

Monday, October 24, 2016
JUPITER AND ITS OCEAN WORLDS: JUICE AND EUROPA CLIPPER-LANDER MISSIONS
3:50 p.m. San Gabriel Ballroom

Chair: Scott Murchie

- 3:50 p.m. Althaus C. * Hussmann H. Lingenauber K. Michaelis H. Kallenbach R. Oberst J.
[The Ganymede Laser Altimeter — Instrument Design Overview with Radiation Hard Transmitter](#) [#4015]
The Ganymede Laser Altimeter (GALA) onboard of JUICE mission shall investigate Ganymede. A laser provides the measuring signal and has therefore to be robust and reliable in the environment of Jupiter, in particular with regard to radiation.
- 4:05 p.m. Barabash S. * Brandt P. Wurz P. PEP Team
[Particle Environment Package \(PEP\) for the ESA JUICE Mission](#) [#4079]
Description of the particle package for the ESA Jupiter mission JUICE.
- 4:20 p.m. Turtle E. P. McEwen A. S. Osterman S. N. * Boldt J. D. Strohbehn K. EIS Science Team
[The Europa Imaging System \(EIS\), a Camera Suite to investigate Europa's Geology, Ice Shell, and Potential for Current Activity](#) [#4091]
EIS NAC and WAC use identical rad-hard rapid-readout 4 k × 2 k CMOS detectors for imaging during close (≤ 25 km) fast (~ 4.5 km/s) Europa flybys. NAC achieves 0.5 m/pixel over a 2-km swath from 50 km, and WAC provides context pushbroom stereo imaging.
- 4:35 p.m. Westlake J. H. * McNutt R. L. Kasper J. C. Case A. W. Rymer A. M. Stevens M. L. Jia X. Paty C. Khurana K. K. Kivelson M. G. Slavin J. A. Smith H. T. Korth H. Krupp N. Roussous E. Saur J.
[The Plasma Instrument for Magnetic Sounding \(PIMS\) for the Europa Mission](#) [#4037]
We present the Plasma Instrument for Magnetic Sounding (PIMS) selected for the Europa Mission. We specifically address how PIMS plasma measurements will improve the accuracy of magnetic sounding of Europa's subsurface ocean.
- 4:50 p.m. Rutherford K. D. * Davis M. W. Greathouse T. K. Montreal R. M. Blasius R. C. Raut U. Steffl A. J. Cooke C. M. Siegmund O. Gladstone G. R.
[Tests of Microchannel Plate \(MCP\) Detector Response to MeV Electrons in Support of Juno, JUICE, and Europa Mission UVS Instrument Investigations](#) [#4102]
We report our efforts to optimize our UV Spectrograph (UVS) instruments for operating in the intense radiation environment of Jupiter for studying the ocean worlds of Europa and Ganymede in order to share our lessons learned.
- 5:05 p.m. Grimm R. E. * Delory G. T. Espley J. R. Stillman D. E.
[Magnetotelluric Sounding of Europa's Ice Shell](#) [#4032]
A magnetometer alone is insufficient to determine thicknesses of water layers in the ice shell because electromagnetic source geometry is indeterminate at the “high” frequencies (~ 1 Hz) needed for adequate resolution.
- 5:20 p.m. Pike W. T. * Standley I. M. Calcutt S. B. Kedar S. Vance S. D. Bills B. G.
[The Europa Seismic Package \(ESP\): 1. Selecting a Broadband Microseismometer for Ocean Worlds.](#) [#4133]
We summarize the requirements that would enable a seismic system to provide a probe of the habitability of Europa and introduce a candidate microseismometer for a Europa Seismic Package, comparing to potential competitor technologies.