faculty. There were ten talks in the Saturday sessions which were devoted to junior and community colleges. 171 persons attended this joint meeting with the AMS and SIAM, including 120 MAA members.

Meeting. June 15-16, 1973, Western Washington State College

George Pólya gave an inspiring dinner talk titled "Galileo: his life and contributions to the scientific method." He received a standing ovation. Two invited addresses were given: David Larman of the University College, London spoke on "The most significant advances in geometry in the last decade"; and John Kenelly of Clemson University spoke on "The challenge spectrum in the various mathematical sciences." Three other talks were also given at this joint meeting with the AMS and SIAM. At the Business Meeting prior to lunch, the newly elected Chairman, John Reay, drew a confusing map showing the route to the dining hall. It was suggested that he just lead the way, but he declined to eat there.

1974 Meeting. The Business Meeting of the section was held on August 23, during the International Congress in Vancouver, British Columbia, August 21-25, 1974. 29 persons attended the Business Meeting.

Meeting. June 20-21, 1975, Washington State University

There were two invited addresses: Ivan Niven of the University of Oregon spoke on "Extremal problems unmanageable by calculus," and Roy Dubisch of the University of Washington spoke on "Exporting mathematics to less developed nations: success or failure." There was a panel discussion on trends in mathematics training, as well as a community college program. The meeting was joint with AMS and SIAM.

Meeting. June 18-19, 1976, Portland State University

There were six invited addresses. Richard M. Koch of the University of Oregon gave a talk titled "Invariant functions on matrices"; Dean McIntire of Central Oregon Community College spoke on "Cognitive style mapping and its relationship to the mathematics lab"; Harold Hauser of Blue Mountain Community College gave a talk titled "Trinomial expansion and its geometric design"; Raymond Mayer of Reed College spoke on "Some applications of nonstandard analysis to number theory"; Eugene Maier of the University of Oregon gave a talk titled "Fancy meeting you here--a college algebra counting problem leads to an unexpected encounter with e "; and Troy Downey of Portland Community College spoke on "Cases versus graphs."

1977 Meeting. The meeting was held in conjunction with the national meeting at the University of Washington on August 16, 1977. The meeting included a parallel session for two-year colleges. There were 21 persons in attendance. The excess money problem persisted. The treasurer reported a balance of \$771.82. It was successfully moved that the officers investigate proposals for the use of excess money in the treasury. Preference was to be given to spending the money in the Northwest.

Meeting. June 16, 1978, University of Oregon

The invited addresses were: Joel Davis of Oregon State University spoke on "Design of functions for handheld calculators"; Ivan Niven of the University of Oregon gave a talk titled "Solved and unsolved problems in tilings"; Jerine Ridgeway of Bellevue Community College spoke on "Math for math avoiders"; and William Firey of Oregon State University spoke on "Contact probabilities between convex figures." Arvid T. Lonseth of Oregon State University gave the dinner talk, titled "In the wake of galleons (some mathematical problems from the age of discovery)." John Loughlin and Jim Snow of Lane Community College presented "Home grown video." There was also a panel discussion on computer literacy for technical students at this joint meeting with the AMS and SIAM.

At the Business Meeting, the use of excess money was discussed. The following motion was successful: "Invited MAA speakers at the annual section meeting be invited guests of the section at the meeting banquet." The issue of excess funds was then referred to the Executive Committee. At this meeting, secretary-treasurer John Herzog gave a short slide presentation on the new MAA headquarters building and reminded members to send money to the building fund.

Meeting. June 15, 1979, University of British Columbia

Invited addresses were: T. Fletcher of Vancouver Community College spoke on "An introduction to cognitive mapping (evaluating student potential)"; Douglas A. Lind of the University of Washington gave a talk titled "Furstenburg's proof of Szemerédi's theorem (or, ergodic theory strikes again)"; D. Dale Olesky of the University of Victoria spoke on "Cooperative education in mathematics"; Constance Reid gave a talk titled "The answer to the question everyone asks"; Ved P. Madan of Red Deer College spoke on "Geometrical theorems in slides--an innovative approach for teaching geometry"; Hazel Jo Reed of Evergreen State College spoke on "Compartmentalization of mathematical cognition"; and Kenneth A. Ross spoke on "A probabilistic approach to studying groups."

Meeting. June 20-21, 1980, Central Washington University

There were three invited addresses: Larry Runyan of Shoreline Community College spoke on "Cold calculating conservation"; A. B. Willcox, as Executive Director of the MAA, gave a talk titled "Mathematics: where are we going? what mathematics education can do about it"; and Donald W. Bushaw of Washington State University spoke on "Minimal competencies, maximal confusion, and mean people." A dinner talk was given by Hugh Burkhardt of the Shell Centre for Mathematics Education, England, titled "England's experience with problem solving curricula: how it has affected the way we teach mathematics." There was also a panel discussion on mathematical services provided for our students. This was the smallest sectional meeting on record. Only 45 persons were brave enough to attend this joint AMS-MAA-SIAM meeting one month after Mount St. Helens exploded on May 18, 1980.

