

TATA INSTITUTE OF FUNDAMENTAL RESEARCH
DEPARTMENT OF ASTRONOMY & ASTROPHYSICS

ASTRONOMY SEMINAR

March 26, 2010

Speaker : Anya Chaudhuri
TIFR-DAA

Title : SZ Scaling Relations and High-z Point Sources
in the Context of SZ Surveys

Day, Date & Time : Tuesday, 30 March, 2010 at 16.00 hrs

Venue : Lecture Room (AG-66)

(J.S. Yadav)

Abstract

The Sunyaev-Ze'ldovich (SZ) effect from galaxy clusters dominates the secondary anisotropies at arc-minute scales and can be used as a cosmological probe. However, cosmological inferences can crucially depend on its modeling as well as in understanding other contaminants to CMB anisotropy at these angular scales.

In the first part of the talk, I will propose a simple cluster model, show how the resultant cluster scaling relations compare with observations and talk about the relevance of such a model in the context of doing cosmology with sz clusters. In the latter part of the talk, I will look at lensing of background point sources and their contribution to arc-minute scale anisotropies.