

Wednesday, April 26, 2017  
**EXOPLANETS: HABITABILITY:  
 CONNECTING MODELING AND OBSERVATIONS  
 IN THE SEARCH FOR HABITABLE PLANETS II**  
 1:30 p.m. Arizona Ballroom D

**Chairs:** Tyler Robinson  
 Kimberly Bott

- 1:30 p.m. Mendez A. \* Schulze-Makuch D. Nery G.  
[Habitability Metrics for Astrobiology](#) [#3217]  
 This presentation will report results on quantitative habitability frameworks that are necessary to characterize the habitability and biosignatures of planets.
- 1:45 p.m. Domagal-Goldman S. D. \* HabEx STDT  
[HabEx: The Habitable Exoplanet Imaging Mission](#) [#3745]  
 This is a presentation on NASA's study of HabEx, a flagship mission that will search for and characterize potentially habitable planets around other stars.
- 2:00 p.m. Feng Y. K. \* Robinson T. D. Fortney J. J.  
[Constraining Habitability Through Reflected Light Observations of Terrestrial Planets](#) [#3580]  
 We present the first systematic exploration of retrievals on reflected-light data from atmospheres of terrestrial exoplanets in preparation for future missions.
- 2:15 p.m. Lustig-Yaeger J. \* Tovar G. Fujii Y. Schwieterman E. W. Meadows V. S.  
[Mapping Surfaces and Clouds on Terrestrial Exoplanets Observed with Next-Generation Coronagraph-Equipped Telescopes](#) [#3558]  
 We discuss the prospects and limitations of using rotational variability to map terrestrial exoplanets using NASA's next-generation telescope concepts.
- 2:30 p.m. Bott K. \* Bailey J. Meadows V. Kedziora-Chudczer L. Cotton D. Marshall J.  
[The Promise of Polarimetry for Biosignatures and Habitability Markers](#) [#3686]  
 Polarimetry as a tool for detecting biosignatures and habitability markers. An example with Earth ocean glint is shown and telescopic capabilities addressed.
- 2:45 p.m. Robinson T. D. \*  
[Characterizing Exoplanet Habitability with Space-Based Telescopes](#) [#3050]  
 Constraining the habitability of an exoplanet will be a challenging and critical step towards understanding the frequency of the origin of life on other worlds.
- 3:00 p.m. Luger R. \* Kruse E. Foreman-Mackey D. Agol E. Saunders N. Barnes R.  
[Habitable Zone Planets with K2](#) [#3338]  
 We present a new pipeline that recovers the Kepler photometric precision for K2 and discuss the discovery of new planets in the habitable zone of nearby stars.
- 3:15 p.m. Mandell A. M. \* Pulkkinen A. A. Domagal-Goldman S.  
[The GSFC Exoplanet Modeling and Analysis Center](#) [#3445]  
 The GSFC Exoplanet Modeling and Analysis Center is meant to provide an accessible platform for the planetary atmosphere modeling and analysis community.
- 3:30 p.m. Kane S. R. \* Hill M. L. Kasting J. F. Kopparapu R. K. Quintana E. V. Barclay T. Batalha N. M. Borucki W. J. Ciardi D. R. Haghhighipour N. Hinkel N. R. Kaltenegger L. Selsis F. Torres G.  
[A Catalog of Kepler Habitable Zone Exoplanet Candidates](#) [#3649]  
 This presentation will describe the highlights of the Habitable Zone catalog and the plans for further validation of Kepler candidates and follow-up studies.
- 3:45 p.m. *Coffee Break*