Wednesday, April 26, 2017 SOLAR SYSTEM SITES: ICE AND OCEAN WORLDS: HABITABILITY OF OCEAN WORLDS II 1:30 p.m. Arizona Ballroom E-G

Chairs: Baptiste Journaux David Senske

1:30 p.m. Laine P. E. *

Life on Icy Worlds? Emergence vs. Panspermia [#3015]

This paper presents pros and cons for the origins of hypothetical life on the icy moons in our solar system.

1:45 p.m. Bollengier O. * Journaux B. Brown J. M. Vance S. D. <u>The Evolution of Oceans in Large Icy Satellites</u> [#3672]

Salt chemistry in the hydrospheres of large icy worlds should result in the formation of late deep oceans, inviting to reconsider their habitability potential.

- 2:00 p.m. Vance S. D. * Kedar S. Banerdt W. B. Panning M. P. Pike W. T. Stähler S. C. <u>Geophysical Tests for Habitabilty in Europa and Other Ocean Worlds</u> [#3283]

 We describe computer models that examine the use of geophysical measurements — mainly seismology — to
 - We describe computer models that examine the use of geophysical measurements mainly seismology to assess the habitability of ocean worlds.
- 2:15 p.m. Barnes R. * Vance S. Driscoll P. Guyer B. Sotin C. Brown J. <u>Habitable Ice-Covered Exoplanets</u> [#3418]

 We present models of the structure and evolution of ice-covered, water-rich exoplanets to

We present models of the structure and evolution of ice-covered, water-rich exoplanets to explore the possible range of subsurface water layers.

- 2:30 p.m. Senske D. A. * Pappalardo R. T. Korth H. Klima R. Vance S. D. Craft K. Europa Science Team Science of the Europa Mission, Exploring the Habitability of a Unique Icy World [#3132]

 The goal of the Europa mission is to explore Europa to investigate its habitability. Nine instruments have been selected to address the science objectives.
- 2:45 p.m. Porco C. C. * Dones L. Mitchell C.

 Flying Through the Plume of Enceladus [#3627]

 This work is an attempt to reconcile the differing results for icy particle number density in the plume of Enceladus, reported by different Cassini instruments.
- 3:00 p.m. Sotin C. Hayes A. Malaska M. * McEwen A.

 Oceanus: A New Frontiers Mission Concept to Study Titan's Habitability [#3523]

 Oceanus is a Titan orbiter mission concept that would conduct chemistry, geology, and geophysics investigations to assess Titan's habitability.
- 3:15 p.m. Barnes J. W. * Turtle E. P. Trainer M. Lorenz R. D. Neish C. D. MacKenzie S. M. McKay C. Freissinet C. Hand K. P.

 **Dragonfly: A New Frontiers Titan Astrobiology Lander* [#3735]*

 Landing on Titan / Prebiotic chemistry / It's the place to go!
- 3:30 p.m. *Coffee Break*