

ASB 10 - Conference Programme

Monday 16th June

17.00 - 18.30 Icebreaker and site registration - Arts Building Level 1 Foyer

Tuesday 17th June – Physics Building Foyer and Lecture Theatre B

09.30	Arrival, site registration + refreshments	
10.30	Cousins	Welcome
10.40	Keynote 1 - Inge Loes Ten Kate “Biosignatures, falses, and public perception”	
11.10	Baidya	Magmatic reactive phosphorus on the prebiotic Earth and implications for the origin of life
11.25	Boden	Establishment of the Nitrogen Cycle on Early Earth
11.40	Holland	Igneous Rocks as a Viable Source of Fixed Nitrogen to Prebiotic Worlds
11.55	McDonald	The efficiency of delivering prebiotic feedstocks to the early Earth with cometary impacts
12.10	Lunch (provided)	
13.30	Keynote 2 - Sophie Nixon “Unearthing the rules of life in microbiomes: Implications for astrobiology”	
14.00	Cockell	Fullerenes (C60) induce a microbial metabolomic stress response under anaerobic conditions
14.15	Gault	Titan analogue tholins are biologically inaccessible
14.30	Latorre	Biogeochemical cycles in extreme volcanic environments
14.45	Ruiz-González	Snow algal plasticity and metabolic responses during a simulated Lunar light cycle
15.00	Refreshment break	
15.30	Olsson-Francis	A new era of planetary protection for Mars
15.45	del Moral	Insights into Europa’s biological potential using high-pressure laboratory simulations
16.00	Galloway	Bioenergetic potential of Mars analogue hot spring microbial communities
16.15	Tatton	Nitrate-dependent Sulphur oxidation on Mars? Insights from a high-altitude Andean Lake
16.30	Hirsch	Preservation of iron-oxidising bacteria: an analogue for potential morphological biosignatures on Mars
17.00 - 18.30	ECR Event - Gateway Boardroom, Gateway Building	

Wednesday 18th June - Physics Building Foyer and Lecture Theatre B		
9.30	Tea/coffee	
10.00	Keynote - Sean Jordan – “Observationally Constraining Planetary Habitability”	
10.30	Caughtry	Mid-IR Characterisation of Salty Ice During Cooling and Exposure to Vacuum: Implications for Future Icy Moon Missions
10.45	Hogan	Size-Dependent Composition of Ice Grains Relevant to Salt-Rich Particles in the Plumes of Enceladus
11.00	Fox-Powell	What is the chemical composition of the shallowest liquid water in Europa's ice shell?
11.15	Guimond	Slightly carbon-rich rocky planets
11.30	Refreshment break	
11.45	Nielson	Constraining elemental enrichments linked to areas of preserved organic matter in Mars analogue sedimentary rocks
12.00	Marsh	Rover-Level Cross-Calibration of the Rosalind Franklin Rover’s Enfys and PanCam Instruments
12.15	Blasciuc	Mechanochemical oxidant generation on Mars- an insight into Martian chemistry
12.30	Loron	Resolving affinities of mysterious fossils using infrared spectroscopy and machine learning
12.45	Lunch (provided)	
13.45	Rodgers	Can Pareto Optimality Be Evidence of Life?
14.00	Stewart	Understanding the adsorption of amino acids onto montmorillonite clays through molecular simulations
14.15	Tang	Latest Results from the JCMT-Venus Atmospheric Monitoring Project
14.30	UKSA	Community discussion/opportunities
15.00	Posters and refreshments - Parliament Hall	
17.00	End	