

Outer Planet Assessment Group

22 posters on:

- Technologies
- Mission & Instrument Concepts
- Early Career/Student Presentations

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JPL – Caltech

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Thermal Protection and Radioisotope Power Systems

- **Plans Underway for Alternate to heritage PICA Development** - *Mairead Stackpoole, Steve Violette and Ethiraj Venkatapathy*
- **Segmented Thermoelectric Module Technology Enables Right-Sizing Next Generation High Performance Radioisotope Thermoelectric Generator System Concepts** - *Jean-Pierre Fleurial, Fivos Drymiotis and Dave Woerner*
- **eMMRTG Development Update** - *David Woerner*

Ocean Worlds Technologies

- **A Deep Subsurface Ice Probe for Europa** - *Brian H. Wilcox, Jason A. Carlton, Justin M. Jenkins, Fletcher A. Porter*
- **Seismic Exploration of Europa and Other Ocean Worlds** - *Mark P Panning, Steve Vance, Sharon Kedar, Sridhar Anandakrishnan, W Bruce Banerdt, Bruce G Bills, Fabio Cammarano, Julie C Castillo, Hsin-Hua Huang, Philippe Henri Lognonne, Jennifer Jackson, Ralph D Lorenz, William T Pike, Simon C. Stähler and Victor C Tsai*

Ocean Worlds Technologies

- **EEPEC: The Europa and Enceladus Plume and Exosphere Cubesat** - *B.E. Schmidt, G. Lightsey, M. R. Meister, T. Hyde, J. Wray, J. J. Buffo, J. Carmona-Reyes, C. Paty.*
- **Icefin: A New AUV/ROV for Sub-Ice Exploration on Earth and Europa.** *B. E. Schmidt, M. R. Meister, M. E. West, A. M. Spears, J. Lutz, C. C. Walker, M. Coulter, J. J. Buffo, J. Lawrence, D. Dichek.*
- **SLIMAERS: Searching for Life on Icy Moons with Absorption, Excitation, and Raman Spectroscopy.** *B. E. Schmidt, A. M. Stockton, C. J. Bennett, J. S. Bowman*
- **The Tethering and Ranging mission of the Georgia Institute of Technology (TARGIT) -- A Cubesat mission to demonstrate a low-cost, miniaturized lidar imaging system for planetary applications.** - *B.C. Gunter, E.G. Lightsey, C. Valenta, B. Schmidt, J. Wray*
- **An Organic Analyzer Instrument for Highly Sensitive Organic Detection on a Kinetic Penetrator** - *Amanda Stockton, Zach Duca, Michael Cato, Thomas Cantrell, Dedra Eichstedt, Jungkyu Kim, Phil Putman, Britney Schmidt*
- **Ocean World sampling and data communication through significant ice depths** - *Yoseph Bar-Cohen, Mircea Badescu, Xiaoqi Bao, Hyeong Jae Lee, and Stewart Sherit*

Mission Concepts and Instruments

- **Entry Probe Studies for Ice-Giants** - *Parul Agrawal, Gary Allen Jr., Milad Mahzari, Helen Hwang, Don Ellerby and Nitin Arora*
- **Aerocapture Assessment at Uranus and Neptune for NASA's Ice Giant Studies** - *S. Saikia, J. Millane, A. Mudek, A. Arora, P. Witsberger, E. Shibata, L. Podesta, Y. Lu, P. Edelman, J. Longuski, K. Hughes, A. Petropoulos, N. Arora, J. Cutts, J. Elliott, J. Sims, and K. Reh,, CA; T. Spilker*
- **A Multi-Planet, Multi-Spacecraft Flagship Class Mission Concept to Explore a Gas Giant and an Ice Giant Planet** - *S. Saikia, J. Mansell, N. Kolencherry, K. Hughes, A. Mudek, L. P. Podesta, B. Libben, J. Millane, S. Fulton, E. Shibata, K. Coleman, A. Arora, Y. Lu, B. Tackett, J. Elliott, G. Smith, T. Ukai, J. Pouplin, P. Witsberger, N. Hobar, and H. S. Chye.*
- **Small Next-generation Atmospheric Probe Concept** – *Kunio Sayanagi, Robert Dillman, David Atkinso, JPL Amy Simon, Michael H. Wong, Tom Spilker, Sarag Saikia, Jing Li*
- **The Incorporation of Multi-dimensional Spectroscopic Techniques in the Future of Planetary Science.** - *C. J. Bennett*
- **Hera Saturn Probe NetFlux Radiometer** -*Shahid Aslam, Conor A. Nixon, Michael Amato, Olivier J. Mousis, David H. Atkinson*

Early Career/Student Presentations

- **Dione's history of tectonic disruption** - *Emily Martin, D. Alex Patthoff and Thomas R. Watters.*
- **The Effects of Total Ionizing Dose on the Transient Response of SiGe BiCMOS Technology** - *Mason Yachter*
- **A Wunda-full world? Carbon dioxide ice deposits on Umbriel and other large moons of Uranus** - *Michael M. Sori, Jonathan Bapst, Ali M. Bramson, Shane Byrne, and Margaret E. Landis*
- **A Search for Temporal Changes on Pluto and Charon using New Horizons Images** - *Jason Hofgartner, J. Hofgartner, B. Buratti, S. Devins, R. Beyer, P. Schenk, K. Ennico, T. Lauer, C. Olkin, J. Spencer, S. A. Stern, H. Weaver, L. Young and The New Horizons Geology, Geophysics and Imaging Science Theme Team*
- **Surface-atmosphere coupling in Titan's hydrologic cycle** - *JM Lora, JL Mitchell, M Adamkovics, S Faulk*