

## Puzzle of Earth's Uninterrupted Habitability Wednesday 11 November 2015

## **Programme**

Programme	
09.30	Registration & tea, coffee
Session 1: Mechanisms for Uninterrupted Habitability 1	
10.00	KEYNOTE:
	Sequential selection for a self-regulating biosphere Tim Lenton (University of Exeter, UK)
10.40	Gaia: chance, necessity and sequential selection David Wilkinson (Liverpool John Moore's University, UK)
Session 2: Evidence of Resilience	
11.00	Tea & coffee break and poster session
11.30	The strength of the weathering feedback cycle: evidence from lithium isotopes Philip Pogge von Strandmann (UCL/Birckbeck University of London, UK)
11.50	Biological mediation of acidity and alkalinity: Does habitability require regulation of environmental pH?  Lee Klinger (Independent Scientist, USA)
12.10	Meteorite impacts, hyperthermals and plant ecosystem resilience in the early Danian David Jolley (Aberdeen University, UK)
12:30	The strengthening influence of life on feedbacks Graham Shields-Zhou (UCL, UK)
12.50	Lunch
Session 3: Mechanisms for Uninterrupted Habitability 2	
13:50	KEYNOTE: Earth's prolonged habitability: destiny or chance?
	Toby Tyrrell (University of Southampton, UK)
14:30	Mechanisms for Gaia James Dyke (University of Southampton, UK)
14:50	Habitability for Complex Life and the Development and Self-Limitations of the Biotic
	Enhancement of Weathering David Schwartzman (Howard University, USA)
15.10	Tea & coffee break and poster session
Session 4: Evidence of Luck	
15.40	Geochemical evolution drives differential habitability on the Earth and Mars Mark Fox-Powell (University of Edinburgh, UK)
16.00	Subduction and the origin of Earth's atmosphere Sami Mikhail (University of St Andrews, UK)
16:20	Snowball Earth ocean chemistry driven by explosive unzipping of Rodinia Tom Gernon (University of Southampton, UK)
Session 5: Next Steps	
16:40	Good luck or good management: Why does it matter and how do we tell?  Dave Waltham (Royal Holloway University of London, UK)
17.00	Closing remarks Dave Waltham & Graham Shields-Zhou
17.10	Drinks reception