



Pacific Northwest Section NEWSLETTER

Fall, 1988

MAA PACIFIC NORTHWEST SECTION NEWSLETTER

PACIFIC NORTHWEST SECTION OFFICERS

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NIVEN TO WIN NATIONAL AWARD

At the January meeting in Phoenix, Ivan Niven will receive the 1989 Award for Distinguished Service to Mathematics. This is the Association's highest honor and is "made for outstanding service to mathematics, other than research. The contribution should be such as to influence significantly the field of mathematics or mathematical education on a national scale." Ivan more than qualifies, having made numerous contributions to American mathematics for nearly half a century.

Ivan's contributions on the national scene, as a mathematician and author as well as a good citizen of the mathematical community, are outlined in a citation that will be published in the Monthly early next year. His contributions have been equally significant in our own section. In fact, he grew up in our section (Vancouver, B.C.) before we were a section. After a few years in the Midwest, he returned in the fall of 1947. He missed the first sectional meeting earlier that year, but attended at least the next six consecutive meetings. He hasn't missed many since. He's given an invited address to the section at least twice and has presented contributed papers over the years. His support and activity have been a positive force in the section. In addition, he served as Governor twice, 1955-1958 and 1979-1982. Only one other person has served as Governor of this section twice; that was Arvid Lonseth.

Though now retired from the University of Oregon, Ivan's contributions to mathematics in many different areas continue with undiminished vigor. We are indeed fortunate to have Ivan in our section.

TEACHING EXPERIMENT IN MONTANA

John Sallee of Montana taught a trigonometry class in which every student was required to have a CASIO fx7000g graphics calculator. At first there was some worry that our Montana students would balk at paying \$60 for the calculator. However, they bought the calculators and were enthusiastic about the course. Teaching the use of the calculator was a regular part of the course. One advantage was that more realistic examples could be explored.

Next, it is the opinion of Professor Sallee that it is ridiculous to teach mathematics without computers where they apply. Instead of teaching students to find derivatives and integrals, we can teach them what derivatives and integrals are and how to use them to solve interesting problems. Counter arguments from mathematicians who either walk or ride horses everywhere they go, do their laundry by either pounding their clothes on rocks in the river or by boiling water in a wash tub on the stove every time, and use quill pens and ink for all their papers, will be eagerly and closely considered.

STUDENTS WIN AWARDS

The undergraduate team of Douglas Galarus, Bradley Larson and Josef Crepeau from the University of Montana was Meritorious in the Mathematical Contest in Modeling. John Sallee was their faculty advisor, however he merely bought them all the pizza which they could eat and cleverly stayed out of their way as they trained for and competed in the contest.

Josef Crepeau won the coveted Montana Academy of Science college scholarship for his project, which is generating two dimensional pictures of Karmarkar's algorithm. Joe has given talks at both the national $\Pi M E$ meeting in Salt Lake City last August and at the Montana Academy of Science meeting in Butte this spring. For an enjoyable time, others in the northwest should consider putting the MAS meeting on their schedule.

JUST HOW BIG IS OUR SECTION?

The Pacific Northwest Section of the MAA includes Washington, Oregon, British Columbia, Alberta, the Yukon and Northwest Territories, Alaska and parts of Idaho and Montana.

The combined population of the regions of our section is about 13.5 million. If this section were a state, it would be fourth largest, behind California, New York and Texas. There are about 1080 MAA members in the section, distributed as follows: 439 in Washington, 286 in Oregon, 82 in British Columbia, 89 in Alberta, 64 in Alaska, and 120 in western Montana and Idaho. In population our section is just above the average of an MAA section.

But in area, our section is huge, nearly 1.5 million square miles. If our section were a country, it would be the seventh largest and considerably larger than number eight: India. Put another way, our section is about 5-1/2 times the size of Texas and half as large as Australia. It's a sparsely populated section with a little over nine persons per square mile.

These statistics might help explain why our meetings are not very well attended. It is over a thousand miles from Calgary to Eugene and over 1150 from Calgary to Ashland. The distances between our Alaskan members and the rest of us are even more staggering.

