

Conference Programme

Tuesday 18th April

Arrival and registration 3 – 6 pm, with Ice-breaker reception 4 – 6 pm. Both these events take place in the Ingram Building.

Wednesday 19th April

(All lectures take place in Grimond Building, Lecture Theatre 2)

Session 1: 8:45 am – 11 am - Mars I.

Convenor:

- 8:45 – 9:00 Welcome and logistics talk: Dr. Burchell (Kent)
9:00 – 9:30 **Wallis MK and Wickramasinghe JT**, *Impacts facilitating elementary life on Mars*
9:30 – 10:00 **Oliver C.A., et al.**, *Hi-tech tools capture astrobiology in the making at Mars analogue site in Western Australia*
10:00 – 10:30 **Pullan D., et al.**, *Identification of morphological biosignatures and associated relict structures in Martian analogue “field” specimens using a combination of planetary instrumentation: implications for in situ astrobiology*
10:30 – 10:45 **Grady M.M., et al.**, *Prospecting for water (and life?) on Mars*
10:45 – 11:00 **Page D.P.**, *The Cerberus plains, Mars: increasing suitability as a host-region for life.*

Tea break: 11 – 11:30 pm

Session 2: 11:30 am – 12:30 pm – Mars II.

Convenor:

- 11:30 – 12:00 **Ellery A.**, *The Exomars rover: an approach to experimental astrobiology*
12:00 – 12:15 **Griffiths A., et al.**, *The Panoramic Camera for the Exomars Rover*
12:15 – 12:30 **Patel M., et al.**, *The UV-VIS spectrometer for the Exomars mission*

Lunch 12:30 – 2 pm (outside the lecture hall)

Session 3: 2:00 pm – 3:30 pm – Mars III & Moon.

Convenor:

- 2:00 – 2:15 **Parnell J., et al.**, *The detection of biomarkers in sulphates on Mars. I: Lipid biomarker signatures extracted from sulphates*
2:15 – 2:30 **Burchell M.J.**, *The Drake Equation Revisited*
2:30 – 3:00 **Crawford I.A.**, *The astrobiological case for renewed robotic and human exploration of the Moon*
3:00 – 3:30 **Horne S.**, *PPARC planetary science priorities, Aurora and funding opportunities for astrobiology*

Tea break: 4 – 4:30 pm

Session 4: 4:00 pm – 5:00 pm – Raman Spectroscopy and Astrobiology

Convenor:

4:00 – 4:30 **Edwards H.G.M.**, *Raman spectroscopy of extremophiles from hot and cold deserts*

4:30 – 5:00 **Jorge Villar S., et al.**, *Raman spectroscopic and SEM characterization of novel Arctic volcanic extremophiles*

Close: 5 pm

Thursday 20th April

(All lectures and the General Business Meeting take place in Grimond Building, Lecture Theatre 2)

Session 5: 9:00 am – 11 am – Comets.

Convenor:

9:00 – 9:30 **Wallis M.K.**, *Exotic amino-acids across the K/T boundary – Cometary origin and relevance for species extinction*

9:30 – 10:00 **Wickramasinghe N.C., et al.**, *Analysis of stratospheric aerosols with reference to cometary structure*

10:00 – 10:30 **Burchell M.J.**, *Stardust: minerals, organics and ?*

10:30 – 11:00 **Watson J.S., et al.**, *Extraterrestrial organic materials analysed by GC×GC-TOFMS*

Tea break: 11 – 11:30 pm

Session 6: 11:30 am – 12:30 pm – Education and Outreach.

Convenor:

11:30 – 12:00 **Brake M. and Hook N.**, *Astrobiology and the curriculum*

12:00 – 12:15 **Pearson V.K., et al.**, *The rocks from space initiative: use of virtual learning environments for planetary science and astrobiology outreach.*

12:15 – 12:30 **Sundin M.**, *Possibilities and problems when teaching interdisciplinary courses*

Lunch 12:30 – 2 pm (outside the lecture hall)

Session 7: 2:00 pm – 3:00 pm Open General Business meeting of the Society (open to all members)

Tea break: 3 – 3:30 pm

Session 8: 3:30 pm – 5:00 pm

Poster Session (see separate list of poster titles at the end of this document).

