



# Project: Laser Interferometer Gravitational-Wave Observatory (LIGO)

Prof. Tarun Souradeep, Senior Professor, IUCAA, Pune

LIGO-India: An Indian Mega-science (Ad)venture



## Abstract:

- The historic discovery of gravitational waves through direct detection by the LIGO observatories in the USA, in principle, opens up a new window for astronomy. In practice, however, the full exploitation of gravitational-wave astronomy will await the global array of LIGO like observatories including the planned LIGO-India observatory. I will review the momentous discovery, the potential of gravitational-wave astronomy and the promise of LIGO-India.

## About the Speaker:

- Tarun Souradeep graduated as an engineer from IIT Kanpur. After short stint in automobile design he decided to pursue a PhD in Gravitation and Cosmology. As a faculty member at IUCAA since 2000, he has built and led a cosmology subgroup on Cosmic Microwave background (CMB) studies. Souradeep led the sole Indian group within the international team of the Planck CMB space mission of the European Space Agency. He has been elected fellow of the International Society on General Relativity & Gravitation and is a co-recipient of the Special Breakthrough Prize in Fundamental Physics 2016, Gruber Cosmology prize 2016 for the recent discovery of gravitational waves. He is also recipient of the Swarnajayanti fellowship, NASI-Scopus award, B.M. Birla Prize, Vikram Sarabhai research award and is a fellow of the Indian academy of Sciences and the National Academy of Sciences, India. He serves as the Science spokesperson and a project coordinator for the LIGO-India.

