



Physical Research Laboratory, Ahmedabad

Special Colloquium 15-13

- Speaker:** Dr. Santosh Vadawale
Associate Professor, Astronomy & Astrophysics Division, PRL,
Ahmedabad.
- Title:** "Astrosat: First Indian satellite dedicated for multi-wavelength
astronomy"
- Time:** Tuesday, 22 September 2015, 16.00 hrs.
- Venue:** K. R. Ramanathan Auditorium, PRL

Abstract

After almost 15 years in making, Astrosat is finally ready for launch by the end of this month. It carries five different instruments covering wavelength range from optical to hard X-ray and is a first observatory worldwide having such wideband coverage. In this talk, I will describe important features of Astrosat as an observatory and all its science instruments. I will also briefly cover some of the important science issues, mainly focusing on galactic X-ray binaries, that Astrosat will address. Finally I will describe our contribution to Astrosat and the resultant value addition to Astrosat science in terms of ability of measuring X-ray polarization.

The Speaker

Dr. Santosh Vadawale completed his Ph. D. from TIFR, Mumbai in 2003, following which he joined Center for Astrophysics (CfA) at Harvard University, USA as a post-doctoral fellow. His primary research interest is in the field of X-ray astronomy, with major emphasis on black hole X-ray binaries. He is also involved in development of new observational techniques and instruments. He joined PRL in 2005 to work on the HEX experiment onboard Chandrayaan-1. Since then he has been involved in many other space experiments including XSM and APXS experiments onboard Chandrayaan-2 mission and ASPEX experiment on Aditya-L1 mission. He has been involved with Astrosat, particularly the CZTI instrument, since its pre-proposal days. He has made significant contributions in development of detector response matrix and associated data processing software pipeline for CZTI. He was also instrumental in establishing completely new scientific capability of CZTI to measure the polarization of X-rays from bright sources.

Tea at 15:30 hrs.

ALL ARE WELCOME