This takes place in room 110 in the Ingram Building.
Close: 5 pm

Meeting of Society Committee, room G52 (Ingram Building), 5:15 to 6:15 pm.

Dinner: 7:30 – late (Darwin College Dining room)

Friday 21st April

(All lectures take place in Grimond Building, Lecture Theatre 2)

Session 9: 9:00 am – 11 am – Exoplanets, Habitability and Panspermia.

Convenor:

- 9:00 – 9:30 **White G.J.**, *Exoplanets – extraterrestrial astrobiology laboratories – future European and UK initiatives (This talk will be given by an alternative speaker)*
- 9:30 – 10:00 **Greaves J.S.**, *Persistent hazardous environments around stars older than the Sun*
- 10:00 – 10:15 **Jones B.W., et al.**, *Habitable planets beyond the solar system*
- 10:15 – 10:30 **Sundin M.**, *The galactic habitable zone in barred galaxies*
- 10:30 – 10:45 **Coulson S.G.**, *Meteoroids: a landing capsule for Panspermia*
- 10:45 – 11:00 **Phillips S.J.M. and Parnell J.**, *Detection of organic compounds in terrestrial snow and ice*

Tea break: 11 – 11:30 pm

Session 10: 11:30 am – 12:30 pm – Impacts.

Convenor:

- 11:30 – 12:00 **Cockell C.S., et al.**, *The fate of a cryptoendolithic habitat and its inhabitants following atmospheric entry*
- 12:00 – 12:15 **Lindgren P., et al.**, *Preservation of biological signature within impact melt breccias: Haughton impact structure*
- 12:15 – 12:30 **Milner D., et al.**, *The survival of biological signatures for life contained within a projectile after an oceanic hypervelocity impact event.*

Lunch 12:30 – 2 pm (outside the lecture hall)

Session 11: 2:00 pm – 3:30 pm – Various.

Convenor:

- 2:00 – 2:30 **Waltham D.A.**, *The large Moon hypothesis: can we test it?*
- 2:30 – 3:00 **Fogg M.J.**, *The possibility of terrestrial planet formation in hot-Jupiter systems*
- 3:00 – 3:15 **Wacey D., et al.**, *New methods to critically test claims of early (3.5 billion-year-old) life*
- 3:15 Summary talk : Close of meeting

Tea break and departures 3:30 pm

Poster Titles:

Poster titles are arranged alphabetically by author

Bartlett S.J., et al. An instrument to determine Europa's surface composition and search for trace biological signatures.

Bowden S.A., et al., The detection of biomarkers in sulphates II: Extraction by a microfluidic device

Dartnell L.R., et al. Modelling the Martian subsurface radiation environment

Direito M.S. Portuguese astrobiology working group outreach activities

Edwards H.G.M., Raman spectroscopy of extremophiles from hot and cold deserts

Fernandes C.D., et al. UV/VIS spectroscopy of Stardust

Gildea K.J., et al., High calcium late stage carbonate in ALH84001

Otter S., et al., In situ spectroscopy at the Martian surface – modelling and future instrumentation

Pearson V.K. and Gilmour I., Current advances in in-situ studies of meteoritic organic material

Pillinger J.M. and Pillinger C.T. From A to C – planetary protection for Mars missions

Pillinger J.M., et al. Mars in their eyes – a cartoon exhibition

Ringrose T.J. and Cockell C.S. Extreme environment test facility

Street R.A., et al. Looking towards Exo-Earths with Superwasp

Thyveetil M.-A., et al. Theoretical Studies On the Origin and Protection of RNA/DNA

Wilson R.C., et al. The effect of atmospheric entry heating on the volatile composition of micrometeorites