

Wednesday, March 23, 2016
MAKEUP OF MERCURY
1:30 p.m. Waterway Ballroom 5

[W454]

Chairs: Noam Izenberg
Asmaa Boujibar

- 1:30 p.m. Parman S. W. * Parmentier E. M. Wang S.
[Crystallization of Mercury's Sulfur-Rich Magma Ocean](#) [#2990]
 Solidification of Mercury's sulfide-rich magma ocean may have produced a buoyant sulfide primary crust. This would have slowed cooling of the planet.
- 1:45 p.m. Boujibar A. * Righter K. Rapp J. F. Ross D. K. Pando K. M. et al.
[The Origin of Mercury's Surface Composition, an Experimental Investigation](#) [#2925]
 Mercury's surface / High pressure experiments / Polybaric melts.
- 2:00 p.m. Lawrence D. J. * Peplowski P. N. Beck A. W. Feldman W. C. Frank E. A. et al.
[Compositional Terranes on Mercury Derived from Measurements of Fast Neutrons](#) [#1253]
 Fast-neutrons at Mercury delineate four compositional terranes, and show a unique signature at Hokusai crater, which is one of the youngest craters on Mercury.
- 2:15 p.m. Morlok A. * Klemme S. Weber I. Stojic A. N. Sohn M. et al.
[Diffuse Reflectance FTIR and Raman Spectroscopy of Synthetic Glasses with Mercury Surface Composition for the BepiColombo Mission](#) [#2136]
 We present mid-infrared spectra of synthetic glasses with chemical composition based surface areas on Mercury for the BepiColombo ESA/JAXA mission.
- 2:30 p.m. Trang D. * Lucey P. G. Izenberg N. R.
[Mapping of Submicroscopic Carbon and Iron on Mercury with Radiative Transfer Modeling of MESSENGER VIRS Reflectance Spectra](#) [#1396]
 Submicroscopic carbon is necessary to successfully model the VIRS reflectance spectra. We produced submicroscopic carbon and iron abundance maps.
- 2:45 p.m. Klima R. L. * Blewett D. T. Denevi B. W. Ernst C. M. Frank E. A. et al.
[Global Distribution and Spectral Properties of Low-Reflectance Material on Mercury](#) [#1195]
 Distinctive low-reflectance material, mostly excavated by craters, is present on Mercury. We assess the spectral properties and distribution of these exposures.
- 3:00 p.m. Thomas R. J. * Hynek B. M. Rothery D. A. Conway S. J. Anand M.
[Hollows as Evidence for the Nature and Source of Mercury's Low-Reflectance Substrates](#) [#1109]
 The spectral character of Mercury's hollows indicates that the low reflectance of widespread surface units does not derive from their volatile component.