

16th Appleton Space Conference
Thursday 3rd December 2020

09.00 **Registrations**

Session 1: Chair - Prof Chris Mutlow, Director, STFC RAL Space

- 09.15 – 09.25 **Welcome**
Prof Chris Mutlow
- 09.25 – 09.45 **From Lockdown to Launch – Why the Future is Bright for the UK in Space**
Dr Graham Turnock, Chief Executive Officer, UK Space Agency
- 09.45 – 10.05 **Earth Observation - One of the Fastest Growing Space Domains**
Josef Aschbacher, Director of Earth Observation Programmes, ESA
- 10.05 – 10.25 **AstrobiologyOU: An Introduction**
Prof Karen Olsson-Francis, Director of AstrobiologyOU, The Open University
- 10.25 – 10.45 **ESA's Earth Observation Wind Mission Aeolus; the First Doppler Wind Lidar in Space**
Dr Anne Grete Straume-Lindner, Aeolus Mission Scientist, ESA
- 10.45 – 11.10 Break – Networking, Virtual Exhibition

Session 2: Chair - Dr Joanna Hart, Harwell Space Cluster Development Manager

- 11.10 – 11.30 **Once Explorers, Always Explorers**
Prof Mark McCaughrean, Senior Advisor for Science and Exploration, ESA
- 11.30 – 11.50 **Collaboration and Competition: Governing Space in the 2020's**
Prof Christopher Newman, Northumbria Law School, Northumbria University
- 11.50 – 12.10 **Early Careers and Skills**
Dr Sarah Beardsley, Head of Space Engineering Technology, STFC RAL Space
Kate Winfield, Environmental Data Scientist, STFC RAL Space
Christopher Jenkyn-Watkins, Apprentice, STFC
Steven George, Graduate Space Systems Engineer, STFC RAL Space
- 12.10 – 12.30 **Equality, Diversity and Inclusion**
Dr Karen Salt, Deputy Director for Culture and Environment at UKRI
- 12.30 – 13.30 Lunch – Networking, Virtual Exhibition



Session 3: Chair - Dr Gillian Wright, Director, STFC UK Astronomy Technology Centre

- 13.30 – 13.50 **FORUM: Understanding How Earth is Losing its Cool**
Dr Helen Brindley, Space and Atmospheric Physics Group and NCEO, Imperial College London
- 13.50 – 14.10 **JT-Cooler Developments at STFC: 2K-30K Coolers in Support of Space Science Missions**
Dr Martin Crook, STFC Technology Department
- 14.10 – 14.30 **NASA Heliophysics: What's New Under the Sun**
Dr Nicola Fox, Director Heliophysics Division, NASA
- 14.30 – 14.50 Break – Networking, Virtual Exhibition
- 14.50 – 15.00 Appleton Celebrates – bring your own cake!

Session 4: Chair - Dr Victoria Bennett, Head of the Centre for Environmental Data Analysis, STFC RAL Space

- 15.00 – 15.20 **Introducing SENSE: The Next Generation of UK Earth Observation Leaders**
Dr Anna E. Hogg, University Academic Fellow and Co-Director of SENSE, University of Leeds
- 15.20 – 15.40 **Exploration of the Ice Giants**
Dr Heidi Hammel, Vice President for Science, AURA, Inc.
- 15.40 – 16.00 **Global Air Quality in 2020: Monitoring the Impacts of Wildfires and COVID-19**
Dr Mark Parrington, Senior Scientist, Copernicus Atmosphere Monitoring Service, ECMWF

Session 5: Chair - Rob Elliott, Head of Business Development, STFC RAL Space

- 16.00 - 17.00 **Industry and Innovation Panel Discussion with Question and Answer Session**
Elodie Viau, Director ESA Telecommunications and Integrated Applications and Head of ECSAT
Mark Boggett, CEO, Seraphim Capital
Diane Gilpin, Founder and CEO, Smart Green Shipping Alliance
Richard Franklin, Managing Director, Airbus Defence and Space (UK) Ltd
Nick Shave, Chair, UKspace
- 17.00 – 17.25 Short Break – Networking, Virtual Exhibition

Session 6: 16th Appleton Keynote Lecture; Chair - Prof Chris Mutlow, Director, STFC RAL Space

- 17.25 – 18.15 **The Nature of Quantum Reality and Why We Should Care**
Prof Jim Al-Khalili, Professor of Theoretical Physics and the Public Engagement in Science, University of Surrey
- 18.15 – 18.25 **Conclusion**
Prof Chris Mutlow
- 18.25 – 19.00 Closing Networking