# **Space Weather Energy Pathways and Implications for Impacts**

# Friday 08 January 2021

10:30	Welcome
10:35	Emilia Kilpua (Invited), University of Helsinki
	Large-scale solar wind structures as drivers of space weather storms
11:05	John Coxon, University of Southampton
	The heavy-tailed distributions of Birkeland currents observed by AMPERE
11:20	Break
11:35	Juliane Huebert, British Geological Survey
	Investigating the Space Weather impacts on ground-based technologies in the UK - Measuring and modelling geomagnetically induced currents in power networks and pipelines
11:50	Sarah Bentley, Northumbria University
	Magnetospheric moderation of solar wind drivers in a statistical model of ULF waves
12:05	Lunch
12:50	Andrew Dimmock (Invited), Swedish Institute of Space Physics Uppsala
	The geomagnetic response in Fennoscandia to the September 2017 storm: observations and modelling
13:20	Frances Staples, MSSL, UCL
	Key Signatures of Magnetopause Shadowing during the September 2017 Geomagnetic Storm.
13:35	Allison Jaynes, University of Iowa
	High-energy electron dynamics of the September 2017 geomagnetic storm
13:50	Open Discussion & Lightning Talks on the September 2017 Storm
14:35	Break
14:50	Poster Session on GatherTown
15:25	Closing Remarks

#### **GatherTown Links**

GatherTown Guide	https://drive.google.com/file/d/1FGDyjc1Z7zYctYNwzkUeZ5YZ9 qap0iN8/view  Once in a room, you can move using the arrow keys on your keyboard and view a poster by pressing the "x" key.
Poster Room 1	https://gather.town/app/k13iq5D5GxiQTCPm/1_SpaceWeather
Poster Room 2	https://gather.town/app/nXQcgUISMwKAgl48/2_SpaceWeather
Poster Room 3	https://gather.town/app/Kcl88jyZZHK6FgGF/3_SpaceWeather
Social Room / Overflow	https://gather.town/app/0Up1xseKalXH3rtT/4_SpaceWeather

Please note that each GatherTown Room holds a <u>maximum of 25</u> <u>attendees</u>. If a room is full, please try a different one.

Please note that the platform does not work with Safari (Chrome or Firefox are recommended).

## **Google Drive Repository**

PDF versions of posters can be accessed here: <a href="https://drive.google.com/drive/folders/19sKe-jZF841xeGGzsgeWn1FIXLoMg34-?usp=sharing">https://drive.google.com/drive/folders/19sKe-jZF841xeGGzsgeWn1FIXLoMg34-?usp=sharing</a>

#### **Poster Presentations**

#### **Poster Room 1:** <a href="https://gather.town/app/k13iq5D5GxiQTCPm/1\_SpaceWeather">https://gather.town/app/k13iq5D5GxiQTCPm/1\_SpaceWeather</a>

Mayur R. Bakrania, Mullard Space Science Laboratory, UCL

Applying unsupervised learning and outlier detection methods to characterise magnetotail plasma sheet electrons

#### Xiangcheng Dong, RAL Space

Field-aligned current ordering and intense ground dB/dt variations

### Poster Room 2: https://gather.town/app/nXQcgUISMwKAgI48/2 SpaceWeather

Tom Elsden, University of Leicester

Modelling the Varying Location of Field Line Resonances During Geomagnetic Storms

#### Colin Forsyth, UCL

Quantitatively comparing the temporal and spatial variations of the aurora, waves and magnetic deflections associated with substorms

#### **Poster Room 3:** https://gather.town/app/Kcl88jyZZHK6FgGF/3\_SpaceWeather

James Waters, University of Southampton

Multipoint Remote Observations of Auroral Kilometric Radiation

#### Clare Watt, Northumbria University

A comparison of magnetospheric ULF wave activity during storm and non-storm times

### **Lightning Talks**

#### Joseph Eggington, Imperial College London

Highlights from a Global MHD Simulation of the September 2017 Geomagnetic Storm

#### Ciaran Beggan, British Geological Survey

Ground magnetic variation data for the North Sea region during the September 2017 storm

#### Lauren Orr, Lancaster University

Wavelet analysis of the European ground response to September 2017 storm

#### Maria-Theresia Walach, Lancaster University

SuperDARN observations of the September 2017 storm

#### Beatriz Sanchez-Cano, University of Leicester

Low ionospheric ionization at Mars and Earth due to the September 2017 Space Weather event

#### Frances Staples, MSSL, UCL

Radiation belt phase space density observations (preliminary title)