



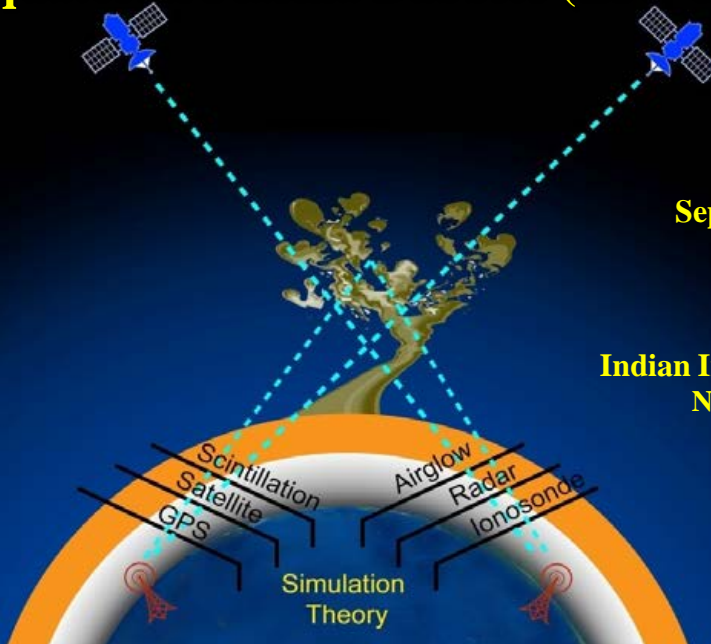
# 3<sup>rd</sup> International Workshop on Equatorial Plasma Bubbles (EPB-3)

**Date**  
**September 13-15, 2023**

**Venue**

**Indian Institute of Geomagnetism**  
**Navi Mumbai 410 218**  
**INDIA**

## Sponsors



## About EPB-3

Equatorial Plasma Bubbles (EPBs) are one of the important topics of Space Weather concern because of their significant impacts on long-distance, over-the-horizon, and ground-to-satellite (or vice-versa) communications over a wide spectrum of radio frequencies. EPBs can cause the loss of GNSS signals leading to severe range errors in the Satellite Based Augmentation Systems (SBAS) and can pose a severe threat to precise landing and precision drilling applications. Because of the increasing dependency on satellite-based global and/or regional navigation systems, there is a renewed global interest in the occurrence and dynamics of EPBs. An international working group is formed in the year 2015 and organizes the focused workshops of EPBs. The first EPB workshop was held at the Institute of Space-Earth Environment Research (ISEE), Nagoya University, Japan during Nov 2016 and the second EPB workshop was organized at Institute of Geology and Geophysics Chinese Academy of Sciences, Beijing, China during September 2019. The third EPB workshop in this series will be organized by Indian Institute of Geomagnetism (IIG), India during 13 – 15<sup>th</sup> September 2023. As the Sun enters into a more active phase of its 11-year cycle, the EPB activity is expected to be significantly enhanced over the next few years. Hence, this workshop is rightly poised to gather eminent scientists across the globe and deliberate on the latest findings and new developments on the genesis, growth, and dynamics of EPBs and their impacts on radio communications.

## Scientific Sessions

Session 1 – Atmospheric wave forcing and processes for the seeding and evolution of EPBs.

Session 2 – Atmospheric coupled models, simulations of EPBs.

Session 3 – New satellite missions, ground-based experiments, techniques, and methods to monitor the EPBs.

Session 4 – Current status on the predictability of EPBs and challenges involved.

Session 5 – Variability of EPBs during active Space weather periods.

Session 6 – Impacts on Space-based technology and societal relevance.



**Participation by invitation only. Contact: [tulasiram.s@iigm.res.in](mailto:tulasiram.s@iigm.res.in)**