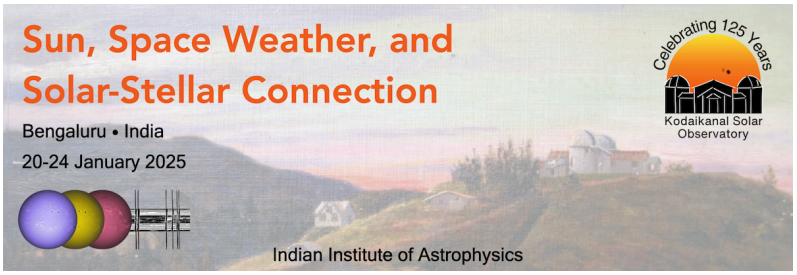


Contribution ID: **148** Type: **Poster**

# Investigating the solar wind source regions through middle corona observations

Large-scale coronal structures, such as helmet streamers (HS) and pseudo-streamers (PS), have been studied extensively as potential source regions for solar wind generation. Historically, white-light observations of the outer corona have provided insights into these features. Yet, the dynamics of HS and PS are more clearly observed in the middle corona, where the Sun's magnetic field transitions from closed to open configurations. Despite their significance, the processes driving the dynamic behavior of streamers and pseudo-streamers and their contribution to the slow solar wind remain insufficiently understood, primarily due to the limited availability of high-resolution observations in the middle corona. We address these limitations by utilizing two complementary vantage points: the Full Sun Imager (FSI) onboard Solar Orbiter and the Atmospheric Imaging Assembly (AIA) onboard the Solar Dynamics Observatory (SDO). These instruments allow us to observe the dynamics in the inner and middle corona with the opportunity to connect them. Our analysis focuses on the dynamics around a pseudo-streamer footpoint, where we detect the presence of propagating disturbances (PDs). Our findings highlight the importance of middle corona observations in understanding the physical mechanisms behind the origin of solar wind. These results could contribute to refining models of slow solar wind formation.

## Contribution Type

## Theme

Connecting Solar Corona to Heliosphere

**Primary author:** SHRIVASTAV, Arpit (Aryabhatta Research Institute of Observational Sciences)

**Co-authors:** Prof. BANERJEE, Dipankar (Indian Institute of Space Science and Technology); Prof. PETER, Hardi (Max Planck Institute for Solar System Research); Dr CHITTA, Lakshmi Pradeep (Max Planck Institute for Solar System Research); Dr PANT, Vaibhav (Aryabhatta Research Institute of Observational Sciences)

**Presenter:** SHRIVASTAV, Arpit (Aryabhatta Research Institute of Observational Sciences)