A.P. Fairall (1943–2008)

Anthony (Tony) Patrick Fairall was born in London on 15 September 1943, but together with his family, moved to Johannesberg in 1948 and later to Salisbury (now Harare) in 1953. It was there at Prince Edward School where Tony became interested in astronomy, in which he was later inspired to pursue a career by the popular works of Sir Patrick Moore.

His career started at the University of Cape Town (UCT) with an undergraduate degree in Physics (1963–1965), summer jobs at the Royal Observatory of the Cape of Good Hope under the supervision of its chief assistant David Evans, and a B.Sc. honours project on ‘Quasars and Quasistellar Galaxies’ in 1966 at UCT under the guidance of the observatory’s director, Her Majesty’s Astronomer at the Cape, Richard Stoy.

Fairall then exchanged the familiar surroundings of Cape Town for Austin, where he continued his postgraduate studies at the University of Texas. He worked with two of the most famous astronomers of the time, and unusual characters of note: the Frenchman Gerard de Vaucouleurs and the Swiss astronomer Fritz Zwicky. Both de Vaucouleurs and Zwicky were at the forefront of modern astronomy with their ‘often controversial, though groundbreaking’ ideas of the universe on large scales. Their supervision and guidance provided a hugely inspiring environment for the young graduate student, and he completed his Ph.D. dissertation on ‘Compact Galaxies’ in 1970. This time in Texas shaped much of Tony’s later research career: his interest in active galaxies and supernovae (valuable subjects for measuring the scale of the universe) were strengthened in particular from this initial time with Zwicky.

In 1970, Fairall returned to Cape Town where he was employed as the first lecturer in the newly formed department of astronomy at UCT. He immediately started a major photographic survey to find supernovae in southern galaxies, and in 1977 discovered the most luminous Seyfert 1 (active) galaxy in a survey of southern compact galaxies. This galaxy, named ‘Fairall 9’ has subsequently become one of the most-observed extra-galactic objects.

Fairall was an expert in mapping and understanding the distribution of galaxies in the local universe – from voids to great attractors. His own interest and excitement in this topic was raised by the discovery in 1977 by the Estonian astronomer Jaan Einasto that great voids existed in extra-galactic space. His excitement is captured by these words he wrote much later: ‘The recognition of large-scale structures and voids in the distribution of galaxies showed how different the universe could be to what we thought we already knew. It has also been the focus of much research effort; in a small way I have also been caught up in the mapping of local large-scale structures and voids. Part of the excitement has come with the contact of fellow workers in the field; it has led to international fellowship and friendship.’

Fairall placed huge value on fellowship and friendship in his scientific explorations of the universe. His kindness, selflessness, unique sense of humour, and above all his excitement about astronomy were obvious to all who interacted with him—through his lecture courses (he taught the first-year introduction to astronomy course at UCT for 36 years), via public outreach events, his many lectures to school children, or at the Cape Town planetarium. In 1988, Fairall became part-time director of this newly renovated planetarium, a post he held for 17 years. During this time he became instantly known to the countless number of people attending his popular Starfinder course.

In style with his character, Fairall rarely had a harsh word of criticism about the work of colleagues. A noticeable exception was when he entered a popular discussion regarding the astronomical significance of the alignment of the Egyptian pyramids, refuting some of the claims made by two authors, Graham Hancock and Robert Bauval. In correspondence with them, Fairall wrote: ‘It is the claim regarding the 10,500 BC date that I dispute on astronomical grounds. While I cannot say I approve of the manner in which this material has been conveyed to a public audience, I do recognize that it has brought about considerable interest in both pyramids and stars.’

Tony Fairall became a Fellow of the University of Cape Town in 1998, and was elected an Associate of the Royal Astronomical Society in 1996 in recognition of leadership in research and the promotion of astronomy to the general public. For his work in the planetarium community, he was elected a Fellow of the International Planetarium Society.

He leaves the South African scientific community with a legacy of both numerous research and popular books on astronomy, and over 200 research publications. His inspiring lecturing style and his ability to communicate complex astrophysical concepts with great ease and through the frequent use of his trademark excruciating puns, made him, more than anyone else, the public face of South African astronomy. With his popular astronomy books he had hoped to inspire young inquisitive minds in the same way as he had once been inspired by the works of Moore.

Just before his death, Fairall’s Starwise – A Beginner’s Guide to the Universe was published. He had hoped that this book, aimed at school-going children, could be distributed to all schools in South Africa as part of the 2009 International Year of Astronomy. To achieve this goal, his friends and family have set up a memorial ‘Starwise Fund’, to which donations are welcome (http://www.ast.uct.ac.za/starwise/starwise.php).


Patrick Woudt is associate professor in the Department of Astronomy at the University of Cape Town, Private Bag X3, Rondebosch 7701. E-mail: patrick.woudt@uct.ac.za