

Tuesday, March 21, 2017

[T314]

**POSTER SESSION I: OUTER PLANETS MISSION CONCEPTS: OUT IN THE COLD**  
**6:00 p.m. Town Center Exhibit Area**

Davies A. G. Gunapala S. Soibel A. Ting D. Rafol S. et al. **POSTER LOCATION #223**  
[Meeting the Challenge of Measuring Io's Lava Eruption Temperatures](#) [#1263]

We show how to overcome the difficulties of measuring lava eruption temperatures on Io with a novel detector and digital focal plane combination.

Williams D. A. Lopes R. M. C. Castillo-Rogez J. Scowen P. **POSTER LOCATION #224**  
[CubeSats to Support Future Io Exploration](#) [#1136]

This presentation discusses mission concepts and instruments using the CubeSat platform to support future exploration of Jupiter's volcanic moon Io.

Christoph J. M. Williams D. A. **POSTER LOCATION #225**  
[Synthetic Aperture Radar Instrument Concept for Subsurface Geological Observations of Io](#) [#2325]

We propose a Synthetic Aperture Radar instrument for a future mission to Io with the goal of revealing geologic features obscured by bright plains deposits.

Prieto-Ballesteros O. Blanc M. André N. Gómez-Elvira J. Jones G. et al. **POSTER LOCATION #226**  
[Joint Europa Mission \(JEM\). A Multiscale Study of Europa to Characterize its Habitability and Search for Extant Life](#) [#2654]

Here we present the Joint Europa Mission (JEM), a proposal submitted to the ESA M5 call last October 2016 and is now under study.

Hand K. P. Murray A. E. Garvin J. Horst S. Brinkerhoff W. et al. **POSTER LOCATION #227**  
[Science Goals, Objectives, and Investigations of the 2016 Europa Lander Science Definition Team Report](#) [#2492]

A summary of the 2016 Europa Lander Science Definition Team report is given.

Pappalardo R. T. Senske D. A. Korth H. Blankenship D. Blaney D. et al. **POSTER LOCATION #228**  
[The Europa Multiple-Flyby Mission: Synergistic Science to Investigate Habitability](#) [#2732]

Europa mission / Synergistic science delves / Habitable world.

Kedar S. Vance S. D. Panning M. P. Pike T. W. Stähler S. C. et al. **POSTER LOCATION #229**  
[Seismology on Europa and the Solar System's Ocean Worlds](#) [#1684]

We discuss potential seismological exploration of Europa and other ocean worlds, and how they shed light on habitability in these environments.

Cable M. L. Lunine J. I. Spilker L. J. Waite J. H. Postberg F. et al. **POSTER LOCATION #230**  
[Enceladus Habitability: Cassini Groundwork and New Possibilities](#) [#2577]

The Enceladus Life Finder (ELF) builds on Cassini's successes, and would bring the compelling life question within reach of the New Frontiers Program.

Mitchell K. L. Ono M. Parcheta C. Iacoponi S. **POSTER LOCATION #231**  
[Dynamic Pressure at Enceladus' Vents and Implications for Vent and Conduit In-Situ Studies](#) [#2801]

Enceladus vents / Sampling robots will fight through / Supersonic winds.

Sotin C. Hayes A. Malaska M. Nimmo F. Trainer M. et al. **POSTER LOCATION #232**  
[Oceanus: A New Frontiers Orbiter to Study Titan's Potential Habitability](#) [#2306]

Following up on the discoveries of the Cassini mission, a Titan orbiter equipped with a focused payload would address the NF science goals.

Wilson C. F. Lorenz R. D.

**POSTER LOCATION #233**

[Design of a Thermal Anemometer for a Titan Lander](#) [#1859]

We present a hot-film anemometer design for a Titan lander, based on heritage from Beagle 2 and ExoMars Schiaparelli wind sensors.

Turtle E. P. Barnes J. W. Trainer M. G. Lorenz R. D.

**POSTER LOCATION #234**

MacKenzie S. M. et al.

[Dragonfly: Exploring Titan's Prebiotic Organic Chemistry and Habitability](#) [#1958]

Titan quadcopter / Samples complex organics / How does life begin?

Bramson A. M. Elder C. M. Blum L. W. Chilton H. T.

**POSTER LOCATION #235**

Chopra A. et al.

[OCEANUS: A Uranus Orbiter Concept Study from the 2016 NASA/JPL Planetary Science Summer School](#) [#1583]

Power systems and appropriate launch vehicles present the main challenges to launching a New Frontiers-class ice giant orbiter before 2040.