

“Autumn MIST 2019 Take 2”

Friday 24 January 2020, Geological Society

0930	Registration	
	<i>Session 1</i>	
1025	Welcome to the meeting	
1030	Mathew Owens (University of Reading) Invited	Sun to mud: The challenges of forecasting within the coupled space-weather system
1050	Stuart Bale (UC Berkeley/Imperial College/Queen Mary)	Some early results from the Parker Solar Probe FIELDS instrument
1102	Diego de Pablos (MSSL/UCL)	Connecting small-scale dynamics in the solar atmosphere to in-situ solar wind measurements
1114	Sofija Durward (Lancaster University)	IMF variability at Mars: a statistical study
1126	Alexander Bader (Lancaster University)	Cassini’s Grand Finale - a glimpse of Saturn’s auroral acceleration region?
1138	Gabrielle Provan (University of Leicester)	Solar wind and Planetary period modulations of reconnection events in Saturn’s magnetotail
1150	Affelia Wibisono (MSSL/UCL)	Temporal and Spectral Studies of Jupiter’s X-ray Aurorae with XMM-Newton During a Compression Event Observed by Juno
1202	James Waters (University of Southampton)	Towards a multi-decadal dataset of auroral kilometric radiation source parameters with Wind
1214	Poster Session 1 (Lower Library)	
1310	LUNCH	
1350	MIST Council Update	
	<i>Session 2</i>	
1400	Sean Elvidge (SERENE, University of Birmingham)	Probabilistic Forecasting of the Ionosphere/Thermosphere

1412	Ingrid Cnossen (British Antarctic Survey)	Simulated trends in ionosphere-thermosphere climate due to predicted main magnetic field changes from 2015 to 2065
1424	Richard Boynton (University of Sheffield)	Spatiotemporal forecasting of the inner magnetosphere: a machine learning approach
1436	Oliver Allanson (University of Reading)	Scattering and energisation of radiation belt electrons by incoherent waves
<i>Lightning Talks</i>		
1448	Chris Arridge (Lancaster University)	Ikuchi: 3D Views of Solar System Magnetospheres
1450	Caitriona Jackman (University of Southampton)	New dataset of magnetopause and bow shock crossings from Cassini mission: list details and applications
1502	Clare Watt (University of Reading)	What are the fundamental modes of energy transfer and partitioning in the coupled Magnetosphere-Ionosphere system? A proposal submitted to ESA Voyage 2050
1504	Poster Session 2 & Refreshments (Lower Library)	
<i>Session 3</i>		
1610	Matthew Brown (University of Southampton)	Future secular neutral density trends at low Earth orbit altitudes and their implications for the space debris environment
1622	Heli Hietala (Imperial College London)	Magnetosheath Jets in Global 3D Hybrid Simulations
1634	Caoimhe Doherty (MSSL/UCL)	A case study of reconnection signatures observed in Earth's magnetospheric cusps
1646	Michaela Mooney (MSSL/UCL)	Evaluating Auroral Forecasts Against Satellite Observations
1658	Han Zhang (University of Durham)	Three dimensional simulations of the most extreme space weather event on record: The 23 July 2012 Interplanetary Coronal Mass Ejection observed by STEREO-A
1710	Meeting Adjourns	