In 1980 Sue Kaplan at Western Washington State University was persuaded to begin editing a newsletter, to be circulated two times a year. After producing a beautiful newsletter for the spring of 1981 that was well received, Sue had to abandon the project.

Meeting. June 19-20, 1981, Lewis and Clark College

Three invited addresses were given: Ivan Niven of the University of Oregon spoke on the "The way it was"; Neal Koblitz of the University of Washington spoke on "Why study equations over finite fields?"; and Ansel Johnson of Portland State University gave a luncheon talk titled "Mathematics used in monitoring Mt. St. Helens." There was a panel discussion on mathematics contests as well as eight other papers. 112 persons attended, including 66 MAA members.

Meeting. June 18-19, 1982, Western Washington University

There were three invited addresses: Edwin Hewitt of the University of Washington gave a talk titled "Even mathematicians are odd"; Marcia P. Sward of the MAA gave a talk titled "Like 55, mathematics saves lives"; and James A. Cochran of Washington State University spoke on "A potpourri of eigenvalue results--the exploitation of analogies." There were eight other talks at this meeting as well as two panel discussions, one on mathematics and computer science, and one on trends in graduate programs. Marjorie Enneking of Portland State University was elected Chair-elect. She was the first woman elected to office in the section, though the Newsletter Editor Sue Kaplan was an officer on the Executive Committee in 1980.

Meeting. June 16-18, 1983, University of Idaho

This meeting had seven invited addresses: Gail Adele Williams of the University of Idaho spoke on "Mathematics at work in society (MAWIS)"; John Reay of Western Washington University gave a talk titled "Modeling measles epidemics"; Donald J. Albers of Menlo College gave a talk titled "Mathematicians are people, too"; Peter J. Hilton of SUNY at Binghamton spoke on "The early history of computers"; John Loughlin of Lane Community College spoke on "Making math video tapes"; Branko Grünbaum of the University of Washington gave a talk titled "Geometry of Moorish ornamentation"; and Calvin T. Long of Washington State University spoke on "Discovering Fibonacci identities." The first sectional minicourse (called a short course) was "Computer graphics in mathematics instruction," which was presented by David Moursund, University of Oregon. There was a panel discussion on the honors program in mathematics, and 11 shorter presentations. 135 persons attended the meeting. On June 1, 1983 the section treasury had a balance of \$1089.82, apparently the first time it exceeded \$1000.

1984 Meeting. There was no meeting because of the National Meeting in Eugene.

Meeting. June 20-22, 1985, Willamette University

Three invited addresses were given: Donald W. Bushaw of Washington State University spoke on "The undergraduate curriculum"; Gerald L. Alexanderson of the University of Santa Clara spoke on "Pictures and stories from George Pólya's album"; and Wesley L. Nicholson of Battelle-Northwest gave a talk titled "Graphical data analysis in more than two dimensions." Four other papers were given as well as a panel discussion on discrete mathematics. There were also two minicourses: "Teaching problem solving" was organized by Alan H. Schoenfeld, University of California at Berkeley, and "Geometry for college teachers" was organized by Branko Grünbaum, University of Washington. 70 persons attended the meeting.

At the 1985 meeting at Willamette University in Salem, Oregon, two old issues were raised. The idea of regional meetings within the section besides the annual June meeting was discussed. There was interest in publishing a newsletter again. In June 1986 Chris Meyer and Ken Batker of Pacific Lutheran University accepted the responsibility of producing a sectional newsletter. It has been published regularly since the fall of 1986, and has been well received.

Meeting. June 20, 1986, Southern Oregon State College

Three invited addresses were given: Paul R. Halmos of the University of Santa Clara gave two talks, titled "Problems I still cannot solve" and "Random reminiscences." Joe Buhler of Reed College spoke on "Finding roots mod p and factoring polynomials." Nine other papers were presented. Joe Buhler also presented a minicourse on "NP completeness."

Meeting. June 18-20, 1987, Pacific Lutheran University

There were two invited addresses: Donald W. Bushaw of Washington State University spoke on "Reflections on discrete mathematics in the first two years," and Branko Grünbaum gave a talk titled "The geometry of polyhedra." Robert Jewett of Western Washington University gave the luncheon address on multiplying decimals that are infinite on the left. There were five other papers and a panel discussion on intermediate algebra. James Sandefur presented the minicourse "Discrete mathematics using difference equations." 100 persons attended.

Meeting. June 18, 1988, University of British Columbia

There were seven invited addresses: Paul Filliman of Western Washington University spoke on "Symmetry in maximal polytopes"; Richard Guy of the University of Alberta gave a talk titled "The strong law of small numbers"; John S. Devitt of the University of Saskatchewan spoke on "Saskatchewan and the symbolic computation group: unleashing computer algebra on the mathematics curriculum"; Eric Pearson of Battelle-PN Labs spoke on "Piecewise analytic methods for solutions of stiff systems of ODE: overview and parallel implementation"; Lynn A. Steen of St. Olaf College gave a talk titled "Numeracy, literacy, and mathematics"; Nancy Heckman of the University of British Columbia spoke on "Semi-parametric models"; and Sam Saunders of Washington State University spoke on "Great expectations or the true odds when playing the state lotteries."

