# European Space Weather Week 2025 - cloned July 3

## Wednesday, 5 November 2025

**CD1 - Combination of physics-based and data-driven methods for space weather forecasting: orals - part 1 (13:30 - 14:45)**

**-Conveners: Sabrina Guastavino; Filipa S. Barros; Kamen Kozarev; Dario Del Moro**

| time | [id] title | presenter |
|---|---|---|
| 13:30 | [188] From Detection to Reconstruction: Combining Real-Time ICME Detection and Automatic Flux Rope Fitting for Operational Short-Term Forecasting | RÜDISSER, Hannah T. |
| 13:45 | [161] Solar Active Region Classification with Deep Learning | LEGNARO, Edoardo |
| 14:00 | [197] Probabilistic Forecasts of Radiation□Belt Enhancement Event Durations and Peak Fluxes Using Gaussian Processes | VOSKRESENSKAYA, Maria |
| 14:15 | [183] Improved Geomagnetic Activity Prediction via Deep Learning and Extended Solar EUV Imaging Dataset | BERNOUX, Guillerme |
| 14:30 | [184] Physics-Informed Neural Networks for Plasmasphere Electron Density Forecasting | SHAHSAVANI, Sadaf |

**CD1 - Combination of physics-based and data-driven methods for space weather forecasting: orals - part 2 (15:00 - 16:30)**

**-Conveners: Sabrina Guastavino; Filipa S. Barros; Kamen Kozarev; Dario Del Moro**

| time | [id] title | presenter |
|---|---|---|
| 15:00 | [208] Combining Physics-Derived and Machine-Learned Features for Probabilistic Solar Flare Forecasting | Dr DINEVA, Ekaterina |
| 15:15 | [22] Real-time Reconstruction of 3D Coronal Magnetic Fields using a Physics-informed Neural Opeartor | JEON, Mingyu |
| 15:30 | [77] Bypassing the static input size of neural networks in flare forecasting by using spatial pyramid pooling | VONG, Philippe |
| 15:45 | [130] Data-Driven Strategies for Early Warning and Identification of Geomagnetic Storms | TROMBINI, Matteo |
| 16:00 | [3] A Multi-Stage Self Organizing Map-Autoencoder-LSTM Model for Total Solar Irradiance Prediction | Mr RAJI, Idowu |
| 16:15 | [298] Attention-Based Deep Learning for Solar Flare Forecasting from SHARP Time Series | CHIERICHINI, Simone |

# Thursday, 6 November 2025

**CD1 - Combination of physics-based and data-driven methods for space weather forecasting: Orals - part 3 (10:45 - 12:15)**

**-Conveners: Sabrina Guastavino; Filipa S. Barros; Kamen Kozarev; Dario Del Moro**

| time | [id] title | presenter |
|---|---|---|
| 10:45 | [225] Integrating data-driven and physics-based modelling of magnetosheath dynamics | MILOSHEVICH, George |
| 11:00 | [150] Next steps in the development of PCA-NN model for the ionosphere: different parameters, regions, NN algorithms and input parameters | MOROZOVA, Anna |
| 11:15 | [124] Prediction of Solar Energetic Particle Events Using Explainable AI: Discovering Insights into Physics-Based Predictors | FUJITA, Naho |
| 11:30 | [103] Data assimilation of cellular automatons for solar flare prediction | LAMARRE, Henri |
| 11:45 | [107] Forecasting the duration and intensity of space weather events: How long? How strong? | REEVES, Geoffrey |
| 12:00 | [299] Extended Lead-Time Geomagnetic Storm Forecasting with Solar Wind Ensembles and Machine Learning | BILLCLIFF, Matthew |

**CD1 - Combination of physics-based and data-driven methods for space weather forecasting: Orals - part 4 (14:45 - 16:00)**

**-Conveners: Sabrina Guastavino; Filipa S. Barros; Kamen Kozarev; Dario Del Moro**

| time | [id] title | presenter |
|---|---|---|
| 14:45 | [76] Bayesian Inference for Automated 3D CME Characterization and Uncertainty Quantification | HERNANDEZ CAMERO, Julio |
| 15:00 | [111] Advancing Solar Flare Forecasting with a Deep Learning Approach Using Multi-Modal Inputs | Dr DORIA ROSALES, Elizabeth |
| 15:15 | [162] Thermospheric Response to Space Weather: Timing and Driver Analysis using Earth-Orbit Satellite Decay Data | MERCEA, Vanessa |
| 15:30 | [155] Surrogate Modeling for the Next-Generation Probabilistic Drag Modeling Framework | SICOLI, Daniele |
| 15:45 | [147] Exploring Continuous Time-to-Event Prediction Models in the Realm of Solar Flare Forecasting | MEYER ZU WESTRAM, Moritz |