

## **ASTRONOMY SEMINAR**

September 14, 2011

Speaker : Dr. Siddharth Savyasachi Malu  
Raman Research Institute, Bangalore

Title : Probing the Bullet Cluster with the  
Sunyaev-Zel'dovich effect

Day, Date & Time : Tuesday, September 20, 2011 at 1600 hrs

Venue : Lecture Theatre (AG-66)

(A. Gopakumar)

### ***Abstract***

*I will present 12mm observations of the Bullet cluster from the Australia Telescope Compact Array; in particular, a high angular resolution measurement of the substructure in Sunyaev-Zel'dovich Effect (SZE) and will talk about the discovery of multiple compact SZ features in the Bullet cluster. None of these SZE feature centres corresponds to any bright spot in X-ray, optical or lensing maps. This implies that the gas pressure distribution differs significantly from the distributions in gas emission measure, galaxy and dark matter distributions.*