There were three other talks and a panel discussion on calculus. Tom Thompson of Walla Walla College gave a short course titled "Error correcting codes." There was a heavy emphasis on calculus at this meeting. At the Business Meeting it was voted to form a

committee 1) to study the current policies and practices for accrediting secondary mathematics teachers in the states and provinces within our section; 2) to recommend an appropriate course of action to the section; and 3) to coordinate implementation of any recommendations made by the section. 80 persons attended.

Meeting. June 15-17, 1989, Gonzaga University

There were seven invited addresses: "Complexity and Robertson/Seymour theory," by Michael Fellows, University of Idaho; "Random walks on Z " and "Factorization in L^1 and other places," by Kenneth A. Ross, University of Oregon; a banquet talk "What are fractals?" by Peter Renz; "Experimental design in industry," by Andrew Booker, Boeing Computer Services; "Neural networks in the dynamics of computation," by Steve Nobel, Boeing Advanced Systems; and a luncheon talk "Mathematics at Boeing," by Stephen P. Keeler, Boeing Computer Services. A short course on "Nonlinear dynamics" was given by Philip Holmes, Cornell University. Fifteen general papers, five papers on mathematics education, and ten student papers were presented. 127 persons attended and 112 attended the evening banquet.

Meeting. June 14-16, 1990, Portland State University

Invited Talks were as follows: "Knot theory," by Steven Bleiler, Portland State University; "Using the HP-28S to teach calculus," by Tom Dick, Oregon State University; "Chaos," by Donald L. Kreider, Dartmouth College; a fascinating and entertaining banquet talk "The geometry of soap bubbles," by Millie Johnson, Western Washington University; "Computer algebra on the HP-28S," by Charles Patton, Hewlett-Packard; "The placement problem for very large scale integrated circuits," by John Blanks, Mentor Graphics; and a luncheon talk "A non-mathematicians view of why knot theory is important to DNA research," by Bob Beck, Oregon Health Sciences University. De Witt Summers, Florida State University, gave a short course on "Knot theory and DNA." There was a panel discussion on "Career opportunities in high-tech industries;" the moderator was Lewis Lum, University of Portland, and the panel members were: Qwen Blake, Intel, Balaji Krishnamurthy, Tektronics, and Charles Patton, Hewlett-Packard. There were 25 contributed papers, including 14 given by students. 111 persons registered for the meeting and 96 attended the banquet.

Meeting. June 20-22, 1991, Seattle Pacific University

This meeting celebrated the centennial anniversaries of Seattle Pacific University and Seattle University. The scientific presentations were held at Seattle Pacific and the major evening banquet was hosted by Seattle University. The banquet speaker was John Hopcroft, Cornell University, who was an undergraduate at Seattle University; he spoke on "Entering the information age." Outstanding invited addresses were given by John

Hopcroft, on "Robust geometry algorithms," and by John Ewing, Indiana University, on "Can we see the Mandelbrot set?" Ramesh Gangolli, University of Washington, spoke on "New trends in undergraduate mathematics education" at the Saturday luncheon. A workshop on "Unsolved problems in intuitive geometry" was given by Victor Klee, University of Washington. Presentations on the actuarial profession were given by Mike Kinzer, Safeco Insurance Company, and by Craig Reynolds, Chief Actuary of Milliman and Robertson, and a workshop, "An introduction to the TI 81," was conducted by Carl Swenson, Seattle University. There were 16 contributed papers, including 5 given by students. About 70 persons registered at the meeting and about 70 attended the banquet.

Meeting. June 18-20, 1992, University of Montana, Missoula, and The Salish Kootenai College, Pablo, Montana

The high point of this meeting was the barbecue at The Salish Kootenai College. This was followed by a very interesting talk on "The life and legacy of India's greatest mathematician, Srinivasa Ramanujan," by Bruce Berndt of the University of Illinois. There was also a presentation of the first PNW Award for Distinguished Teaching, which was presented to André Yandl of Seattle University. Alan Tucker, SUNY at Stony Brook, gave a very interesting talk on "The mathematics of fair representation." Walter Mientka, University of Nebraska and the Executive Director of the American Mathematics Competitions, reported on "The development, implementation, and results of the American Mathematics Competitions." At the Saturday luncheon, Howard E. Reinhardt, University of Montana, gave a very entertaining account of "What every dean should know about mathematics." William McCallum, University of Arizona, gave a short course on "Teaching reform calculus;" 32 registered for the short course. William Hawkins, Director of the SUMMA Program of the MAA, gave a workshop on "Strengthening underrepresented minority mathematics achievement," with 20 registrants. There were fifteen papers presented, including 9 by students. About 90 people registered at this meeting. There were 69 at the banquet and about 35 at the Saturday luncheon. The first sectional Award for Distinguished Teaching of Mathematics was presented to André Yandl at Seattle University.

