UK Space Weather and Space Environment Meeting II

Programme

Wednesday 11 September 2024

8:30 AM - 9:00 AM	**Arrival Refreshments**
9:00 AM - 9:45 AM (Room: Exeter Suite 2)	**EISCAT & LOFAR** **Maria Mihalikova: Invited Speaker (9:00 AM - 9:15 AM)** EISCAT_3D – A Multi-Static Phased-Array Incoherent Scatter Radar in Northern Fennoscandia **Sophie Maguire: Invited Speaker (9:15 AM - 9:30 AM)** Observations of plasma structures of varying scale sizes in the high-latitude ionosphere with a suite of instrumentation **Biagio Forte (9:30 AM - 9:45 AM)** Radio wave scintillation observed through LOFAR to infer properties of ionospheric structures
9:45 AM - 10:30 AM (Room: Exeter Suite 2)	**The May 2024 Storm** **Anthony Iampietro (9:45 AM - 10:00 AM)** A Perspective of the Real Time Analysis of the May 2024 Storm from The Moon to Mars Space Weather Analysis Office **Eva Weiler (10:00 AM - 10:15 AM)** Assessing the geo-effectiveness of CMEs from a sub-L1 perspective **Siegfried Gonzi (10:15 AM - 10:30 AM)** An Analysis of the May 2024 Superstorm with the tools used by Met Office Forecasters
10:30 AM - 11:00 AM	**Morning Break**
11:00 AM - 12:00 PM (Room: Exeter Suite 2)	**Parallel 1A: The Ionosphere** **Michaela Mooney (11:00 AM - 11:15 AM)** Evaluating auroral forecasts against satellite observations under different levels of geomagnetic activity **David Themens: Invited Speaker (11:15 AM - 11:30 AM)** High latitude ionospheric response to the May 2024 Storm and its impacts on GNSS **Cathryn Mitchell: Invited Speaker (11:30 AM - 11:45 AM)** MIDAS ionospheric data assimilation and applications to GNSS **Martin Cafolla (11:45 AM - 12:00 PM)** Identifying and Tracking TEC Enhancements seen in JPL GIMs and their response to Geomagnetic Activity

11:00 AM - 12:00 PM (Room: County Suite)	**Parallel 2A: Solar** **Thomas Howson: Invited Speaker (11:00 AM - 11:15 AM)** A Review of Contemporary Models of the Solar Corona **Andrew Hillier (11:15 AM - 11:30 AM)** Prominence/filament dynamics and their potential role in the eruption of quiet Sun filaments **William Beckwith-chandler (11:30 AM - 11:45 AM)** A Precursor to Solar Prominence Eruptions: Detection and Analysis of EUV Prominence Oscillations **Jennifer O'Hara (11:45 AM - 12:00 PM)** Bridging Operations to Research: Development and Utilization of the SIDC Moderated Solar Weather Event List
12:00 PM - 1:00 PM (Room: Exeter Suite 2)	**Parallel 1B: Instrumentation** **John Morgan (12:00 PM - 12:15 PM)** High resolution mapping of the inner heliosphere via ground-based radio observations with state-of-the-art instruments: an australian perspective **Jackie Davies (12:15 PM - 12:30 PM)** Results of stray-light testing of the COR Stray-light Qualification Model (CSQM) **Fan Lei (12:30 PM - 12:45 PM)** Development of Compact Cherenkov Proton Detectors and Telescopes **Mario Bisi (12:45 PM - 1:00 PM)** RASOR: Radio Astronomy and Space Observation Research Facility - An Opportunity for the Future
12:00 PM - 1:00 PM (Room: County Suite)	**Parallel 2B: The Magnetosphere** **Thomas Berger (12:00 PM - 12:15 PM)** The Space Weather Operational Readiness Development Center: a new NASA space weather center of excellence **Robert Fear: Invited Speaker (12:15 PM - 12:30 PM)** Joint Cluster/Ground-Based Studies in the First 20 Years of the Cluster Mission **Tom Elsden: Invited Speaker (12:30 PM - 12:45 PM)** Numerical Modelling of ULF Waves in Asymmetric Media **Enrico Camporeale (12:45 PM - 1:00 PM)** Probabilistic forecasting with physics-informed machine learning: Sun-to-mud
1:00 PM - 2:00 PM	**Lunch**
1:30 PM - 2:00 PM (Room: Exeter Suite 2)	**MIST/UKSP Lunch Session**

2:00 PM - 4:00 PM	**Poster Session** **Sponsored by UK Space Agency**
4:00 PM - 5:00 PM (Room: Exeter Suite 2)	**Parallel 1C: The Mesosphere and Thermosphere and Ionosphere** **Anna Belehaki (4:00 PM - 4:15 PM)** Large Scale Travelling Ionospheric Disturbances AI/ML based forecasting model **John Plane: Invited Speaker (4:15 PM - 4:30 PM)** Meteoric ablation and metallic layers in the mesosphere and lower thermosphere: impacts of space weather **Benjamin Reid (4:30 PM - 4:45 PM)** A Real-Time Data Assimilation International Reference Ionosphere **Natalie Reeves (4:45 PM - 5:00 PM)** Understanding the sensitivity of TIe-GCM's forcing parameters
4:00 PM - 5:00 PM (Room: County Suite)	**Parallel 2C: The Solar Wind and Coupling to the Magnetosphere** **Harriet Turner: Invited Speaker (4:00 PM - 4:15 PM)** Data assimilation in the solar wind **Mathew Owens (4:15 PM - 4:30 PM)** Solar-wind Modelling: The Importance of Boundary Evolution **Bernard Jackson (4:30 PM - 4:45 PM)** Heliospheric Mesoscale 3-D Reconstructions and the UCSD Plan for the NASA Small Explorer PUNCH Analyses **Dusan Odstrcil (4:45 PM - 5:00 PM)** Improving the Arrival-Time Prediction of Coronal Mass Ejections by Heliospheric Imagery and Ensemble Modeling
5:00 PM - 6:00 PM (Room: Exeter Suite 2)	**Parallel 1D: Ground and Infrastructure** **Cameron Patterson: Invited Speaker (5:00 PM - 5:15 PM)** Could Space Weather Delay Your Train? Modelling the Impacts of Geomagnetically Induced Currents on Railway Signalling Systems **Matthew Allcock (5:15 PM - 5:30 PM)** Space weather and autonomous transport: Voices from industry on risk and resilience **Joseph Eggington: Invited Speaker (5:30 PM - 5:45 PM)** Extreme space weather risks to power plants: assessing vulnerability, building resilience and improving preparedness **Ciaran Beggan (5:45 PM - 6:00 PM)** SWIMMR N4: An overview of the completed SAGE project

5:00 PM - 6:00 PM (Room: County Suite)	**Parallel 2D: The Radiation Belts** **Sarah Glauert: Invited Speaker (5:00 PM - 5:15 PM)** Energy diffusion in the Earth's radiation belts **Ravindra Desai (5:15 PM - 5:30 PM)** Electron injections and decays during solar cycle 22 observed by CRRES **Fraser Baird (5:30 PM - 5:45 PM)** Observations of the Radiation Belts during Solar Minimum **Dedong Wang: Invited Speaker (5:45 PM - 6:00 PM)** Prediction of Adverse effects of Geomagnetic storms and Energetic Radiation (PAGER) Project and Follow-On
7:00 PM - 10:00 PM (Room: Chiefs Suite)	**Conference Dinner**