

Thursday, March 23, 2017
POSTER SESSION II: MERCURY: FROM CRUST TO CORE
6:00 p.m. Town Center Exhibit Area

[R610]

- Stockstill-Cahill K. R. Cahill J. T. S. Domingue D.
 Izenberg N. R. D'Amore M. **POSTER LOCATION #201**
[Composition of MESSENGER Surface Types from Multispectral MASCS Data](#) [#2673]
 Comparing data / Spectral, and composition / Straddling divides.
- Cartier C. Namur O. Charlier B. **POSTER LOCATION #202**
[No FeS layer in Mercury? Evidence from Ti/Al measured by MESSENGER](#) [#1419]
 Comparing MESSENGER data and experimentally constrained geochemical models, we use Ti/Al as a tracer for the potential formation of a FeS layer in Mercury.
- Varatharajan I. Maturilli A. Helbert J. Hiesinger H. **POSTER LOCATION #203**
[Thermal Infrared Spectroscopy of Mg-Sulfides at Simulated Mercury's Surface Conditions](#) [#1398]
 Thermal infrared spectroscopy of MgS at very high temperatures is studied to support MERTIS payload of Bepicolombo mission to Mercury.
- Anzures B. A. Parman S. W. Milliken R. E. **POSTER LOCATION #204**
[Sulfur Speciation in Heavily Reduced Mercurian Melts by K-Edge XANES Spectroscopy](#) [#2039]
 S K-edge XANES analysis of experimental Mercurian melts reveals sulfur speciation trends as sulfur solubility increases and f_{O_2} decreases.
- Wright J. Rothery D. A. Balme M. R. Conway S. J. **POSTER LOCATION #205**
[Late-Stage Effusive Volcanism on Mercury: Evidence from Mansurian Impact Basins](#) [#2239]
 Post-impact lava / Did cooling and contraction / End your effusion?
- Padovan S. Tosi N. Plesa A.-C. Ruedas T. **POSTER LOCATION #206**
[Volcanic Infillings of Large Basins on Mercury as Indicators of Mantle Thermal State and Composition](#) [#1809]
 Melt erupting at the surface in the event of an impact has both deep and shallow components. The dominant one depends on the thermal state of the mantle.
- Neumann G. A. Sun X. Mazarico E. Deutsch A. N. Head J. W. et al. **POSTER LOCATION #207**
[Latitudinal Variations in Mercury's Reflectance from the Mercury Laser Altimeter](#) [#2660]
 Mercury's polar terrain, illuminated by 1064-nm laser light, darkens poleward from 75°N and brightens from 85°N, likely due to micro-cold-trapped volatiles.
- Peterson G. A. Johnson C. L. Byrne P. K. Phillips R. J. Neumann G. A. **POSTER LOCATION #208**
[Depth of Faulting in Mercury's Northern Hemisphere from Thrust Fault Morphology](#) [#2315]
 Variations in mechanical properties and heat flow might explain the difference in fault geometry between the intercrater and the northern smooth plains.
- Leeburn J. M. Denevi B. W. Ernst C. M. Klima R. L. **POSTER LOCATION #209**
[The Stratigraphy of Mercury's Crust as Exposed by Impact Craters: A Global Classification](#) [#2736]
 We investigate Mercury's stratigraphy as exposed by impact craters to evaluate the mode(s) of formation of a key crustal unit, low-reflectance material.
- Lucchetti A. Pajola M. Cremonese G. Carli C. Marzo G. A. et al. **POSTER LOCATION #210**
[Spectral Clustering on Mercury Hollows: The Dominici Crater Case](#) [#1329]
 We applied a spectral clustering method to the ~20 km wide Dominici Crater to investigate the composition of Hermean hollows.

- Kay J. P. Dombard A. J. *POSTER LOCATION #211*
[A Test for Developing Long-Wavelength Lithospheric Folding on Mercury](#) [#1657]
A warm Mercury. It has cooled and shrunk lots, but not enough to fold.
- Kinczyk M. J. Susorney H. C. M. Prockter L. M. Byrne P. K. Ernst C. M. et al. *POSTER LOCATION #212*
[Roughness of Impact Crater Ejecta Deposits on Mercury as a Proxy for Crater Degradation](#) [#2717]
Mercury's craters / Some are rough, others are smooth / Now how can we tell?
- Leight C. Fassett C. I. Crowley M. C. Dyar M. D. *POSTER LOCATION #213*
[Crater Morphometry and Degradation on Mercury: Mercury Laser Altimeter \(MLA\) Measurements and Comparison to Stereo-DTM Derived Results](#) [#2809]
Mercury impact craters with $D = 2.5\text{--}5$ km have shallower topography than expected, and likely experienced degradation at rates much faster than on the Moon.
- Giacomini L. Massironi M. Galluzzi V. Ferrari S. *POSTER LOCATION #214*
[Dating the Activity of Tectonic Systems on Mercury](#) [#2143]
We dated the activity of four thrust systems on Mercury. The results allowed us to better constrain the beginning of the contraction of the planet.
- Gemperline J. D. Hynek B. M. Robbins S. J. Osterloo M. K. Mueller K. et al. *POSTER LOCATION #215*
[Age Estimates of Geologic Units Around the Rembrandt Basin, Mercury](#) [#2864]
Relative and absolute ages from crater statistics along with stratigraphic and cross-cutting relationships detail the timing of formation for Rembrandt Basin.
- Ernst C. M. Denevi B. W. Ostrach L. R. *POSTER LOCATION #216*
[Updated Absolute Age Estimates for the Tolstoj and Caloris Basins, Mercury](#) [#2934]
Here, we update definitions of the Tolstoj Basin ejecta deposit and the Caloris Basin rim and derive new model ages for the Tojstojan and Calorian systems.
- Schmude R. W. Jr. *POSTER LOCATION #217*
[J and H Filter Photometry of Mercury and the Other Bright Planets](#) [#1578]
This abstract presents preliminary results of brightness measurements of the bright solar system planets made in J and H filters.