Meeting. March 6, 1993, University of Puget Sound, Tacoma, and Pierce College, Tacoma

This meeting was historic on two counts. This was the first meeting not held in June in over thirty years and this was a one-day meeting. And this was the first meeting that had a really strong student presence. Indeed, students were the theme of the meeting. In the first invited address, Ben Fusaro of Salisbury State University discussed the history of the *Mathematical Contest in Modeling (MCM)*, which he single-handedly brought into being in the early 1980s. Three MCM teams were introduced whose members made some brief comments and fielded many questions. The teams were from the University

of Alaska, University of Puget Sound, and Pacific Lutheran University. The luncheon banquet speaker was Frank Morgan of Williams College. He talked about "Shortest Networks" and many of the results that he talked about were discovered by undergraduate students. Also at the banquet, the second sectional Distinguished Teaching Award was presented to Jack Robertson of Washington State University. The afternoon invited address was also given by Frank Morgan who talked about "Soap bubble clusters: new results." Again, many of the results were discovered by undergraduates. The program also had very strong sessions of contributed papers, including reports from the three MCM teams discussed above. In addition to those reports, there were 19 contributed papers, 7 by students. 120 people attended the meeting, including about 40 students.

Meeting. June 16-18, 1994, University of Oregon, Eugene

This meeting was held in conjunction with Western Section meeting of the American Mathematical Society. There were three wonderful hour talks. Carl Pomerance, University of Georgia, gave the first Polya Lecture to be given to the section; he talked about "Witnesses of composite numbers." Doris Schattschneider, Moravian College and First Vice President of the MAA, addressed the question "Was Escher a mathematician?" Millie J. Johnson, Western Washington University, spoke on "The mathematics of meanders: rivers, channelization, floods, and the environment." The AMS program included a talk of special interest to MAA members; Karen V. H. Parshall, University of Virginia, spoke on "Algebras with a Scottish lilt: the life and work of Joseph H. M. Wedderburn (1882-1948). There were 11 contributed papers and two minicourses. Jim Tattersall, Providence College in Rhode Island, gave a minicourse on the "History of the first nine Lucasian professors at Cambridge." Carl E. Swenson, Seattle University, gave a minicourse on "Using Mathematica to produce graphical classroom materials." Ken Ross, University of Oregon, moderated a panel discussion on "Sensitivity and understanding of the job market." Three department heads and three "young" mathematicians with recent Ph.D.s served on this panel which addressed the very tight job market. Stu Thomas, University of Oregon, moderated a panel discussion titled "The baby and the bathwater," which focused on what we throw out of algebra to make room for technological advances. The issue was whether heavy reliance on modern technology enhanced or interfered with the learning process. Florence Fasanelli, Director of the SUMMA Intervention Programs of the MAA, led an "MAA Proposal Writing Workshop."

About 130 people attended the MAA salmon bake. The highlight of the evening was the presentation of the third sectional Distinguished Teaching Award to Millie Johnson of Western Washington University. There was also a banquet for University of Oregon alumni and one in honor of Professor Emeritus David K. Harrison, University of Oregon.

There were 229 registrants for the meeting, including 102 MAA members and 51 students. The MAA sponsored a free pizza lunch for about 30 students.

Meeting. June 15-17, 1995, Whitman College, Walla Walla

This meeting was co-hosted by Columbia Basin College. The meeting celebrated the section's fiftieth anniversary and emphasized aspects of mathematical modeling. There were two invited addresses. Dr. Paul Whitney, Battelle Northwest, presented a case study showing the interaction between mathematical modeling and data analysis in analyzing the amount of gas trapped in the nuclear waste stored in the Hanford tanks. Professor Martha Siegel, Towson State University and editor of Mathematics Magazine, spoke on industrial mathematics in the undergraduate curriculum. There were also two minicourses. Professor Maurice Weir, Naval Postgraduate School, gave a minicourse on the construction of mathematical models. Professor Marcella Laddon, Monterey Peninsula College, organized a minicourse which examined special topics that can be taught in elementary and intermediate algebra. A panel discussion on "Recognition and Rewards in the Mathematical Sciences" included panelists Martha Siegel, Donald Bentley of Pomona College, Donald Bushaw of Washington State University, and David Guichard of Whitman College. The discussion was moderated by Douglas Underwood of Whitman College. There were 21 contributed papers, five of which were presented by students.

The banquet was well attended. The section's fourth Distinguished Teaching Award was presented to Richard M. Koch of the University of Oregon. The banquet speech, given by Kenneth A. Ross of the University of Oregon, focused on some of the lesser known and amusing events that have occurred in the section in its first fifty years. Persons who have been members of MAA for 25 or more years were honored at the banquet. There were 78 registrants at the meeting, including 15 students.

