



Physical Research Laboratory, Ahmedabad

Colloquium 17-03

- Speaker:** Dr. Debrup Hui
Post Doctoral Fellow, SPASC, PRL, Ahmedabad.
- Title:** “Plasma Drifts in Equatorial Ionosphere: New Insights”
- Time:** Wednesday, 25 January 2017, 16.00 hrs.
- Venue:** K. R. Ramanathan Auditorium, PRL

Abstract

The advancement of modern day society is increasingly becoming dependent on space based technologies. Our day to day requirements of communication, navigation and positioning system depend on trans-ionospheric transmission of electromagnetic waves. A faithful propagation of these waves requires very good knowledge of space weather conditions in the ionosphere. Improved models of space weather ask for a clear understanding of the plasma drifts in the ionosphere under influence of different drivers. Plasma drifts are caused by ionospheric electric fields that are curl-free (irrotational) in nature. In order to satisfy this curl-free condition of the ionospheric electric field during varying space weather conditions, it is necessary to understand the altitudinal as well as longitudinal variations in plasma drifts. These aspects that are important for realistic ionospheric models and for the evaluation of space weather effects on equatorial ionosphere, will be presented.

The Speaker

Dr. Debrup Hui completed his MSc from Calcutta University in Electronic Science. After working at Radiophysics and Electronics Department for a brief period, he went to University of Texas at Arlington, USA to pursue his MS in Physics. There, he completed MS with specialization in Space Physics in 2009. He then joined Electrical Engineering Department, Utah State University, USA and completed MS in Electrical Engineering with specialization in Space Instruments in 2011. He joined the Center for Atmospheric and Space Sciences, Physics Department in 2012 in the same university and completed his PhD in 2015. Soon after his PhD, he started working as a Post Doctoral Fellow at PRL, India. His areas of research interest are electrodynamics of low latitude ionosphere and space physics. He is particularly interested in building instruments for space payloads and addressing unresolved space science issues

Tea at 15:30 hrs.

ALL ARE WELCOME

