

TATA INSTITUTE OF FUNDAMENTAL RESEARCH
DEPARTMENT OF ASTRONOMY & ASTROPHYSICS

Speaker : Dr. David Perez-Suarez
Armagh Observatory, UK

Title : Multi-layer analysis of Coronal Bright Points. Structure and Evolution.

Day, Date & Time : Monday, 13 April , 2009 at 14.30 hrs

Venue : Lecture Room (AG-80)

Abstract

The Coronal Bright Points (BPs) are small dynamic loop-like structures that are observed all over the solar corona. They are associated with the interaction of photospheric bipolar magnetic features. Few BPs are analysed during different stages of their life with instruments on-board three spacecraft: SoHO, TRACE and Hinode. With different instruments we can see the appearance of the BPs at different layers. Together with image processing techniques, spectral analysis and magnetic extrapolation we obtain some physical parameters (electron density, Doppler shift, etc.) Furthermore, I will address these questions during my presentation.

- How good is the assumption, that the BPs are potential? The use of different instruments shows us whether the results obtained with the extrapolation is correct or not. - Can we see waves in a BP? here we show the first sunquake seen on a BP. - How does a BP look on the limb?

Finally the present status of the understanding of the morphology of BPs will be summarised.