Meeting. March 9, 1996, Reed College, Portland

The emphasis of this fine meeting was on students. Nearly 200 people were in attendance and about 80 of them were students. There were three invited lectures. S. Brent Morris, of the National Security Agency, spoke on "Magic tricks, card shuffling, and dynamic computer memories." Arthur Benjamin, of Harvey Mudd College, spoke on "Mathematical magic with Fibonacci numbers," and Sam Saunders, of Washington State University, spoke on "The equation of a sword." Live demonstrations included magic tricks, cards and swords. In addition to regular sessions for faculty and students, there was a session for student projects in lower division statistics and a session for 1995 Putnam Examination and 1996 COMAP Modeling Competition problem solutions. Twelve 20-minute talks were given by students, and six were given by faculty. A panel discussion on "Calculus Reform: The Next Tier," included panelists Richard Koch of the

University of Oregon, Jeanette Palmiter of Portland State University, and Mark Utlaut of the University of the Pacific.

At the banquet lunch, Brent Morris provided some prestidigitation. The section's fifth Distinguished Teaching Award was presented to Janet Ray, who teaches at Seattle Central Community College. The day ended with a pizza party for all, at which Arthur Benjamin demonstrated "The Art of mental calculation." Prior to the meeting, Brent Morris conducted an entertaining minicourse on "The mathematics of the perfect shuffle." The question of updating the bylaws of the section, which were last amended in 1983, was discussed at the meeting of the Executive Committee.

Meeting. June 19-21, 1997, Western Washington University, Bellingham

The theme of this meeting was "Forging Links: People, Mathematics, Technology, and Resources." Among the many excellent presentations, the highlight was the keynote banquet talk by Tom Daniel, Professor of Zoology at the University of Washington. Daniel, a distinguished teacher and a MacArthur Foundation Fellow, spoke on "Motility in Biology: Merging Mathematics, Mechanics & Molecules." The presentation was fascinating and he allowed participants to handle 350 million year old fossils.

A subtheme of the meeting was linear algebra. Roger Horn, University of Utah and editor of the Mathematical Monthly, gave two fine hour lectures, one responding to "Why would you want to factor a matrix in more than one way?" and one on "Eigenvalue inequalities and equalities." Maria Klawe, University of British Columbia, gave a very interesting lecture on "How middle school software provides students with a glimpse at linear algebra concepts." Tjalling Ypma and Richard Levin, Western Washington University, gave a minicourse titled, "Linear algebra using ATLAST Project Materials and Matlab." A panel discussion on "Contemporary trends in linear algebra instruction" focused on the impact of new software tools on the teaching of linear algebra. The panelists were Roger Horn of the University of Utah, David Lay of the University of Maryland, and Steven Leon of the University of Massachusetts Dartmouth.

At the banquet, the section's sixth Distinguished Teaching Award was presented to Brian Wick, University of Alaska – Anchorage. Two fine talks were given by previous winners of this award. Richard Koch, University of Oregon, illustrated some of the peculiar things that can happen in "The fourth dimension." Jack Robertson, Washington State University, talked about old and new results on cake-cutting problem using various definitions of "fair." A minicourse on "Designing mathematical animations with Excel" was organized by Chuck Stevens, Skagit Valley College. Joe Fiedler, California State University-Bakersfield, gave a presentation titled, "Yes, but what have you done for me lately: beyond the TI-92," and Eric Schultz, Walla Walla Community College, ran a workshop on "The TI-92: More than a graphing calculator." Earl Fife, Calvin College and

co-director of the Mathematics Archives, introduced participants to the archives during a hands-on session titled, "Using the Internet constructively in mathematics education."

There was a panel discussion on how to get a job, "Putting your best foot forward--career search." The panelists were Jill McKenney, Lane Community College, and Tina Litzinger and Don Gorman of Western Washington University. There were 28 other presentations, including some outstanding student presentations, many of which reflected the themes of the meeting. There were 112 registrants at the meeting including about 30 students, ten of whom gave talks.

Meeting. June 18-20, 1998, Washington State University, Pullman

The theme of this meeting was Differential Equations. There was a balanced program of content and pedagogy with a session on inclusive teaching strategies and an invited address by two Portland high school teachers who are including dynamical systems in their classrooms under an NSF grant. The high school teachers were Diana Fisher, Franklin High School, and Ron Zaraza, Wilson High School. An invited address on "The role of modeling in the introductory ODE course" was given by Robert Borrelli, Harvey Mudd College. Another invited address was given by Robert O'Malley, Jr., University of Washington; the title of his lecture was "Giving your ODE course a single perturbation." A panel discussion addressed issues in the teaching of differential equations. The panel participants were Robert Borrelli, Don Bushaw, Diana Fisher, Robert O'Malley, and Ron Zaraza. There were two workshops given by Kevin Cooper and Thomas LaForo of Washington State University. One of them was on "Differential equations instruction using technology," and the other was on "Using Mathematica in the calculus classroom."

