



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

## Prof. Somak Raychaudhury, Director, IUCAA, Pune

### LIGO-India: Ripples at the cutting edge of Science and Technology



#### Abstract:

- Within the last four years, epoch-making discoveries have been made by the Laser Interferometric Gravitational-Wave Observatories (LIGO) in the USA, with the discovery of gravitational waves, which have confirmed Einstein's formulation of the nature of gravitation, and has opened up a completely new way of studying the Universe. In collaboration with the USA, we are about to build the third such observatory in India (LIGO-India), which will become a crucial node of the worldwide network of these detectors. Building LIGO-India represents challenges not just to the scientific community, but poses unique challenges and opportunities for engineers and Indian industry, and promises a cutting-edge international facility on Indian soil for coming generations. I will introduce LIGO-India, and review its current status and the challenges ahead.

#### About the Speaker:

- Somak Raychaudhury is the Director of the Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune, and is the Chair of the TMT-India Project Management Board and the LIGO-India Science Management Board. He graduated from Presidency College, University of Calcutta, and University of Oxford, UK. After his PhD from the University of Cambridge, UK, he worked at the Harvard-Smithsonian Center for Astrophysics, USA, where he was part of the team that built the Chandra X-Ray Observatory for NASA. After faculty positions at IUCAA, Pune and at the University of Birmingham, UK, he was Dean of Sciences at Presidency University, Kolkata, before his current position. His research involves a wide range of topics in observational Cosmology and Astrophysics.

