



ICTS COLLOQUIUM

- Title : Physics and astrophysics from networks of second-generation gravitational-wave detectors
- Speaker : Sukanta Bose, Inter University Centre for Astronomy and Astrophysics, Pune, India
- Date : Friday, July 5, 2013
- Time : 4:00 p.m.
- Venue : ICTS Lecture Hall, IISc Campus, Bangalore
- Abstract : The era of advanced or second generation earth-based gravitational wave (GW) detectors is set to begin in a couple of years. The first GW discoveries are expected to follow thereafter. This effort involves close collaboration among various communities, including Experimenters, Numerical Relativists, Data analysts, and Astrophysicists. It also involves collaborating with electromagnetic and neutrino astronomers to complement their observations with GW ones in solving long-standing puzzles such as proving if indeed merging compact object binaries involving neutron stars are the progenitors of short duration gamma ray bursts. I will give a few concrete examples of how these communities have worked in tandem to extract useful information about astronomical sources from first generation detectors. I will also describe how they are preparing to use advanced detectors to enhance our understanding of the universe.

(This colloquium is part of the ICTS Program on Numerical Relativity and the ICTS-IISc Joint Program)