Ken Ross

ANNOUNCEMENT

The next meeting of the section will be at Gonzaga University in Spokane, June 15-17, 1989. Do you have any ideas for speakers or short courses? Would you like to speak yourself? Send your suggestions to either

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Cheney, WA 99004

or to

Nick Nickleoff
Department of Mathematics
and Physical Sciences
Spokane Falls Community College
Spokane, WA 99204

SUMMER MEETING, JUNE 16-18, 1988, VANCOUVER, B.C.

The University of British Columbia played host to last summer's annual meeting which was distinguished by its rich program and the attention it drew from the British Columbia TV and press. For example, invited speaker Sam Saunders from WSU, who spoke on the mathematics of lottery systems, was interviewed on TV during the course of the meetings.

A short course on Error Correcting Codes was given by Tom Thompson of Walla Walla College. The invited speakers included Lynn Steen (St. Olaf), past president of the MAA; Sam Saunders, Paul Filliman (WWU), Richard Guy (U. Calgary), John Devitt (U. Saskatchewan and Symbolic Computation Group), Eric Pearson (Battelle-PNW laboratory), and Nancy Heckman (UBC statistics). Tom Dick (OSU), Nathan Divinsky (UBC), Martin Gerson (Vancouver, B.C. Langara), Dale Hoffman (Bellevue CC), and Lynn Steen participated in an animated panel discussion on calculus, lean, lively and otherwise. In addition, a contributed papers session included presentations by Robert R. Christian (UBC), Peter Bullen (UBC) and Stanley D. Luke (Seattle Pacific).

Our business meeting was livelier than usual. Cal Long suggested we form subsections which would be closer to home for most of us (see HOW BIG IS OUR SECTION, above). Cal also urged the section to try to influence our state and province legislatures concerning teacher certification in mathematics.

On the lighter side, on Thursday evening Afton Cayford hosted a social gathering at his home. Lynn Steen delivered the banquet address entitled "Everything counts: numeracy, literacy and mathematics," and Bill Unruh (UBC Physics) gave a talk on "Of time and the universe."

There were approximately 70-80 in attendance at the conference.



CAMPUS PROFILE: GONZAGA UNIVERSITY

Gonzaga College admitted its first students in 1887 as a result of plans laid by Reverend Joseph M. Cataldo, S.J., an Italian Jesuit missionary. Gonzaga College became Gonzaga University with the opening of the School of Law in 1912. Other schools were subsequently added, the last of which was the School of Continuing Education in 1975.

Today Gonzaga University remains an independent Roman Catholic university governed by a Board of Trustees. The University receives no regular support from the church but depends on tuition revenues, gifts, the income from an endowment fund, and the contributed services of some fifty Jesuits among the faculty and administration for its operational needs.

Gonzaga University is located in Spokane, Washington, the hub of the Pacific Northwest's "Inland Empire." The campus is located along the north bank of the Spokane River near the downtown area of this metropolitan area of 325,000 people. The downtown area contains beautiful Riverfront Park which was the site of Expo '74.

Currently there are over 2200 undergraduates enrolled with a total of 3400 registered in all of its branches. Students come from forty-two states and forty foreign countries. Over half of the students come from locations at least four hundred miles from Spokane.

The Mathematics Department became the Department of Mathematics and Computer Science in the early '80s. This marriage has proved to be valuable since several of the twelve full-time faculty teach in both disciplines. The emphasis for faculty is on teaching, yet some members are actively engaged in research in pure mathematics, consulting outside the university, and leadership roles in mathematics education. A wide variety of special mathematical interests are represented among the faculty.



From the Editor

NEWSLETTER EDITORIAL STAFF CUT BY 50%.

That's right. Ken Batker is taking a well deserved sabbatical this year at Virginia Polytechnic Institute, leaving Chris Meyer as the only editor. One way or another the newsletter has survived.

The editor is grateful for the news that was sent to us for this issue. Keep it coming folks! A special thanks to John Sallee and Ken Ross.

Do you have something you want to get off your chest? The newsletter is happy to print letters to the editor. What do you think about Cal Long's suggestion that we have local subsections? Does anyone want to respond to John Sallee's opinions about calculators? This is your chance. Send your letters and your news to

Chris Meyer, Newsletter Editor
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A reminder: At a recent meeting we volunteered to send \$2.00 each to help pay for the newsletter. Save on checks and postage by combining your contribution with others. Send money to:

Harvey Schmidt, Treasurer
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