## CENTREFOLD



John Harper

At the end of last year, Professor John Harper retired from the Mathematics Department at Victoria University. Ross Renner delivered farewell comments to the Academic Board to honour John. The following is Ross's tribute:

"This is not a farewell. Certainly, John Harper is about to take early retirement, but he has a simple plan. And remember, I am referring to the man whose meticulous attention to detail we have all come to know and love. John's plan is to return to Victoria in the New Year, and continue with his research, undistracted by students, University committees, or the arcane workings of the Academic Board.

"So rather than a farewell, this is a tribute.

"John Harper has had a long and distinguished association with Victoria since he enrolled here with a coveted Junior Scholarship in 1956. He graduated MSc with 1st Class Honours in 1960, and then, with an even more coveted Senior Scholarship, he studied at the Department of Applied Mathematics and Theoretical Physics at Cambridge University in England. After gaining his PhD there in 1964, he lectured at Bristol University until he returned to Victoria, in 1968, to take up a Senior Lectureship in Mathematics. He was promoted to Reader in 1975, and later, to the personal Chair of Applied Mathematics in 1993, after a 10-year moratorium on personal chairs was lifted.

"His early scientific reputation was established in fluid mechanics, in which he is still publishing, and still a leading authority. But, as a result of his association with Victoria's Institute of Geophysics, he published a series of papers that brought an unprecedented level of mathematical brilliance to the seemingly impossible problem of plate motion, in the theory of plate tectonics. These are the terrestrial processes that build mountains, and cause earthquakes. He achieved this, working alone in relative isolation, and went on to win for himself and this University, the highest international reputation.

"Acknowledgments of his research have included The New Zealand Geophysics Prize, a higher Doctorate of Science from Cambridge, and the election as a Fellow of the Royal Society of New Zealand.

"A referee for his Doctorate of Science wrote, "Harper's papers represent Applied Mathematics in the finest Cambridge tradition, combining deep physical insight with mathematical brilliance. He has always tackled hard, scientifically interesting problems, and on the whole, his contributions have been unquestionably significant".

"I myself would describe John as one of the few great polymaths. Over the years that our two careers have criss-crossed, we have had many moments of quiet conversation in the course of which I have peppered him with my minor mysteries like, how did Kepler make measurements precisely enough to determine the orbit of Mars?. Or, if neutrinos have mass and account for the dark matter in the universe, how did they reach earth before the light from Supernova 1987A? And to all the questions, John would either know the answer, know a reference to the answer, or sometimes, and this was most unsettling, he would simply go away and work the answer out."

>From John's CV we learn in addition that John was born in New Zealand 60 years ago, is married with 2 adult children. During his career he has made many contributions outside of his direct university responsibilities. The list of society's to which he has held positions of responsibility include: Carter Observatory Board (NZ Government appointee 1969–77); NZ National Committee for the Lithosphere (1981–82); NZ Mathematical Society (Council member 1984–87) Wellington Branch, Royal Society of NZ (Secretary 1982–83, Vice-President 1984–88, President 1988–90), Astronomy and Geophysics Section (Chairman 1977); Royal Society of NZ (Council member elected by Member Bodies 1987–90) International Association of Seismology and Physics of the Earth's Interior Organising Committee for the 27th General Assembly, Wellington, January 1994 (Treasurer); NZ Geophysical Society (Council member: 1994) Australian and NZ Industrial Applied Mathematics (Chair 1995).

Further he has supervised four MSc and two PhD students, is on the editorial board of three international research journals and has twice held visiting positions at Cambridge University.

Mike Hendy