

APR15-2015-000584

Abstract for an Invited Paper
for the APR15 Meeting of
the American Physical Society

LIGO-India: expanding the international network of gravitational wave detectors¹

BALASUBRAMANIAN IYER, International Centre for Theoretical Physics, TIFR

The first detection of Gravitational Waves (GW) by ground based detectors will open up a fundamentally new observational window to the Universe with implications for astrophysics and eventually cosmology and fundamental physics. The realization of GW astronomy requires a global network of Advanced GW detectors including upcoming observatories like KAGRA (Japan) and LIGO-India to provide good sky localization of the GW sources. LIGO-India is expected to play a key role in locating and deciphering the sources contributing to the GW symphony. The current status of LIGO-India project and the exciting future research opportunities of this ambitious Indo-US collaboration in science, technology and computation will be finally indicated.

¹Acknowledge CISA and APS for the Award of a APS Beller Lectureship. BRI supported by the AIRBUS Group Corporate Foundation through a visiting professorship, which is part of the “Mathematics of Complex Systems” chair at ICTS.