CTR Wilson Workshop on Lightning Interferometry
University of Bath, 12-14th November 2018

Sponsored by EarthNetworks

Room 2E3.4 in the Department of Electrical and Electronic Engineering at the University of Bath

Monday, November 12th

10:00-10:30	Coffee and Tea
10:30-10:45	**Welcome and Introduction**
10:45-12:00	**Michael Stock - Techniques for lightning interferometry: imaging, interpolation, nearfield corrections, and deconvolution**
12:00-14:00	Lunch break
14:00-15:15	**Brian Hare and Olaf Scholten - 3D imaging with meter-level accuracy with the LOFAR radio telescope**
15:15-15:30	Tea and Coffee
15:30-16:45	**Ivana Kolmasova and Ondrej Santolik - Broad-band electromagnetic measurements of lightning radiation: Overview of IAP instrumentation and latest results**
16:45-18:00	Discussion

Tuesday, November 13th

9:00-9:30	Coffee and Tea
9:30-10:45	**Mark Stanley - Broadband VHF Interferometry Inside Lightning Mapping Arrays**
10:45-12:00	**Richard Sonnenfeld - Lightning channel conditioning and the measurement of currents on K-changes**
12:00-14:00	Lunch break
14:00-15:15	**Martin Fullekrug - Low Frequency Radio Interferometry**
15:15-15:30	Tea and Coffee
15:30-16:15	**Robert Watson - Measurement of tropospheric refractivity using interferometry**
16:15-16:45	**Biagio Forte - Ionospheric irregularity detection with LOFAR**
16:45-17:30	Discussion
19:00-21:00	Workshop Dinner

Wednesday, November 14th

9:00-9:30	Coffee and Tea
9:30-10:15	**Zhuling Sun and Mingyuan Liu - Three-dimensional location technology for VHF Lightning Mapping Interferometer system in SHATLE, China**
10:15-11:00	**Jeff Lapierre - Remote Measurements of Volcanic Plume Electrification Using a Sparse Network Technique**
11:00-11:15	Snacks
11:15-12:30	**Michele Urbani - Broadband VHF interferometry to study the origin of the high-energy radiation from lightning**
12:30-13:00	**Workshop Summary**
15:00-18:00	Exploration of Bath

CTR Wilson Meeting on Atmospheric Electricity

University of Bath, 15th November 2018

Sponsored by Metrol, the Institute of Physics and the Royal Meteorological Society

Supported by the International Union of Radio Science

Room 2E3.4 in the Department of Electrical and Electronic Engineering at the University of Bath

1030-1100	Welcome Coffee
1100-1120	**Torsten Neubert - Early results from ASIM on lightning and sprites**
1120-1140	**Dakalo Mashao - Altitude estimation of sprites observed in South Africa**
1140-1200	**Michael Kosch - Estimating the electric field within sprites**
1200-1220	**Jeff Lapierre - Observing regional variability in lightning NOx production rates**
1220-1240	**Corrado Cimarelli - The bright side of the plume - Volcanic plume electrification: observations and experiments**
1240-1300	**Richard Kacerek and Peter Campbell-Burns: UKMON – Amateur Citizen Science**
1300-1430	Lunch break – Wessex Restaurant
1430-1450	**Martin Airey and Graeme Marlton - Atmospheric Electricity in the United Arab Emirates**
1450-1510	**Clara Montgomery - The electric flight of the bumblebee**
1510-1530	**Kuang Koh – Bee MEMS**
1530-1550	**Michael Rycroft - Five important questions in atmospheric electricity**
1550-1610	**Karen Aplin - J.A. Chalmers and his legacy to atmospheric science**
1610-1700	Posters and Tea

- **Ellard Hunting - Recurrent effects of agricultural chemicals on floral electric fields**
- **Jonathon Wilkinson - Investigating the performance of thunderstorm forecasts over the UK and Europe using two high-resolution operational NWP models**
- **Adam Peverell – Radio measurements of lightning and sprites with small arrays**
- **Simon Ghilain – Optical sprite observations with camera and photosensor from the ground**
- **Xue Bai – Lightning detection and location**

Internet Access: eduroam or WiFi Guest_ (need registration)

Registration: https://www.ctrwiae.org/registration

How to get to Bath: https://www.ctrwiae.org/howtogettobath

How to get to the University of Bath: https://www.ctrwiae.org/howtogettobathuniversity

Parking permit: Email Ann Linfield at A.D.Linfield@bath.ac.uk

Accommodation in Bath: https://www.ctrwiae.org/accommodationinbath

Michael Rycroft Symposium

The Bath and County Club – Norfolk Room, Queens Parade, Bath BA1 2NJ

16th November 2018

1030-1100	Welcome Coffee
1100-1115	**David Southwood – Early Days with Michael at Imperial**
1115-1130	**Grant Lewison – Memories of Michael**
1130-1145	**Kit Reeve – Iceland and Beyond**
1145-1200	**Paul Cannon - Reindeers, rockets and receivers**
1200-1215	**Sergei Sazhin – Our journey from Leningrad to Sheffield**
1215-1230	**David Nunn - The INTAS years**
1230-1245	**Richard Horne – Michael Rycroft – A Gentleman Scientist**
1300-1430	Lunch break
1430-1500	**Betty Lanchester – Oration on Michael Rycroft**
1500-1515	**Colin Price - The Schumann Resonances and Biological Systems**
1515-1530	**Torsten Neubert – Michael's influence on sprites and lightning**
1530-1545	**Norma Crosby – Interdisciplinary, Intercultural and International**
1545-1600	**Martin Fullekrug – Schumann Resonances, Sprites and the Radio Sky**
1600-1615	**Giles Harrison – Slowing from 8 Hz to DC**
1615-1630	**Karen Aplin – From CTR Wilson to Michael Rycroft: Atmospheric Electricity in Cambridge**
1630-1700	Meet at the bar

1845-2030 **Dinner at Woods Restaurant, 9/13 Alfred Street, Bath BA1 2QX**

Internet access: BTWholeHome-NXN Password: FLFGTpyc3aVX

Registration: https://www.ctrwiae.org/rycroft

How to get to Bath: https://www.ctrwiae.org/howtogettobath

Accommodation in Bath: https://www.ctrwiae.org/accommodationinbath