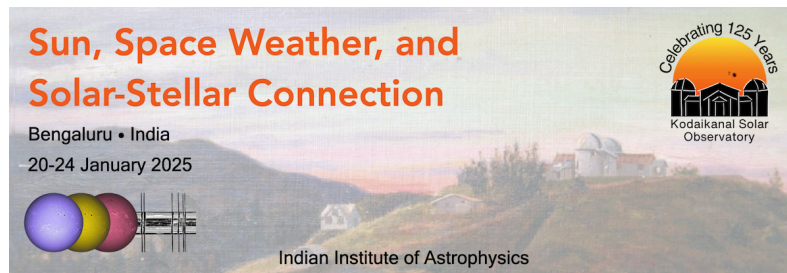


Sun, Space Weather, and Solar-Stellar Connection



Contribution ID: 113

Type: **Invited review talk**

Spicules and Jets in the solar Chromosphere: A Perspective of Recent Advances

Wednesday, January 22, 2025 8:30 AM (25 minutes)

Jets permeate the upper solar atmosphere, from the powerful and extended coronal jets to the smaller but more abundant spicules. They appear as a natural bridge to transport mass and energy from the surface to the upper atmosphere, and possibly also drive the solar wind. I will review the progress made over the last few years, in particular about the elusive spicules. The age old question of their driver being magnetic reconnection or waves is very much still alive, and simulations of ever increasing realism provide important clues about different drivers. The coronal connection of spicules is now placed on much stronger footing thanks to detailed multi-instrument observations. Finally, thanks to modern techniques for big data we can now analyse complex spectral and imaging data and detect events on a vast scale, providing unique statistics that give us more insight into the atmospheric impact of these enigmatic phenomena.

Contribution Type

Theme

Energetic Phenomena

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Presenter: PEREIRA, Tiago (University of Oslo)

Session Classification: Jets and Magnetic Reconnection