

Tuesday, March 22, 2016

[T316]

**POSTER SESSION I: PLANETARY MISSION CONCEPTS:
VENUS, EUROPA, JUPITER, ENCELADUS, TITAN
6:00 p.m. Town Center Exhibit Area**

Ghail R. C. Wilson C. F. Widemann T. *POSTER LOCATION #244*

[EnVision M5 Venus Orbiter Proposal: Opportunities and Challenges](#) [#1511]

With its advanced radars and IR/UV instruments, EnVision will detect and measure activity on Venus. Here we outline our plans for ESA's next call.

Hensley S. Smrekar S. Nunes D. Seu R. Lombardo P. et al. *POSTER LOCATION #245*

[Single Pass X-Band Radar Interferometry for Topographic Mapping of Venus](#) [#1979]

The VISAR instrument is a single pass X-band radar interferometer that is part of the VERITAS proposed Discovery mission to Venus.

Glaze L. S. Garvin J. B. Johnson N. M. Atkinson D. Atreya S. et al. *POSTER LOCATION #246*

[DAVINCI: Deep Atmosphere Venus Investigation of Noble Gases, Chemistry, and Imaging](#) [#1560]

DAVINCI will study the composition of Venus' atmosphere at a level of detail not possible on earlier missions and will image the surface at optical wavelengths.

Amato M. Generie J. Glaze L. Robinson D. Mahaffy P. et al. *POSTER LOCATION #247*

[The Davinci Probe Descent Module and Engineering Development Unit Testing](#) [#2566]

The Davinci Venus mission in situ probe design and probe descent sphere engineering test unit build and test work is discussed.

Amato M. Spidaliere P. Mahaffy P. Schiff C. Hsu O. et al. *POSTER LOCATION #248*

[Biosignature Explorer for Europa Probe \(BEE\) — The Concept for Directly Searching for Life Evidence on Europa at Lower Cost and Risk](#) [#2602]

The Biosignature Explorer for Europa (BEE) Plume Probe is designed to collect and analyze samples for life evidence as a potential part of the Europa mission.

Pappalardo R. T. Prockter L. M. Senske D. A. Klima R. *POSTER LOCATION #249*

Fenton Vance S. et al.

[Science Objectives and Capabilities of the NASA Europa Mission](#) [#3058]

The goal, objectives, instruments, and unified science traceability of NASA's Europa mission are summarized.

Blanc M. Jones G. H. Prieto-Ballesteros O. Sterken V. J. EI-M5 Team *POSTER LOCATION #250*

[The Europa Initiative for ESA's M5 Call \(EI-M5\): A Potential European Contribution to NASA's Europa Multiple-Flyby Mission](#) [#2455]

We will report on the science community-based proposition of a possible ESA contribution to NASA's Europa mission as a candidate for the upcoming ESA M5 mission.

James P. B. *POSTER LOCATION #251*

[Geophysical Constraints on Europa's Ice Shell and Rocky Core from a Flyby Mission](#) [#2513]

Line-of-sight residuals from a flyby mission will offer a way to study Europa's ice shell structure and sea floor, even when coverage is not fully global.

Burgett B. J. Long J. Whaley P. Raz A. Herrick R. R. et al. *POSTER LOCATION #252*

[Mini-MAGGIE: CubeSat MAGnetism and Gravity Investigation at Europa](#) [#1928]

The Mini-MAGGIE satellite mission will accompany the future Europa mission to aid the primary satellite in measuring gravity and magnetic fields.

Iwata T. Matsuura S. Tsumura K. Yano H. Hirai T. et al.

POSTER LOCATION #253

[*A Study of Cruising-Phase Sciences Using the Solar Power Sail*](#) [#2000]

We present the scientific objectives and instruments in the cruising-phase of the Solar Power Sail, a Japanese candidate deep-space probe.

John K. K. Wynne J. J. Powell K. E.

POSTER LOCATION #254

MacKenzie S. M. Caswell T. et al.

[*THEO Mission Concept: Testing the Habitability of Enceladus' Ocean*](#) [#1277]

Fly to Saturn moon / Is ocean habitable? / THEO could find out.

Ross F. Lee G. Polidan R. Sen B. Sokol D.

POSTER LOCATION #255

[*Titan Lifting Entry and Atmospheric Flight \(T-LEAF\) System Concept for Exploration of*](#)

[*Saturn's Moon Titan*](#) [#2453]

Both entry vehicle and maneuverable atmospheric rover, T-LEAF (Titan Lifting Entry and Atmospheric Flight) performs both surface and atmospheric science at Titan.