

## 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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