



## Ortrud Oellermann

### The Erica and Arnold Rogers Award for Excellence in Research and Scholarship

Dr. Ortrud Oellermann is a world leader in the field of Pure Mathematics. She has been nationally and internationally recognized for her outstanding research contributions and is the world's foremost expert in the study of Steiner Trees and Steiner distances in graphs. Today she will be honoured with the Erica and Arnold Rogers Award for Excellence in Research and Scholarship.

It is the thrill of finding an answer that drives Dr. Oellermann. "Especially if you've been struggling for it," she adds. "A researcher can have many frustrating months when no answers surface, but there are no words to describe the feeling of success and accomplishment when you finally make a breakthrough." Dr. Oellermann says she has always enjoyed problem-solving and uncovering new knowledge. She found her niche while studying as an undergraduate at the University of Natal, where she says she was fortunate to have encountered professors who encouraged women in the field of mathematics.

In addition to its intrinsic mathematical interest, Dr. Oellermann's work on Steiner Trees, distance and connectivity has applications in computer science, chemistry, and the social sciences. Questions of connectivity and network reliability have obvious relevance to any one who uses the internet, local area networks, or other modern forms of communication technology. The academic significance of Dr. Oellermann's work has earned her numerous honours, including the Royal Society's Meiring Naude Medal and the British Association Medal.

The Mathematical Reviews database lists 88 of her papers. A mentor and world-renowned researcher, Dr. Oellermann says that it is deeply gratifying to co-author papers with students. "It is always stimulating to collaborate with other researchers—especially when those researchers are students. I have had the pleasure of working with some very gifted undergraduates who have gone on to excel in graduate programs," she notes. She adds that The University of Winnipeg boasts a strong Mathematics Department with excellent researchers who do ground-breaking work. "We have a tremendous group of researchers doing work in the area of combinatorial mathematics," Dr. Oellermann says. "It's very stimulating."

Given her striking publication record, extensive work on boards and conference committees, and activity as an editor, referee, and conference organizer, it is not surprising that Dr. Oellermann is an elected member of the board of the Canadian Mathematical Society and the Institute for Combinatorics and its Applications (ICA). In 1995 she won the Hall medal of the ICA.

In addition to mentoring several undergraduate students, Dr. Oellermann has developed "Networks and their applications", a fourth-year course in her field. "That's what I enjoy the most about my job—the perfectly balanced combination of research and teaching. It's the best of both worlds."