There were three other outstanding invited addresses. Mark Nielsen, University of Idaho, spoke on "Inscribing figures in curves--A short tour of an old problem." Ron Graham of AT&T Labs, and past president of the AMS, spoke on "Juggling permutations of the integers." This was followed by a juggling lesson. Paul Zorn, editor of Mathematics Magazine, reported on "Math Mag morsels." In addition, Sandra Cooper, Kimberly Vincent and Judy Meuth of Washington State University organized a collaborative session on "Inclusive teaching strategies in mathematics." There were 18 other presentations, including six by students. For the first time, there was a student paper competition with cash awards given for the three best papers. Contributions from the host institution made this possible. Also, Matt Hudelson, Washington State University, and Janet Ray, Seattle Central Community College, presided over an informal session titled "Your mathematical career--Off to a good start," which included a report about Project NExT. The invited speaker for the banquet was Don Bushaw of Washington State University, who spoke on "The demoniac and the determinant." There were 101 attendees, including 26 students.

Meeting. March 12-13, 1999, Willamette University, Salem, Oregon

This meeting, which was well-attended by students, featured three outstanding speakers. Peter Hilton, SUNY Binghamton, spoke on “New wine in old bottles: recent results on divisibility of Fibonacci and Lucas numbers.” He also gave the Saturday lunch address on, “Reminiscences of a codebreaker,” a fascinating account of his work with Alan Turing on code-breaking during World War II. Jonathan Borwein, Simon Fraser University, gave a fascinating philosophical presentation titled, “Experimental mathematics: insight from computation.” He also gave the Saturday dinner address on “Why pi?” Millie Johnson, Western Washington University, gave an invited address titled, “Why do dogs have wet noses and other mathematical insights into animal physiology: breathing, swimming, flying, ...”

There were 21 sessions of contributed papers, including 10 given by students. There was also a student session led by the section’s Student Chapters Coordinator, Steven Johnson, Seattle Pacific University. There was a panel discussion on “Issues in K-12 education -- and what it has to do with us at the college level.” The panelists were Barbara Edwards, Oregon State University; Marjorie Enneking, Portland State University; and Kenneth A. Ross, University of Oregon. There was also a presentation on “Web-based mathematics courses” given by Tim Merzenich, Chemeketa Community College; Steve Perry, Shoreline Community College; and Dick Schori, Oregon State University.

At the business meeting, it was observed that the experiment with March meetings every three years, which are more accessible to students, has been a big success. It was decided to modify the scheduling of meetings so that the March meetings occur every two years. Specifically, it was agreed to schedule them on the following four-year rotation, starting with the current meeting: March meeting in Willamette Valley, June meeting west of the Cascades, March meeting in Puget Sound, June meeting east of the Cascades. The section’s Award for Distinguished College or University Teaching was presented to Professor Ping-Tung Chang of Matanuska-Susitna College, University of Alaska-Anchorage. It is possible that this is the first such sectional award in the country where the winner was nominated by HIS STUDENTS. There were 140 attendees, including 68 students.

Meeting. June 15-17, 2000, University of British Columbia, Vancouver, British Columbia

The program included lectures honoring Ivan Niven (1915-1999), Past President of the MAA and two-time Governor of the section. Kenneth A. Ross, University of Oregon, gave “A tribute to Ivan Niven” and Hugh Montgomery, University of Michigan, spoke on “Experimental modes for teaching number theory.” Ross’s talk included a report on

Niven's famous one-page proof of the irrationality of pi; Montgomery clarified the ideas and added comments about the proof that pi is transcendental. Ivan's widow, Betty Niven, and son, Scott Niven, attended these talks.

There were several outstanding invited lectures concerning the impact of technology on mathematics education. William McCallum, University of Arizona, spoke on "The effect of computer algebra systems on mathematics education." Thomas F. Banchoff, Brown University and President of the MAA, demonstrated how the web has become an effective tool in the dissemination of mathematics and mathematical ideas. He also gave the Friday banquet speech, where he expanded on these ideas in the context of the preparation of the electronic Mathematics Awareness Month poster. Cristina Conati, University of British Columbia, reported on experiments "Toward intelligent computer-based support of meta-cognitive, learning skills." Jonathan Borwein, Simon Fraser University and President-Elect of the Canadian Mathematical Society, gave a report on "Numerical and computational mathematics at the undergraduate level." Marjorie Enneking, Portland State University, spoke on the importance of universal involvement in "The preparation of future teachers."

There was a panel discussion on student competitions, both at the high school and college level. There was also a display of some student projects that were winners in the FAME competition in mathematics at the secondary school level on Vancouver Island. Several students of Larry Anderson and Russell Gordon at Whitman College gave excellent presentations on their mathematics projects. They were Todd Combs, Colin C. Ferguson, Marc Kepler, Aimee Taylor and Elisabeth Wood. Other 20-minute presentations were given by Russell A. Gordon, Whitman College, James D. Harper, Central Washington University, Kenneth A. Ross, University of Oregon, and Andre Yandl, Seattle University.

The main meeting was preceded by two minicourses. Hugh Montgomery, University of Michigan, gave "An introduction to computational number theory," and Michael Monagan, Simon Fraser University, organized a course on "Applications of MAPLE." The first PNW Project NExT session was organized by Jennifer McNulty. Presentations were given by Brian Thomas Gill, Seattle Pacific University, Nancy Ann Neudauer, Pacific Lutheran University, Matt Hudelson, Washington State University, Brett Stevens, Simon Fraser, and Grant Miller, Maple Grove Elementary School. There were about 75 attendees.

