

CENTREFOLD



David Gauld

David Barry Gauld was born at Inglewood on 28 June 1942. He graduated MSc (1st class Honours) from the University of Auckland in 1965. He then became a Fulbright student of topology under Robion Kirby at UCLA, where he gained his PhD in 1969.

David became a Lecturer in the University of Auckland Department of Mathematics in 1969, and he became Professor in 1981. He first became Head of the Department of Mathematics in 1981, and he is currently HOD, as he has been for over half of the 20 years since 1981. In addition to his three main terms as HOD he has been Acting Head of Department for various briefer periods. In 1991 David was Acting Acting Head of the Department of Mathematics & Statistics, sandwiched between on the one hand Alastair Scott as Head of Department with Ivan Reilly as Acting Head, and on the other hand George Seber as Acting Acting Acting Head with Chris Triggs as deputy Acting Acting Acting Head. He has been active on many university committees, and for the past few years he had been Associate Dean of Budgets for the Faculty of Science, and Associate Vice-Chancellor (Research). He was instrumental in getting Vaughan Jones appointed as Distinguished Alumni Professor, with much consequent benefit to the Department.

David's research interests are in set theoretic topology, especially applications to non-metrisable manifolds, and topological properties of manifolds near the limit of metrisability. He has published many papers since 1970 in numerous prominent journals and in proceedings of several conferences; and his text on "Differential Topology: an introduction" was published by Marcel Dekker in 1982. He has given many invited addresses on topology, at many places around the world. The RSNZ awarded him a New Zealand Science & Technology Medal for 1997. David and his research colleagues (Vaughan Jones, Marston Conder, Gaven Martin and Rod Downey) have received major Marsden Fund grants in 1995, 1998 and 2001 for their research on "Interactions between branches of mathematics, with applications to biology, statistics and physics". He is the founding secretary of the New Zealand Mathematics Research Institute, and he largely organized the first two summer camps, at Huia on Knots (1994) and at Tolaga Bay on Statistical Mechanics (1996). David advised Gaven Martin to go to the University of Michigan for post-graduate study, and since 1980 about 10 of our graduates have gone there for post-graduate study.

David traces his mathematical whakapapa back 6 generations to H. A. Newton, as do David McIntyre and Marston Conder and (5 generations only) Ivan Reilly. Several other mathematical descendants of H. A. Newton have visited this Department of Mathematics during the past decade. In 1999 four students completed their PhD degrees in topology at the University of Auckland, three supervised jointly by David Gauld and David McIntyre, and one supervised by Ivan Reilly. David supervised another student who completed his PhD in 2000, and he is currently supervising another PhD student.

David was President of the NZMS in 1981-1982, and he belongs also to the Mathematical Societies of Allahabad, Australia and USA. He has been active since 1977 on the Editorial Board for Mathematical Chronicle and then for The New Zealand Journal of Mathematics, he is a Member of the Editorial Board of Far Eastern Journal of Mathematics, and he is one of the Editors of Topology Atlas. For several years he has attended the Summer Topology Conference held in North America. He is now arranging for the first Summer Topology Conference in the southern hemisphere, to be held in Auckland in 2002 July 1--4. A web-site has been established at: <http://www.math.auckland.ac.nz/TOP2002>

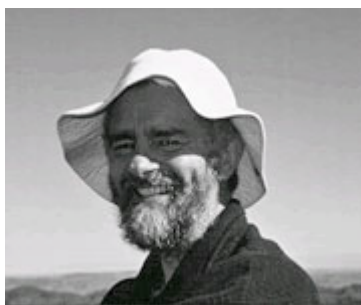
David is renowned for his enthusiasm for bush and stream tramping, especially in the Waitakere ranges and the Hunua hills. Vaughan Jones has gone tramping with David on various occasions, and he was impressed by David climbing mountains with bare feet. David is active in the Royal Forest and Bird Society of New Zealand, and he organizes annual excursions to the bird sanctuary on Tiritiri-Matangi Island.

In 1983 "The Mathematical Intelligencer" set a contest, to write a speech for a mathematician who had been captured by cannibals. When those cannibals learned that their intended meal was a mathematician, they offered to

release him if he could give them a proof which they could understand, of some striking and novel theorem. David won the prize with a short speech giving a proof of the topological theorem that there must be at least one point in the ocean at which the mean tidal range is zero. A rough English translation of that speech was published in “The Mathematical Intelligencer” (vol.5, no.4, 1983), together with David’s original text in Maori.

Mavin Vamanamurthy recalls that, in the late 1980s, he and David attended conferences in Analysis in Helsinki and Topology in Dubrovnik, respectively. “There was a fabulous dinner at the Dubrovnik conference where they served plenty of alcoholic drinks, but not soft drinks. David and I, being the few odd ones at the conference who only drank “healthy” soft drinks, had great difficulty convincing the servers that we had the right to be served orange juice and water, instead of alcoholic drinks! After much argument and delays finally we got what we wanted! I can’t remember if we had to pay extra for soft drinks while alcoholic drinks were free!”.

Vaman concludes that “David has been my closest friend, philosopher and guide in academics as well as in other aspects of life in this wonderful Kiwiland. I have learnt much on interactions between topology and mathematics analysis. We have written many joint papers, taught good courses together, written valuable lecture notes and contributed our little share to mathematical life at the University of Auckland.”



Garry J. Tee