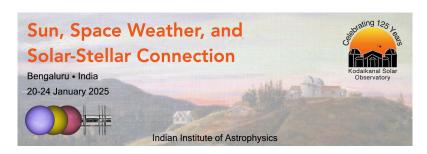
Sun, Space Weather, and Solar-Stellar Connection



Contribution ID: 13 Type: Invited talk

What Could Bridge the Gap Between Medium and Shorter-Term Solar Flare Prediction Methods?

Friday, January 24, 2025 9:25 AM (20 minutes)

The integration of medium-term and short-term solar flare predictions is a crucial component of space weather forecasting, given their potential impacts on Earth's technological infrastructure and astronaut safety. This presentation examines the importance of combining medium-term and short-term solar flare prediction methods to improve the reliability and precision of forecasts. Medium-term predictions provide a broad understanding of solar activity, facilitating better preparedness for heightened periods of solar activity. In contrast, short-term predictions are based on recent solar observations and the rapidly evolving phenomena on the solar surface, offering warnings within hours or a daily timeframe. By merging medium-term and short-term insights, a more robust and effective solar flare prediction framework can be established. This comprehensive approach enhances the accuracy of specific flare event predictions and significantly advances our grasp of solar dynamics.

Contribution Type

Theme

Connecting Solar Corona to Heliosphere

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Session Classification: Solar Active Regions and Eruptions