## UK Space Weather and Space Environment Meeting III

## Lightning Talks 1: Monday 8 September 2025

| | First Name | Last Name | Organisation | Paper Title |
|---|---|---|---|---|
| 1 | Martin | Archer | Imperial College London | Characterising magnetopause surface waves within magnetosphere–ionosphere–ground coupling |
| 2 | Stephen | Bannister | Northumbria University | Quantitative Characterisation of Magnetic Topology in Solar Active Regions for Operational Space Weather Forecasting |
| 3 | Susanna | Bekker | Queen's University Belfast | Response of the total electron content in the ionosphere to the impulsive and late phases of X-class solar flares |
| 4 | Damini | Bhagwath | University of Central Lancashire | Model Validation using Historical SEP Event Analysis of the 3D Physics-Based Forecasting Tool SPARX |
| 5 | Christopher | Chen | Queen Mary University of London | Examining time-dependent heliospheric solar wind properties driven by evolving WSA boundaries |
| 6 | Ingrid | Cnossen | British Antarctic Survey | Projected long-term decline in upper atmosphere density and its impacts on the space debris environment |
| 7 | Jackie | Davies | STFC | UK-ODESSI: A Low-Cost, Low-Earth Orbit, In-Orbit Pathfinder for UK Space Weather |
| 8 | Clive | Dyer | Csdradconsultancy And University of Surrey Space Centre | The Importance of Single Event Effects For Atmospheric Radiation Scales, Alerts and Actions |
| 9 | Ian | Mann | University of Alberta | Understanding, Modelling, and Quantifying the Space Weather Effects of Geomagnetically Induced Currents (GICs) on the Electric Power Grid |
| 10 | Mike | Marsh | Met office | Atmospheric Radiation: the Met Office Pathway to Operations |
| 11 | Juliana | Rinaldi-Semione | SDGs in Space / Calymru Research | Conceptualising ‘environment’ and ‘sustainability’ for an off-Earth future: leveraging existing expertise and frameworks to make a start |
| 12 | Christopher | Chen | Queen Mary University of London | Scale-by-scale accuracy of solar wind analogue ensemble forecasts |

## Lightning Talks 2: Wednesday 10 September 2025

| | First Name | Last Name | Organisation | Paper Title |
|---|---|---|---|---|
| 1 | Lucie | Green | University College London | Bayesian Inference for Automated 3D CME Characterization and Uncertainty Quantification |
| 2 | Jithu | Jose Athalathil | Indian Institute of Technology Indore | Investigating Nonlinear Quenching Effects on Polar Field Buildup Using Physics-Informed Neural Networks |
| 3 | Delores | Knipp | University of Colorado Boulder | Mid-latitude Geomagnetically Induced Currents as a Manifestation of Penetrating Electric Fields |
| 4 | Timo | Laitinen | University of Lancashire | Multi-point Solar Energetic Particle observations and space weather forecasting |
| 5 | Emily | Mottram | University College London | Probing the characteristics of a pre-eruptive flux rope using novel techniques |
| 6 | Sirsha | Nandy | Indian Institute of Technology Indore | Solar Wind Density Pulse Effects on the Ionospheric Electrodynamics Under Variable IMF Orientations |
| 7 | Yiwei | Ni | University of St Andrews | Unravelling Filament Barb Dynamics through Pseudo-3D Hydrodynamic Simulations |
| 8 | Louisa | Prattley | National Emergency Management Agency New Zealand | Number Eight Wire: Building New Zealand's Approach to Managing Space Weather Risk |
| 9 | Ian | Richardson | University of Maryland / Goddard Space Flight Centre | Coronal Mass Ejections Associated with Solar Energetic Particle Events Observed in the Low Corona by the Mauna Loa Solar Observatory |
| 10 | David R. | Themens | University of Birmingham | Statistical modelling of high latitude Sporadic-E climatology: A Sporadic-E module for E-CHAIM |
| 11 | Bhagyashree | Waghule | University of Colorado Boulder | Very Near-Earth Reconnection (VNERX) and its connection to the 30A GIC spike in the Eastern US |
| 12 | Samuel | Wharton | University of Leicester | Measuring the Magnetopause Position with SMILE-SXI |