

Tim Poston obituary



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My friend and colleague Tim Poston, who has died aged 72, had an unorthodox academic career that combined pure mathematics with physics, engineering, computer science and medicine. He also co-authored two science-fiction novels.

He was born in St Albans, Hertfordshire, to Ralph, a broadcaster and Anglican priest, and his wife, Mary (nee King), a teacher and later a psychiatric social worker. As his parents moved around for work purposes, Tim was educated at various schools in Britain and abroad before he went to Hull University, where he graduated with a first-class degree in mathematics in 1967. He followed it up with a PhD at Warwick University in 1972, then worked in mathematics and physics research centres around the world, mainly as a research fellow or visiting professor. Among the many cities in which he worked were Rio de Janeiro, Porto, Geneva, Stuttgart, Los Angeles and Bangalore.

After Christopher Zeeman gave the first ever lecture course on catastrophe theory, a new approach to the mathematics of sudden changes, Tim persuaded me to join him in writing *Catastrophe Theory and Its Applications* (1978), a 500-page research text. With

Kit Dodson he wrote *Tensor Geometry* (1991), on the mathematics behind relativity.

Tim revelled in geometry in the broadest sense: visual intuition supported by advanced techniques of analysis, algebra and topology. He named his website *Geometeer* and applied geometric thinking to anything that caught his eye, from visual illusions to space elevators. He published research on algorithms, archaeology, catastrophe theory, computer graphics, crystals, economics and robotics.

Medical applications were a major theme of his work, and at the National University of Singapore in the 1990s he came up with an early 3D virtual reality system to let brain surgeons practise operations on an accurate representation of a patient's brain. He secured 18 patents on various inventions, with another 12 pending.

Tim was unorthodox and original, and at Hull he belonged to the anti-establishment performance group *COUM Transmissions*, whose founders included the musician Genesis P-Orridge and the performance artist Cosey Fanni Tutti. Good with his hands, he wove his own cloth, made his own clothes and sculpted and carved in wood. With long hair and a beard, he habitually carried a thumb-stick that he had carved himself - often to illustrate the mathematics of Fibonacci spirals in plants - until he lost it on a tram in Stuttgart. It was replaced by an ebony stick that his brother, David, had carved for him in Africa.

Tim was also a science fiction fan. In 1978 we started an SF novel and 38 years later it appeared as *The Living Labyrinth* (2016). Within six months we had written the sequel, *Rock Star*. Tim died a few days after it was published.

Tim met his future wife, Rebecca Fisher-Grogan, at a party in Leicester in 1965 when they were both students and they married in 1967.

He is survived by Rebecca, David and his sister Monica. His twin brother, Jim, died in 2007.