Physical Research Laboratory, Ahmedabad

Colloquium 20_11

Speaker: Dr. Girjesh R. Gupta

Assistant Professor, Udaipur Solar Observatory (USO), PRL, Udaipur

Title: "Role of waves and small-scale transients in the coronal heating"

Date and Time: Wednesday, 25 November 2020, 16:00 – 17:00 hrs

YouTube Link: https://www.youtube.com/watch?v=7Qvz-vLCZ0I&feature=youtu.be

Abstract

The tenuous outer atmosphere of the Sun, commonly known as 'corona', is orders of magnitude hotter (> 1 MK) than the solar surface (< 6000 K). The heating of coronal plasma remains one of the most puzzling problems in astrophysics. Magnetohydrodynamic (MHD) waves and small-scale transients are proposed to provide sufficient energy to maintain the hot corona. In this talk, observations of wave propagation and small-scale transients in the solar atmosphere, and their contribution to coronal plasma heating will be presented.

The Speaker

Dr. Girjesh R Gupta did his Masters in Physics from IIT Bombay in 2005 and Ph.D. from Indian Institute of Astrophysics in 2011 under the Joint Astronomy Program (JAP) of IISc Bangalore. He did post-doctoral research at Max Planck Institute for Solar System Research, Germany (2011-2013) and then moved to IUCAA Pune as DST-INSPIRE Faculty Fellow (2013-2018). He spent a few months at the University of Cambridge before joining the Udaipur Solar Observatory (USO) division of Physical Research Laboratory as Assistant Professor in late 2018. He mainly works on the propagation and damping of MHD waves and small-scale transients in the solar atmosphere using spectroscopic observations. Dr. Gupta is the recipient of Justice Oak Best Thesis Award 2011 and the Parvez Guzdar Young Scientist Award 2017. He has delivered several international conference presentations and has many high standard publications in reputed international journals to his credit.

ALL ARE WELCOME