

## Autumn MIST 2014 – 28<sup>th</sup> November, 2014

## Royal Astronomical Society, Burlington House, Piccadilly

10:30	Mike Lockwood	Space Climate Change (Invited)
10:55	Ingrid Cnossen	Causes of long-term change in the upper atmosphere
11:07	Angeline Burrell	Solar Cycle Variations in the Polar Ionosphere
11:19	Jasmine Sandhu	The dependence of high-latitude geomagnetic pulsations on magnetospheric plasma mass loading
11:31	Beatriz Sanchez-Cano	Scale Height variations with solar cycle in the ionosphere of Mars
11:43	Ben Hall	Assessment of Electron Flux Irregularities, or 'Holes', in the Upper Atmosphere of Mars
11:55	Ian McCrea	MIST Update
		LUNCH 12:00-13:15
13:15	Luke Barnard	The Solar Stormwatch CME catalogue
13:27	Kimberley Tucker-Hood	Validation of a priori CME Arrival Predictions Made Using Real- Time Heliospheric Imager Observations
13:39	Leopoldo Carbajal Gomez	Parametric study of preferential ion heating due to intermittent magnetic fields in the solar wind
13:51	Rishi Mistry	Magnetic reconnection exhausts in the solar wind
14:03	Heli Hietala	Depleting effects of ICME-driven sheath regions on the outer electron radiation belt
14:15	Simon Good	The radial and azimuthal expansion of a magnetic cloud
14:27	Graziella Branduardi-Raymont	AXIOM: Advanced X-ray Imaging Of the Magnetosphere
		COFFEE & POSTERS 14:40-15:40
15:40	Martin Archer	The global magnetospheric impacts of Foreshock Bubbles
15:52	Dimitry Pokhotelov	Solar Wind Dynamics Controlling Wave Power in the Magnetosphere
16:04	Jennifer Carter	Dayside reconnection under IMF-B <sub>Y</sub> dominated conditions: the formation and movement of bending arcs

16:16	Maria-Theresia Walach	Are Steady Magnetospheric Convection Events Prolonged Substorms?
16:28	Zhonghua Yao	Magnetic Reconnection Outflows and their Critical Role in Driving the Coupled Magnetotail
16:40	Nadine Kalmoni	The substorm onset arc: Diagnosing the magnetotail plasma instability from the ground
16:52	Sam Tuttle	Estimating ionospheric electric fields using optical observations of the aurora
17:04	Nigussie Giday	Ionospheric Tomography using GNSS data in Africa: the challenges towards imaging small scale structures in Africa

## **Posters**

Ingrid Cnossen	The role of the Sun in long-term change in the F2 peak ionosphere: new insights from Ensemble Empirical Mode Decomposition (EEMD) and numerical modelling
Louise Cooper	Cluster dual-spacecraft observations of Kinetic Alfven Waves in the Plasma Sheet Boundary Layer
John Coxon	Birkeland current measurements compared with estimates derived from a Dungey Cycle-based model
Joe Dods	Quantifying the spatio-temporal correlation during a substorm using dynamical networks from the SuperMAG database of ground based magnetometer stations
Jonathan Eastwood	Ion dynamics near magnetotail dipolarization fronts associated with magnetic reconnection
Colin Forsyth	Increases in plasma sheet temperature with solar wind driving during substorm growth phases
Alice Foster	Magnetic Reconnection Structures in the Solar Wind
Greg Hunt	Saturn's Field-Aligned Currents: Sub-corotation and Planetary Period Oscillation Components
Philip Hush	Robust Features of the Size-Above-Threshold Distribution of Space Weather Events Seen in Geomagnetic Indices
Caitriona Jackman	Observation of field dipolarization, planetward ion beams and streaming energetic particles: A case study of long-duration reconnection in Saturn's tail
Khurom Kiyani	Sub-ion scale intermittency and the development of filamentary current structures from the Hall effect
Mai Lam	Solar-wind-driven geopotential height anomalies originate in the Antarctic lower troposphere
Kirthika Mohan	First results of simulations of 'multi-band' structures in spacecraft observations of inner magnetosphere plasma electrons and ions
Jonathan Nichols	Modelling auroral currents at hot Jupiters: implications for auroral radio emissions
David Nunn	Non linear wave particle interactions in oblique whistlers- computation of growth rates and resonant particle distribution functions
Kareem Osman	Multi-Spacecraft Measurement of Turbulence within a Magnetic Reconnection Jet
Amy Ronksley	Thermospheric vertical winds and temperature enhancements associated with auroral energy deposition