

**POSTER SESSIONS**  
**Monday, November 13, 2017**  
**and Thursday, November 16, 2017**

**5:00–6:30 p.m. UWCC Grand Ballroom**

**MISCELLANEOUS POSTERS**

Byrne J. F.

[\*A Climate Classification Scheme for Habitable Worlds\*](#) [#4116]

This presentation will include an exploration of the internal/external forcings and variability associated with climate using Earth as a reference model in addition to a classification scheme consisting of five categories.

Cardona M. C. Ramírez S. I.

[\*Salinibacter Ruber as a Model for the Habitability of Europa's Ocean\*](#) [#4039]

The moon Europa has an ocean enriched with sulfate compounds. This work evaluates the adaptation strategies of *Salinibacter ruber*, a halophilic bacterium, when subjected to  $\text{MgSO}_4$  and  $\text{NaSO}_4$ , two of the main salty components of Europa's ocean.

Colose C. C. Del Genio A. Way M.

[\*Climate Dynamics and Hysteresis at Low and High Obliquity\*](#) [#4113]

We explore climate dynamics for an Earth-like planet, especially one near the outer edge of the habitable zone that is susceptible to global glaciations.

Echaurren J. C.

[\*Korolev Crater, Mars: Estimating the Impact Conditions\*](#) [#4015]

In this work, estimates are made for the main variables that give shape to an impact crater, taking as an example the Korolev impact crater that is on Mars.

Ko B. Shim S. Prakapenka V. Meng Y.

[\*Mineralogy of the Silica-Rich Lower Mantle for Rocky Planets\*](#) [#4111]

Our experiments show that Si-rich lower mantle of rocky planets may consist only of bridgmanite and calcium silicate perovskite, implying different physical properties of the lower mantle than the extrapolated model from the Earth.

Lorenzo A. M. Jr. Desch S. J. Unterborn C. Shim S. H. Byeongkwan K.

[\*ExoPlex: A Code for Calculating the Mineralogy and Mass-Radius Relationships for Rocky Planets\*](#) [#4106]

We present a code for finding the mineralogy and mass radius relationships for rocky exoplanets.

Staguhn J. Meixner M. Cooray A. Leisawitz D. Origins Space Telescope STDT

[\*The Origins Space Telescope — A NASA Decadal Mission Study\*](#) [#4152]

The Origins Space Telescope will discover or characterize exoplanets, the most distant galaxies, nearby galaxies and the Milky Way, and the outer reaches of our solar system. This talk will present the Origins Space Telescope Mission Concept 1.

Quintana E. V. Barclay T. Schlieder J. Boyd P. Thackeray-Lacko B.

[\*Simultaneous, Multi-Wavelength Flare Observations of the M Dwarf Wolf 359\*](#) [#4069]

Wolf 359 is a nearby late-M dwarf that is known to produce frequent flares. We will present results from our observations in the optical, UV, X-ray, and radio wavelengths and discuss the potential impact on exoplanet habitability.

Roberge A. LUVVOIR Mission Concept Team

[\*Big Bang to Biosignatures: The LUVVOIR Decadal Mission Concept\*](#) [#4065]

The Large UV/Optical/IR Surveyor (LUVVOIR) is a concept for a multi-wavelength space observatory with broad science goals. One of its major aims is to characterize habitable exoplanets around Sun-like stars and search them for signs of life.

Rubio D. G.    Ramírez S. I.

[\*Bacterial Growth in the Salty Liquid Water Ocean of Europa\*](#) [#4050]

We are interested in the adaptation strategies displayed by bacteria when exposed to laboratory-controlled conditions that represent the salinity, temperature, and available oxygen conditions of the salty liquid water ocean present on Europa.

Stern S. A.

[\*An Answer to Fermi's Paradox in the Prevalence of Ocean Worlds?\*](#) [#4006]

We suggest that the great majority of worlds with biology and civilizations are interior ocean worlds, cut off from communication by their nature inside of their host world, therefore not easily revealing themselves.

Tan S. P.

[\*Liquid Phase Equilibria for Habitability\*](#) [#4138]

The existence of liquid phase, which amplifies habitability, can be predicted using an equation of state from atmospheric composition, pressure, and temperature. If solid is also present, density inversion that keeps liquid from freezing is examined.