

PRINT-ONLY PRESENTATIONS

Astrobiology

Baron M. Pentecost A. Parnell J.

Hot and Cold Spring Deposits as a Source of Palaeo-Fluid Samples on Mars [#1184]

Palaeofluids, rich in biomolecules, are preserved unaltered in minerals from terrestrial hot and cold spring deposits. These deposits are therefore valuable targets for astrobiological sampling on Mars.

Cabrol N. A. Grin E. A. McKay C. P. Friedmann E. I. Chong Diaz G. Demergasso C. Kisse K. Grigorszky I. Ocampo-Friedmann R. Hock A. Fike D. A. Tambley C. Escudero E. Murbach M. S. DeVore E. Grigsby B. H.

The Licancabur Project: Exploring the Limits of Life in the Highest Lake on Earth as an Analog to Martian Paleolakes [#1393]

Our poster presents the Licancabur project overall objectives and summarizes the results of the first expedition to the highest lake on Earth that took place in 2002. It also describes the direction and developments of this project in the coming years as a unique terrestrial analog to Mars.

Maurette M. Balanzat E. Duprat J.

Cosmic Irradiation of Carbonaceous Material in Space and Prebiotic Chemistry [#1743]

The evolution of carbonaceous material in sporadic and “shower” micrometeorites under cosmic irradiation (of both galactic and solar energetic particles) is examined. Implications are drawn concerning prebiotic chemistry.

Mizser A. Kereszturi A.

The Astrobiology Matrix and the “Drake Matrix” in Education [#1114]

We present here two matrix shaped tables for the education of astrobiology: the “Drake matrix” for the comparison of the astrobiological potential of different bodies, and the astrobiology matrix for the visualization of the interdisciplinary connections between different fields of astrobiology.

Morris P. A. Wentworth S. J. Nelman M. Byrne M. Longazo T. Galindo C. McKay D. S. Sams C.

Modern Microbial Fossilization Processes as Signatures for Interpreting Ancient Terrestrial and Extraterrestrial Microbial Forms [#1909]

Terrestrial biotas from microbially dominated hypersaline environments will help us understand microbial fossilization processes, thereby enabling us to identify putative microbes from extraterrestrial materials.

Wilkins A. D. Parnell J.

Potential Preservation of Life Within Fluid Inclusions in Martian Impact Craters [#1697]

Impact craters on Mars may have created a range of aqueous environments conducive to life. Fluid inclusions have the potential to preserve organic matter, and have significant potential for astrobiological exploration within evaporites and hydrothermal systems in craters.