Poster Session 1, 12.14-13.10

1	Lorenzo Matteini (Imperial College London)	Large scale 1/f magnetic field spectrum in the solar wind close to the Sun
2	Jade Reidy (British Antarctic Survey)	Comparing high energy electron precipitation from radiation belt models to satellite observations
3	Timo Laitinen (University of Central Lancashire)	Bayesian analysis of STEREO turbulence observations for solar energetic particle transport
4	Luca Franci (Queen Mary University of London)	Impact of the turbulence strength on the spectral properties and on electron acceleration
5	Tom Elsdon (University of Leicester)	The Effect of Fast Normal Mode Structure and Magnetopause Forcing on FLRs in a 3-D Waveguide
6	Steven Sembay (University of Leicester)	The Soft X-ray Imager (SXI) on the forthcoming SMILE Mission
7	Allan Macneil (University of Reading)	Helios Observations of Strahl Electrons on Magnetic Switchbacks
8	Wayne Gould (Lancaster University)	Deciphering the Solar Wind at Saturn
9	Josh Wiggs (Lancaster University)	Hybrid Magnetospheric Modelling at the Outer Planets using Python
10	Graziella Branduardi- Raymont (MSSL/UCL)	Imaging the Earth's magnetic environment in soft X-rays: SMILE
11	Jasmine Sandhu (MSSL/UCL)	Challenging the Use of Ring Current Indices During Geomagnetic Storms
12	Andrey Samsonov (MSSL/UCL)	Is the relation between the solar wind dynamic pressure and the magnetopause standoff distance so simple?
13	Julia Stawarz (Imperial College London)	Turbulence-Driven Magnetic Reconnection: A Survey of Magnetosheath Turbulence with the Magnetospheric Multiscale Mission
14	James Lane (Lancaster University)	Magnetotail fast flows and their association with IMF By driven magnetotail asymmetries
15	Imogen Gingell (University of Southampton)	The statistics of magnetic reconnection at Earth's bow shock
16	Aisling Bergin (University of Warwick)	AE, Dst and their SuperMAG counterparts: What is the effect of improved spatial resolution in geomagnetic indices?
17	Richard Haythornwaite (MSSL/UCL)	Ion velocities in the Enceladus plume

- 18 Carl Haines
(University of Reading) Forecasting Geomagnetic Activity: Analogue Ensemble and Support Vector Machine Approaches

Poster Session 2, 15.04-16.10

1	Maria-Theresia Walach (Lancaster University)	Ionospheric convection during geomagnetic storm phases observed with SuperDARN
2	Samuel Wharton (University of Leicester)	Determining Dayside Cold Plasma Dynamics during Geomagnetic Storms with ULF Waves
3	Jefferson Agudelo (MSSL/UCL)	Identifying and Quantifying the Role of Magnetic Reconnection in Space Plasma Turbulence
4	Mayur Bakrania (MSSL/UCL)	A statistical study of solar wind electron populations using machine learning techniques
5	Samuel Walton (MSSL/UCL)	How Coherent are Flux Variations in the Outer Radiation Belt?
6	Matt Lang (University of Reading)	Data assimilation in the solar wind
7	Andy Smith (MSSL/UCL)	The magnetospheric ULF wave counterpart of substorm onset
8	Tommy Bridgen (Nottingham Trent University)	Mapping plasma features in the ionosphere observed by LOFAR
9	Peter Rowe (Nottingham Trent University)	Observed Decay of Polar Cap Patches
10	Jesse Coburn (Queen Mary University of London)	Turbulent generation of pressure anisotropy in the solar wind.
11	Harneet Sangha (University of Leicester)	The Relationship Between Region 2 Field-Aligned Currents Bifurcations and the Occurrence of Sub-Auroral Polarization Streams
12	Alexandra R. Fogg (University of Leicester)	Multi-Instrument Observations of the effects of a positive Sudden Impulse on the high-latitude ionosphere
13	Dale Weigt (University of Southampton)	Future exploration of Chandra observations of auroral emission during Juno apojove 2017
14	Shahbaz Chaudhry (University of Warwick)	Multi-Layer Relaxation Models for Coronal Heating
15	Ryan Cumming (University of Reading)	Relationship between the solar wind and ultra-low frequency waves inside and outside of geomagnetic storms
16	Lauren Orr (University of Warwick)	Network Community Structure of Substorms using SuperMAG magnetometers

17	Greg Hunt (Imperial College London)	Saturn's Auroral Field-Aligned Currents: Observations from the Northern Hemisphere Dawn Sector During Cassini's Grand Finale
18	Rhys Thompson (University of Reading)	Pro-L* - A probabilistic L* mapping tool for ground observations to the magnetic equator
19	Peter Stephenson (Imperial College London)	Multi-instrument Analysis of FUV emissions in the Southern Hemisphere of comet 67P