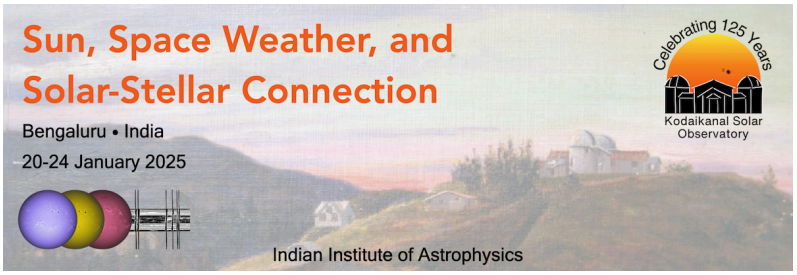

Contribution ID: **111** Type: **Invited talk**

Solar Magnetic Fields Before and During Eruptions

Tuesday, January 21, 2025 9:25 AM (20 minutes)

Space weather is largely caused by the activity of our Sun. Invisible yet powerful magnetic fields, created within the Sun, determine when and where the next solar eruption will happen. In this talk, I will review how advances in solar observations and data-driven models allowed scientists to understand flare magnetism in a lot more detail than ever before. I will overview highlights of statistical analyses of flare magnetism using SDO/HMI datasets and will show examples of recent data-driven MHD models of eruptive X-class flares.

Contribution Type

Theme

Solar Magnetism in High-Resolution

Primary author: KAZACHENKO, Maria (University of Colorado Boulder / National Solar Observatory)

Presenter: KAZACHENKO, Maria (University of Colorado Boulder / National Solar Observatory)

Session Classification: High Resolution Observations of Solar Magnetic Fields