



# TATA INSTITUTE OF FUNDAMENTAL RESEARCH

DEPARTMENT OF ASTRONOMY & ASTROPHYSICS

## ASTRONOMY SEMINAR

February 22, 2010

Speaker : Sayan Chakraborti  
DAA-TIFR

Title : Feedback from Supernovae: Tous pour un, un pour tous

Day, Date & Time : Tuesday, 2 March, 2010 16.00 hrs

Venue : Lecture Theater (AG66)

( H.M. Antia)

### *Abstract*

*A comprehensive description of the feedback processes from SNe, LGRBs, SNRs and supershells would span time scales of a few days to a few million years. A broad understanding may be achieved by systematic observations of a multitude of these events at different stages of evolution and connecting all of them using our theoretical understanding of the underlying physical principles. We are conducting observations of a number of these astrophysical objects using the GMRT, and other national and international telescope facilities. These multi wavelength observations shall reveal the nature of non-relativistic outflows from common SNe, relativistic outflows from LGRBs and a newly discovered subset of SNe. A study of feedback processes from these cosmic explosions, both in isolation and in associations, will further the understanding of their role in energy injection and metal enrichment of the baryonic matter in the universe throughout cosmic history.*