Obituary

Ernest Oliver (Ernie) Tuck
1 June 1939 – 11 March 2009

I have been fortunate to count Ernie Tuck as a friend for more than forty years. We met at the 1968 Applied Mathematics Conference at Victor Harbor on a Sunday. By Tuesday we were bodysurfing together at Port Elliot beach after lectures finished for the day. During that swim in the surf, Ernie's wife, Helen, frantically blew the car's horn to warn us of the school of sharks in the water. But it was not their dinner time, and luckily for us they turned out to be porpoises.

I think that Helen eventually forgave me for encouraging such bravado in a young, aspiring and brilliant academic, for we began to visit each others' homes when in Adelaide, Canberra, the Gold Coast or the United Kingdom, and became lifelong friends.

We continued to meet regularly for many years at the February Applied Mathematics Conferences. Ernie was a great supporter of these events, logging more than thirty attendances since they began way back in 1965.

Not many of you will know that Ernie was the first academic to take study leave at the fledgling Bond University in 1990, just one year after it opened. It was there that he suggested we write a book for high-school children on chaos theory. There were many zany and memorable moments as we conjured up the text and the numerous cartoons that enliven Computer Ecology and Chaos.

Prior to the 1999 ICIAM meeting in Edinburgh, Ernie, Helen, Margaret and I travelled through the Lakes District and western Scotland for a week. Besides stopping for morning and afternoon tea, Ernie always insisted that we call each day at a typical pub for lunch. He was such a delightful travelling companion that we couldn't refuse his enthusiasm to include this in the daily itinerary, but I couldn't convince him to go swimming in the sea at Skye.

We had a common research interest in low-Reynolds-number flows, and his ability to open up new aspects of this subject amazed many of his colleagues. His main research interest in fluid mechanics was in ship waves and associated problems for which he had an international reputation matched by only a few.

He loved cricket and Aussie Rules. One afternoon Ernie and I visited the Adelaide Oval to watch an interstate cricket match. It started to rain for a short period, the players went off, and then it fined up. Out came the groundsmen with a small tractor to which was attached a long heavy rope to mop up the raindrops on the field. The tractor was driven around the perimeter and the unattached end of the rope was held on the ground by one person at the wicket. As the water droplets were being spread, Ernie said 'I wonder what curve the rope is forming?' Out came a piece of paper and a ballpoint and applied maths was in action again. He was like this with many observations of natural phenomena such as skimmer boards on the edge of the beach, honey dripping from a spoon, oil tankers in shallow water, waves breaking, hydrofoils, catamarans, tsunamis, backgammon, iceberg towing, flow out of hoses, waterfalls and paint flow. His interests were exceedingly widespread.

Ernie was extremely proud of the mathematical achievements of his two sons. Geoffrey completed his PhD in applied maths at Adelaide in 1994 with Hugh Possingham as supervisor, while Warren recently graduated in Engineering at the age of 43.

For readers who were fortunate enough to attend any of Ernie's lectures at Applied Mathematics conferences, you will remember a dynamic delivery full of humour and surprises, laced with original mathematical expertise and ideas. His invited talk at ICIAM 2003 in Sydney on multi-hulled vessels was beautifully presented, and did Australia proud as Ernie was one of only two Australians among the twenty-seven invited speakers.

It is a shame that such a brilliant mind can no longer produce insightful research in many areas. In the world of applied mathematics we will miss his friendship, his love of students, his poignant questions at the end of anybody's lecture, and his helpful ideas. I am glad to have known him both as a mathematician, a good family man, and a great human being.

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