Meeting. April 6-7, 2001, Seattle Pacific University, Seattle, Washington

Much of the main program on Saturday was designed for students, but the program was fun for everyone. There were four excellent invited talks. Aparna Higgins, University of Dayton, gave an entertaining talk at the luncheon on "Pebbling, Demonic Graphs and

Undergraduate Research." The banquet speaker was Colin Adams, Williams College, who gave demonstrations on "Making Calculus Fun: How to Entertain at Parties." Adams' notorious brother-in-law, Mel Slugbate, reported on "Real Estate in Hyperbolic Space: Investment Opportunities for the New Millennium." Curtis Tuckey, of Oracle, gave an interesting talk on "Some Internet Stuff That Could Be Mathematics." There were twenty-two 15-minute presentations of papers. Eleven of the presentations were by students, including an excellent one by Eric Malm, a high school student at Saint George's School near Spokane. There were two panel discussions, "Conversations on the changing face of the mathematics major," organized by Michael Boardman, and "Graduate School in Mathematics: Personal Perspectives," moderated by Jenny McNulty. Panelists of the second panel were graduate students from various institutions in our section. In addition, Doug Mooers of Whatcom Community College gave a presentation about Online Math Center, a free online resource for teachers, students, and anyone interested in mathematics.

The second PNW Project NExT session was held on Friday and organized by Jennifer McNulty. Presentations were given by Sharon Allen-Felton, Director of Counseling, Bellevue Community College; DeWayne Derryberry, University of Puget Sound; Brian Gill, Seattle Pacific University; Jennifer Laveglia, Bellevue Community College; Nancy Ann Neudauer, Pacific Lutheran University. Following that program, there were two concurrent minicourses. One was given by Aparna Higgins, University of Dayton, and was titled, "Getting students involved in undergraduate research," and the other, titled "Writing grant proposals," was given by Marjorie Enneking, Portland State University. Seattle University hosted a wine-and-cheese reception Friday evening. There were 148 attendees at the meeting, including 61 students.

Meeting. June 20-22, 2002, Portland State University, Portland, Oregon

This meeting was held jointly with the Western Section of the American Mathematical Society. Kenneth A. Ribet, University of California Berkeley, gave the joint AMS-MAA Invited Address; he spoke on, "Modular curves and their twisted analogues." There were two MAA Invited Addresses. Tina H. Straley, Executive Director of the MAA, reported on "The MAA's role in the future of undergraduate mathematics." Jim Valerio, Intel Desktop Architectural Lab, spoke on, "Improving PC graphics." The MAA Banquet Speaker was Edward B. Burger, Williams College, who discussed, "Innovative Experiments . . . and how I survived them." Ed Burger also organized one of the minicourses, "What to Teach and How Not to Teach it." The other minicourse, "Senior Capstones: Meaningful Closure to the Undergraduate Experience," was organized by Dusty E. Sabo and Kemble R. Yates, Southern Oregon University.

Other MAA sessions were: a Special Address by the PNW-MAA Teaching Award Winner, Andrew Chiang-Fung Liu, University of Alberta. A presentation,

“Mathematically Inspired, Computer Generated Art,” by Jeffrey Ely, Lewis and Clark College. A session on “Innovations in Teaching Undergraduates,” organized by Monte Boisen, University of Idaho. A session on “Mathematics Education Research,” organized by Barbara Edwards, Oregon State University, and Sam Hall, Willamette University. A session, “On Undergraduate Research Programs that Work,” organized by Daniel Kim, Southern Oregon University. A session on, “The Use of Technology in Community College Mathematics Courses,” organized by Peter Haberman, Portland Community College. A session, “Junior Faculty on their Research, organized by Jennifer Ann Firkins. And a “Special Presentation on Assessment,” by Bonnie Gold, Monmouth University, who represented SAUM, Supporting Assessment in Undergraduate Mathematics, an NSF-supported project. There were two general sessions of papers, with nine presenters, and a session consisting of six presentations by undergraduates.

In addition to elections of officers, two important decisions were authorized at the Business Meeting. A first-ever section meeting in Alaska was approved for mid June of 2004. Several bylaw changes were approved that had been prepared by the Bylaws Committee, chaired by Jenny McNulty. The total attendance figure of 276 may be the highest at a meeting of this section. Attendance at the MAA portion of the meeting was 147 of which 24 were students. Andrew Chiang-Fung Liu, University of Alberta, won the section's distinguished teaching award. He also won the nationwide Debbie Haimo Teaching Award in January 2004.

Meeting. June 19-21, 2003, Whitman College, Walla Walla, Washington

There were four invited addresses. Mike Beanland, TriAxis Engineering, spoke on "Wind + electricity + engineer = Number crunching!" C. W. Groetsch, University of Cincinnati, spoke about "Two gentlemen of Verona: An early episode in ballistics." Allan Rossman and Beth Chance, California Polytechnic State University, lectured on "Teaching statistical inference: Activities and assessment." The banquet speaker was the national MAA speaker, Underwood Dudley of DePauw University. He talked about "Calculus books," pointing out that this is a weighty subject.

