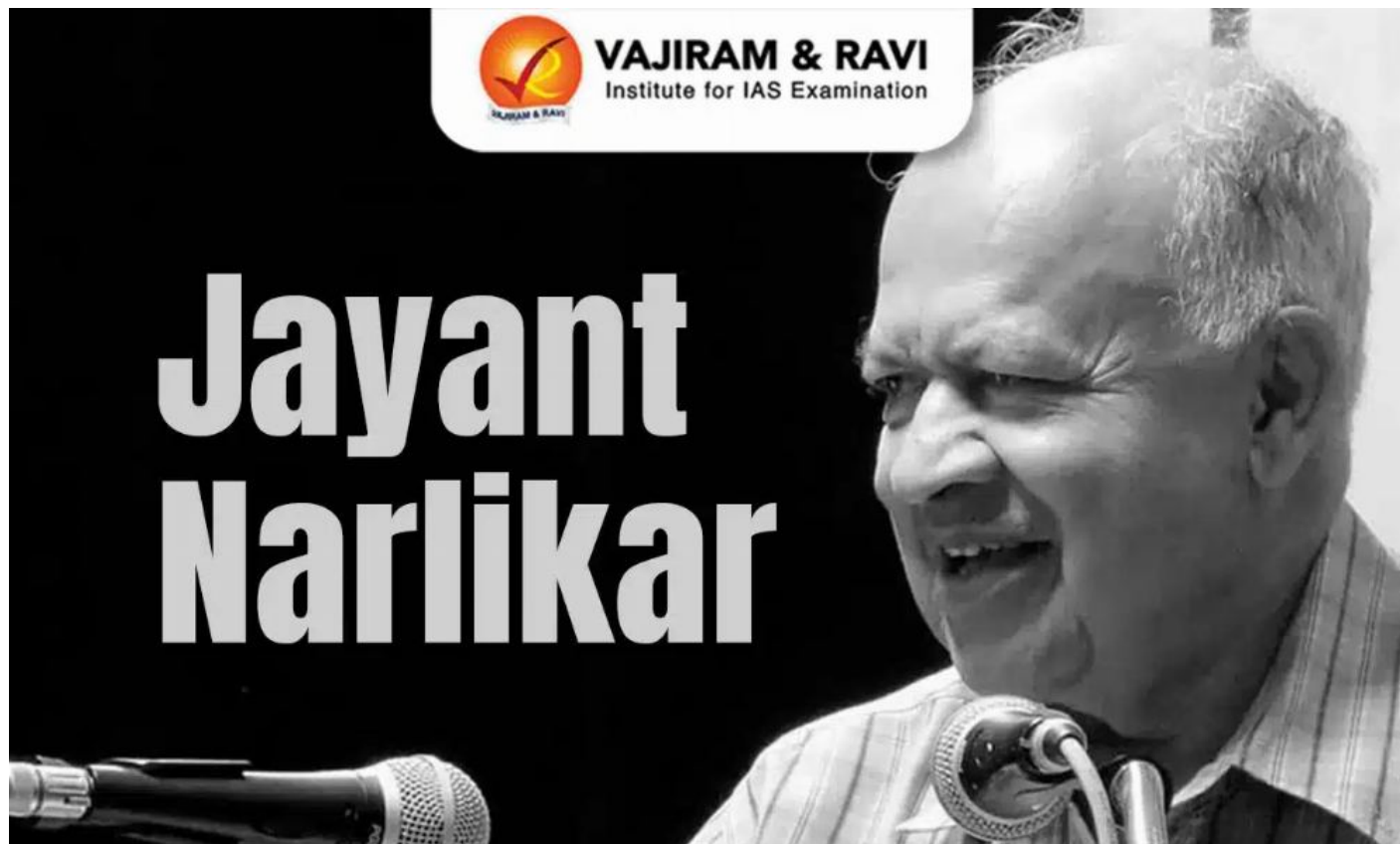


Jayant Narlikar

May 21, 2025 • vajiramandravi.com



Jayant Narlikar Latest News

Eminent astrophysicist, science communicator, and Padma Vibhushan awardee Dr. Jayant Vishnu Narlikar passed away in Pune recently.

About Jayant Narlikar

- He is one of India's most **distinguished astrophysicists** and a global name **in theoretical cosmology**.
- He was born on July 19, 1938, in Kolhapur, **Maharashtra**.
- He earned his B.Sc degree from the Banaras Hindu University (BHU) in 1957.
- He later went on to **Cambridge University for higher studies**, becoming a Wrangler and earning the **Tyson Medal in the Mathematical Tripos** — a mark of top academic distinction.
- After returning to India, Narlikar **joined the Tata Institute of Fundamental Research (TIFR)** in 1972 and **led the Theoretical Astrophysics Group until 1989**, during which time the **group gained international recognition**.

- In 1988, the University Grants Commission (UGC) entrusted him with the task of **establishing the Inter-University Centre for Astronomy and Astrophysics (IUCAA)** inside the Savitribai Phule Pune University campus. As its **founding director**, he led IUCAA until his retirement in 2003.
- He served as **President of the Cosmology Commission of the International Astronomical Union** from **1994 to 1997**.
- He is best known for co-developing the **Hoyle-Narlikar theory of gravity**.
- From 1999 to 2003, he **led a space research experiment to collect microorganisms** from the upper atmosphere (up to 41 km).
- He **authored numerous popular science books** and articles, and appeared frequently on radio and television to explain complex scientific ideas in simple terms.
- In 1996, **UNESCO** honoured him with the **Kalinga Award for science popularisation**.
- **In 2004**, he received the **Padma Vibhushan**, India's **second-highest civilian award**.
- In 2014, the Sahitya Akademi honoured his Marathi autobiography with its highest prize for regional literature.
- He was a **Fellow of all three national science academies of India**, the **Royal Astronomical Society of London**, and the **Third World Academy of Sciences**.

Hoyle-Narlikar Theory of Gravity

- Dr. Jayant Narlikar is best known for co-developing the Hoyle-Narlikar theory of gravity—an **alternative to Einstein's general relativity**—and for **championing the steady-state theory of the universe**, a bold **counterpoint to** the widely accepted **Big Bang model**.
- The Hoyle-Narlikar theory offered a formulation of gravitation that **synthesised Einstein's general relativity with Mach's principle**, proposing that the inertial mass of a particle depends on the distribution of mass across the universe—an idea that challenged conventional big bang cosmology and continues to stimulate scientific debate.
- The theory **produced evidence to support** what is known as the **steady-state theory of the universe**.
 - Unlike the Big Bang theory that suggests a definite beginning, and possibly an end, to the universe, the **steady-state theory maintains that the universe has always been, and would continue to be, the way it is — infinite in extent, without a beginning or an end**.
 - It **acknowledged an expanding universe**, which was experimentally verifiable, **but proposed that the universe was able to maintain a constant density by continuously creating new matter**.
 - The theory was **first put forward in 1948 by British scientists Sir Hermann Bondi, Thomas Gold, and Sir Fred Hoyle**.
 - It was **further developed by Hoyle** to deal with problems that had arisen in connection with the alternative big-bang hypothesis.

Jayant Narlikar FAQs

Q1: Jayant Narlikar is best known for co-developing which theory?

Ans: Hoyle-Narlikar Theory of Gravity

Q2: What is the name of the research institution Jayant Narlikar helped found in Pune?

Ans: Inter-University Centre for Astronomy and Astrophysics (IUCAA)

Q3: Which Indian civilian award was conferred on Jayant Narlikar in 2004?

Ans: Padma Vibhushan

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