Tuesday, April 25, 2017
EXOPLANETS: HABITABILITY:
FORMATION OF HABITABLE AND "EARTH-LIKE" PLANETS II
4:15 p.m. Arizona Ballroom D

Chair: **Cayman Unterborn**

4:15 p.m. Meech K. J. *
Formation of a Habitable Earth — Understanding Origins of Earth's Water **[#3741]**
Understanding how habitable worlds form begins with how Earth became habitable. This talk explores origins of Earth's water from ground and space observations.

4:30 p.m. Kalyaan A. * Desch S. J.
Location of Snow Lines and Distribution of Water in Protoplanetary Disks **[#3654]**
We present simulations of snow lines in externally photoevaporated protoplanetary disks with non-uniform alpha derived from magnetorotational instabilities.

4:45 p.m. Lehmer O. R. * Catling D. C.
Early Hydrodynamic Escape Limits Rocky Planets to 1.6 Earth Radii **[#3068]**
The observed cutoff between rocky and gaseous planets at ~1.6 Earth radii is simply explained by an early episode of thermally-driven hydrodynamic escape.

5:00 p.m. Hanson J. R. * Desch S. J.
Mass and Composition Constraints on Disintegrating Exoplanets **[#3365]**
Planetary parameters such as mass and composition are fit to extremely low mass planets that are virtually undetectable via any other means.

5:15 p.m. Komacek T. D. * Abbot D. S.
Effect of Surface-Mantle Water Exchange Parameterizations on the Prevalence of Waterworlds **[#3066]**
We determine how the prevalence of waterworlds depends on assumptions about what regulates the cycling of water between the mantle and surface of exoplanets.

5:30 p.m. Zahnle K. J. *
Limits to Creation of Oxygen-Rich Atmospheres on Planets in the Outer Reaches of the Conventional Habitable Zone **[#3702]**
Hydrogen escape promotes the origin of oxygen-rich atmospheres, and without hydrogen escape, oxygen-rich atmospheres will not develop a testable hypothesis.