

ICTS COLLOQUIUM

- Title : Numerical simulations of binary black holes
- Speaker : Harald Pfeiffer, Canadian Institute for Theoretical Astrophysics,
Toronto, Canada
- Date : Thursday, July 4, 2013
- Time : 4:00 p.m.
- Venue : ICTS Lecture Hall, IISc Campus, Bangalore
- Abstract : The last few years have seen astonishing progress in the numerical simulation of the inspiral and merger of two black holes. The results of these simulations are of high importance to gravitational wave detectors searching for binary black holes, and --once signals have been identified-- they will be instrumental to elucidate masses and spins of the merging black holes. Numerical simulations help also understand Einstein's equations in the genuinely nonlinear and dynamic situations. This talk gives an overview of recent advances in black hole simulations and attempts to convey a flavor of the variety of problems being attacked by such simulations. We will close with a discussion of some of the outstanding problems.

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