

SPECTROSCOPY OF AIRLESS BODIES IN WAVELENGTHS FROM THE VISIBLE TO THE MICROWAVE:

ORBITAL, TELESCOPIC, AND/OR LABORATORY MEASUREMENTS RELEVANT TO MERCURY, THE MOON AND
ASTEROIDS

10.00 Coffee

10.30 **Opening remarks** – Kerri Donaldson Hanna

Session 1: Mercury and the Moon (Chair: Neil Bowles)

10.35 **Alessandro Maturilli, DLR (Keynote Talk)** – *‘MERTIS seeing Mercury for the first time in the TIR’*

10.55 David Rothery, Open University – *‘X-ray fluorescence spectroscopy of Mercury’s surface and the Mercury Imaging X-ray Spectrometer (MIXS)’*

11.10 Huma Irfan, Birkbeck College – *‘Mineralogical insights of a landing site of interest in the lunar South Pole from Moon Mineralogy Mapper (M³) data from Chandrayaan-1’*

11.25 Benjamin Greenhagen, APL Johns Hopkins University – *‘Thermophysical and Compositional Properties of the Moon Revealed by the Diviner Lunar Radiometer’*

11.40 Elliot Sefton-Nash, Birkbeck College – *‘LRO Diviner thermal infrared observations to constrain the presence of volatiles at the Moon’s poles’*

11.55 Tristram Warren, University of Oxford – *‘A New Instrument for Studying Directional Thermal Infrared Emission: The Oxford Space Environment Goniometer’*

12.10 Kerri Donaldson Hanna, University of Oxford – *‘Characterisation of Airless Body Analogues Under Simulated Near-Surface Conditions Across Thermal Infrared Wavelengths’*

Session 2: Asteroids and Comets (Chair: Simon Green and Stephen Lowry)

12.25 **Josh Emery, University of Tennessee (Keynote Talk)** – *‘Compositional and Physical Characterisation of Asteroids using Near- and Thermal-Infrared Remote Sensing Measurements’*

12.45 Stephen Lowry, University of Kent – *‘Thermal Modeling of Asteroids’*

13.00 Lunch

14.00 Ashley King, Natural History Museum – *‘Linking meteorites and asteroids with IR spectroscopy’*

14.15 Colin Snodgrass, Open University – *‘Searching for water ice in the Kuiper Belt: NIR photometry on objects too faint for spectroscopy’*

14.30 Alan Fitzsimmons, Queen’s University Belfast – *‘How wet are the asteroids?’*

14.45 Stefano Bagnulo, Armagh Observatory – *'Spectropolarimetry of Comets and Asteroids'*

15.00 Neil Bowles, University of Oxford – *'Current data sets and future space based mission and instrument opportunities'*

15.15 Wrap-Up Discussion – Simon Green and Stephen Lowry

15.30 Tea