



# TIFR ALUMNI ASSOCIATION

## National Science Day Public Lecture



### The top scientific breakthrough of 2016: The detection of Gravitational Waves by LIGO

Prof. Bala Iyer, ICTS-TIFR



Bala Iyer, currently a Visiting Professor at ICTS-TIFR, Bengaluru, worked at the Raman Research Institute, Bengaluru

during 1980-2014. Since 1990 he has worked on calculations of gravitational waves from binaries of neutron stars and black holes. He has been a Visiting Scientist in France, UK, Germany and the USA. He is a Fellow of American Physical Society and International Society on General Relativity and Gravitation.

He is the Chair of the IndIGO Consortium from its inception, Member of the Core team involved in the LIGO-India Proposal, and PI of IndIGO participation in the LIGO Scientific Collaboration (LSC). He is the Editor in Chief and Subject Editor on Gravitational Waves for the Online Journal 'Living Reviews in General Relativity'. He actively participates in REAP (Research Education Advancement Program) at the Bengaluru planetarium for BSc students and public outreach activities on GW.



Image: caltech,edu

Predicted by Einstein a century ago, Gravitational Waves have eluded direct detection till recently. The first two detections of gravitational waves by Advanced LIGO in 2015 and the remarkable success in reconstructing the black hole binary source has been a long and fascinating journey pushing to limits both the experiment and the theory. The discovery is a sneak preview of what is possible in the coming decade with the new gravitational wave astronomy when LIGO-India joins the global gravitational wave detector network. This new window to the universe has implications for astrophysics, cosmology and fundamental physics. No wonder then that this figured as the top scientific breakthrough of 2016.

**Tuesday, 28 February 2017 at 5 p.m.**

Homi Bhabha Auditorium  
TIFR, Homi Bhabha Road  
Colaba, Mumbai 400005

Lecture open to all

Non-TIFR members are requested to come with a valid photo ID