

## **Jayant Vishnu Narlikar**

Jayant Narlikar was born on July 19, 1938 in Kolhapur, Maharashtra and received his early education in the campus of Banaras Hindu University (BHU), where his father Vishnu Vasudeva Narlikar was Professor and Head of the Mathematics Department. His mother Sumati Narlikar was a Sanskrit scholar. After a brilliant career in school and college, Narlikar got his B.Sc. degree at BHU in 1957. He went to Cambridge for higher studies, becoming a Wrangler and Tyson Medallist in the Mathematical Tripos. He got his Cambridge degrees in mathematics: B.A.(1960), Ph.D. (1963), M.A. (1964) and Sc.D. (1976), but specialized in astronomy and astrophysics. He distinguished himself at Cambridge with the Smith's Prize in 1962 and the Adams Prize in 1967. He later stayed on at Cambridge till 1972, as Fellow of King's College (1963-72) and Founder Staff Member of the Institute of Theoretical Astronomy (1966-72). During this period he laid the foundations of his research work in cosmology and astrophysics in collaboration with his mentor Fred Hoyle.

Narlikar returned to India to join the Tata Institute of Fundamental Research (1972-1989) where under his charge the Theoretical Astrophysics Group expanded and acquired international standing. In 1988 the University Grants Commission invited him to set up the proposed Inter-University Centre for Astronomy and Astrophysics (IUCAA) as its Founder Director. He held the Directorship of IUCAA until his retirement in 2003. Under his direction IUCAA has acquired a world-wide reputation as a centre for excellence in teaching and research in astronomy and astrophysics. He is now Emeritus Professor at IUCAA. In 2012 the Third World Academy of Sciences awarded him their prize for setting up a centre for excellence in science.

In 1966, Narlikar married Mangala Rajwade. She is a Ph.D. in mathematics. They have three daughters, Geeta, Girija and Leelavati, all of whom have opted for research careers in science.

Narlikar is internationally known for his work in cosmology, for championing models alternative to the popularly believed big bang model. He was President of the Cosmology Commission of the International Astronomical Union from 1994 to 1997. His work has been on the frontiers of gravity and Mach's Principle, quantum cosmology and action at a distance physics. He has also worked on problems related to quasars, black holes, etc. He has received several national and international awards and honorary doctorates. He is a Bhatnagar awardee, as well as recipient of the M.P. Birla award, the Prix Janssen of the French Astronomical Society and an Associate of the Royal Astronomical Society of London. He is Fellow of the three national science academies as well as of the Third World Academy of Sciences. Apart from his scientific research, Narlikar has been well known as a science communicator through his books, articles, and radio/TV programmes. He is also known for his science fiction stories. For all these efforts, he was honoured by the UNESCO in 1996 with the Kalinga Award for popular science works.

Narlikar has broken new grounds in space research. Since 1999 he has been heading a multi-institutional team of scientists pioneering experiments designed to sample air at heights of up to 41 km, to look for microorganisms. Biological studies of the samples collected in 2001 and 2005 led to the findings of live cells and bacteria, thus opening out the intriguing possibility that the Earth is being bombarded by microorganisms some of which might have seeded life itself here. Further experiments are under planning.

Narlikar was decorated Padmabhushan in 1965, at the young age of 26. In 2004 he was awarded Padmavibhushan. In 2011, the Government of the State of Maharashtra honoured him with the State's highest civilian award of Maharashtra Bhushan. In 2014, the Sahitya Akademi, the premiere literary body in India, selected his autobiography for its highest prize in regional language (Marathi) writing.

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