The meeting was preceded by a program for the PNW Project Next Fellows. Eric Schultz, Walla Walla Community College, organized a minicourse on "Visual Linear Algebra." Beth Chance and Allan Rossman, California Polytechnic State University, organized a minicourse on "Teaching introductory statistics with data and activities." Eleven papers were presented in general sessions. In addition, nine papers were presented in undergraduate sessions, six were presented in an "early career faculty session," and six were presented in a session focused on "teaching innovations in multivariable calculus courses."

At the banquet, Steven A. Bleiler, Portland State University, was awarded the section's distinguished teaching award. In addition, Larry Curnutt of Bellevue Community College was recognized as a 25 year member of the MAA. Most of the Business Meeting was devoted to a discussion of plans for the meeting in Anchorage, Alaska, in June 2004. There were 101 people in attendance, including 93 members of the MAA and 15 students.

Meeting. June 24-26, 2004, University of Alaska Anchorage, Anchorage, Alaska

This was an historic meeting, being the first section meeting in Alaska. So far as we know, this is the first mathematics meeting in Alaska. I. Martin Isaacs, of the University of Wisconsin, gave one of the hour addresses; he spoke on “Dirty Children, Unfaithful Husbands and Similar Problems.” Kenneth A. Ross, University of Oregon, spoke about “Two Vexing, though Unimportant, Problems.” Ronald L. Graham, University of California at San Diego and MAA President, gave the banquet talk; see below.

For its fifth year, the section’s Project NexT had sessions prior to the regular part of the meeting. There were also three minicourses. “What Are Your Math Majors Learning?” was organized by Marj Enneking and Paul Latiolais of Portland State University. The minicourse “Earthmath: Classroom Projects with Environmental Applications,” was given by Paul Latiolais, and “Bridging the Gap Between Mathematics and the Physical Sciences” was presented by Tevian Dray of Oregon State University.

There were three special sessions as follows. David M. Bressoud of Macalester College organized a session on CUPM, the MAA Committee on the Undergraduate Program in Mathematics. Bernard Madison, University of Arkansas, and Dale Oliver, Humboldt State University, organized a session on the PMET (Preparing Mathematicians to Educate Teachers). And Caren Diefenderfer, Hollins University, and Bernard Madison organized a session on Quantitative Literacy.

The traditional banquet was held in the elegant Hotel Captain Cook. Ron Graham, President of the MAA, gave an interesting banquet talk entitled, “The Stomachion of Archimedes.” There were 34 contributed papers, some in sessions focused on Quantitative Literacy, Discrete Mathematics, Teaching Mathematics, Applied Mathematics, and a geographically-appropriate session on Math of the North. Two of the papers were excellent presentations given by students.

At the Business Meeting, Stuart Boersma of Central Washington University was elected Chair-elect. Jenny McNulty was reappointed Project NexT Coordinator. Curtis Feist of Southern Oregon University was elected Student Program Coordinator; he replaces Jennifer Firkins Nordstrom. There was discussion about the scheduling cycle for our meetings. The tentative schedule for the next few meetings is: Spring 2005, University of

Puget Sound; June 2006, Southern Oregon University; Spring 2007, populated area; June 2008, Carroll College in Montana. The new Local Arrangements Chair will be Rob Beezer, and the new Program Chair for Universities and Four-year Colleges is Nancy Neudauer at Pacific University. Douglas F. Mooers of Whatcom Community College received the section's distinguished teaching award. There were 123 people at the meeting, including 13 students.

Meeting, April 1-2, 2005, University of Puget Sound, Tacoma, Washington

There were three invited speakers. Frank Farris, Santa Clara University, and Editor, Mathematics Magazine, gave an interesting and exciting talk on "Forbidden Symmetry—relaxing the crystallographic restriction." Jenny Quinn, Occidental College, and Co-Editor, Math Horizons, talked about "Proofs that really count." Keith Devlin, Stanford University, and National Public Radio's Math Guy, addressed the question, "How much mathematics can be for all?" He also gave the banquet talk on "Using math to beat the casino, which was well-received. There were two minicourses: "Combinatorially Thinking," organized by Jenny Quinn, Occidental College; and "Teaching Linear Algebra with Technology," organized by Jenny McNulty, University of Montana. There were several sessions of contributed papers, including a student paper session, a session of junior faculty research talks, and general paper sessions. There was also a stimulating student problem solving session. There were Project NExT sessions on Friday morning.

The section's distinguished teaching award was presented to Chris Meyer of Pacific Lutheran University. Students and student participation were a major part of the meeting. In fact, there were 130 students in attendance. At the Business Meeting it was noted that there will be a \$3000-4000 deficit due to partially subsidizing so many students; only 40 were anticipated. There were 120 faculty in attendance. Jenny McNulty agreed to create a meeting evaluation form for future meetings.