

Session Program

Aug 17 - 21, 2026



GSST/CBERS-5 International Symposium on Machine Learning in Heliophysics and Space Weather

Invited Talks

National Institute for Space Research, São José dos Campos, SP, Brazil, Fernando de Mendonça - LIT
Av. dos Astronautas, 1758 - Jardim da Granja, São José dos Campos - SP, 12227-010

Mon, August 17

9:40 AM

Invited Talks

Session |

Location: National Institute for Space Research, São José dos Campos, SP, Brazil, Fernando de Mendonça - LIT, Av. dos Astronautas, 1758 - Jardim da Granja, São José dos Campos - SP, 12227-010

9:40 - 10:20 AM

Selected advances achieved by space- and balloon-borne missions

Speaker

Sami Solanki

10:20 AM

2:00 PM

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2:00 - 2:40 PM

From Pixels to Physics: Reconstructing the Solar Atmosphere with Physics-Informed AI

Speaker

Dr Robert Jarolim

2:40 PM

4:10 PM

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4:10 - 4:50 PM

Machine learning techniques for remote sensing of the Sun and inner heliosphere

Speaker

Dr Francisco Iglesias

4:50 PM

Tue, August 18

9:00 AM

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9:00 - 9:40 AM

Solar magnetic field observation for HSOS: from SMFT to SPO

Speaker

Junfeng Hou

9:40 AM

2:00 PM

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2:00 - 2:40 PM

Computer Vision with small-scale magnetic elements in the photosphere

Speaker

Dr Peter Keys

2:40 PM

4:10 PM

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4:10 - 4:50 PM

Individual and Collective Dynamics of Vortical Structures in the Solar Atmosphere

Speaker

Dr Viktor Fedun

4:50 PM

Wed, August 19

9:00 AM

Invited Talks
Session |
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9:00 - 9:40 AM **Wave theories and modelling in the lower solar atmosphere**

Speaker
Dr Gary Verth

9:40 AM

2:00 PM

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2:00 - 2:40 PM

The impact of machine learning, AI, and novel analysis tools to better understand the plasma dynamics of the Sun

Speaker
David B. Jess

2:40 PM

4:10 PM

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4:10 - 4:50 PM

The Data-Driven Evolution of Heliophysics: Bridging Physical Mechanisms and Machine Learning in the Inner Magnetosphere

Speaker
Victor A. Pinto

4:50 PM

Thu, August 20

9:00 AM

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9:00 - 9:40 AM

Coupling Between Complex Solar Wind Structures and Outer Radiation Belt Dynamics

Speaker

Dr Ligia Alves da Silva

9:40 AM

2:00 PM

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2:00 - 2:40 PM

The Hainan Ionogram Dataset: Supporting AI-Enabled Spread-F Monitoring, Prediction, and Space Weather Operations

Speaker

Zheng Wang

2:40 PM