

Tuesday, March 20, 2018 [T325]
POSTER SESSION I: ASTEROIDS II: NEAR, FAR, WHEREVER THEY ARE
 6:00 p.m. Town Center Exhibit Area

- Virkki A. K. Taylor P. A. Bhiravarasu S. S. Howell E. S. Lejoly C. et al. *POSTER LOCATION #325*
[Surface Properties of Space Flight Accessible Near-Earth Objects](#) [#2322]
 Which targets to choose / For future space flights with crews? / Surface matters too!
- Zambrano-Marin L. F. Virkki A. Rivera-Valentin E. G. Taylor P. A. *POSTER LOCATION #326*
[Scattering Laws Fit for Dual Polarization Radar Echoes of Asteroids Using Arecibo Observatory Planetary Radar Data](#) [#2569]
 We investigate the physical properties of the surfaces of asteroids: 2010NY65, 2014JO25, 2007LE, Jason, and Phaethon using dual polarization-radar observations.
- López-Oquendo A. Virkki A. *POSTER LOCATION #327*
[Cobble Distribution on Surface of Near-Earth Asteroids Using Radar Observations](#) [#2867]
 If you are not in love with the sciences, it is because you haven't seen the planetary world in action.
- Roegge A. Milazzo M. P. *POSTER LOCATION #328*
[Boulder Shape and Distributions on Small Solar System Bodies](#) [#2970]
 We study the rounding of boulders on airless bodies.
- Rodríguez-DelValle Y. López-Oquendo A. Espinosa-Rodríguez G. Cotto-Figueroa D. *POSTER LOCATION #329*
[Rotation Rates of Near-Earth Asteroids](#) [#2171]
 Rotation periods and lower limits of 14 near-Earth asteroids.
- Ravaji B. Ali-Lagoa V. Delbo M. Wilkerson J. W. *POSTER LOCATION #330*
[The Effect of Rotation Period on Thermal Stress Weathering](#) [#2628]
 We model the role of rotation period on diurnal temperature variations, rate-of-temperature-change, thermal stresses, and thermal stress weathering lifetime.
- Golubov O. Scheeres D. J. *POSTER LOCATION #331*
[The Systematic Structure of YORP Dynamics](#) [#2032]
 YORP has a fundamental symmetry that drives spin states of asteroids in a consistent pattern, and enables the identification of asteroid spin state equilibria.
- Sánchez D. P. Scheeres D. J. *POSTER LOCATION #332*
[The Role of Angular Momentum on Accreting Rubble Pile Shapes](#) [#1196]
 We analyze how a cloud of self-gravitating grains, with a non-zero angular momentum, accretes to form a single granular body or a binary system.
- Ballouz R.-L. Walsh K. J. Richardson D. C. Michel P. *POSTER LOCATION #333*
[Numerical Simulations of Asteroid Reaccumulation: Improving the SPH to N-Body Handoff Using Alpha Shapes](#) [#2816]
 Using alpha shapes, we present a new method to perform the SPH to N-body handoff for simulations of asteroid reaccumulation after catastrophic disruption.
- Schorghofer N. Hsieh H. H. *POSTER LOCATION #334*
[Ice Loss from the Interior of Small Bodies According to an Idealized Model](#) [#1770]
 Interior temperatures and ice retreat rates are calculated to quantify ice retention in asteroids and NEOs.

Wooden D. H. Dotson J. L. Howell S. B. Horch E. P. **POSTER LOCATION #335**

[Direct Imaging of Near Earth Object 3200 Phaethon \(1983 TB\) \[#1919\]](#)

The NEO 3200 Phaethon (1983 TB), which is a B-type PHA, was resolved in direct imaging using the speckle camera 'Alopeke on Gemini-N on 2017-Dec-13UT 07:31UT.

Dotson J. D. Wheeler L. F. Mathias D. L. Farnocchia D. **POSTER LOCATION #336**

[Risk Assessment for 2012 TC4 Based Hypothetical Impact Scenarios \[#2944\]](#)

A probabilistic framework was used to assess the risk due to asteroid impact of two hypothetical scenarios based on the close approach of 2012 TC4.

Jozwiak L. M. Blewett D. T. **POSTER LOCATION #337**

[Investigation of Eros Pond Properties Utilizing Phase-Ratio Image Analysis \[#1596\]](#)

We generate phase-ratio images to study subtle differences in the particle size distribution of Eros's ponds, and use these data to investigate pond formation.

McAdam M. M. Sunshine J. M. Howard K. T. Alexander C. M. O'D.

McCoy T. J. et al.

POSTER LOCATION #338

[Asteroid \(93\) Minerva: Spectral Evidence of Primitive, Amorphous Materials, and Implications \[#2081\]](#)

We present the first detection of an asteroid with abundant amorphous silicates similar to those found in primitive, least-processed carbonaceous chondrites.

Li J.-Y. Le Corre L. Reddy V. **POSTER LOCATION #339**

[Hapke Modeling of Asteroid \(25143\) Itokawa Using Hayabusa/AMICA Data \[#1957\]](#)

We report the Hapke model parameters of Asteroid (25143) Itokawa derived from Hayabusa/AMICA data in all seven color filters.

Cloutis E. A. Trang D. Lucey P. G. **POSTER LOCATION #340**

[The Effect of Opaque Materials on Spectral Reflectance of the Cherokee Springs LL Chondrite: Implications for Asteroid Itokawa \[#1591\]](#)

Mixtures of the Cherokee Springs LL chondrite with various types of fine-grained iron result in variable amounts of reddening and darkening.

Susorney H. C. Johnson C. L. Barnouin O. S. Daly M. Seabrook J. et al. **POSTER LOCATION #341**

[The Global Surface Roughness of 25143 Itokawa \[#1066\]](#)

The surface roughness of Itokawa is dominated by boulders at short baselines and at long baselines it differs from Eros, likely due to interior structure.

Tatsumi E. Domingue D. Hirata N. Kitazato K. Vilas F. et al. **POSTER LOCATION #342**

[Regolith Properties on the S-Type Asteroid Itokawa Estimated from Photometrical Measurements \[#1920\]](#)

Disk-integrated photometric analyses on Itokawa indicates the less weathered regolith. Regolith properties based on the opposition surge were well constrained.

Nichols C. I. O. Bryson J. F. J. Weiss B. P. Herrero-Albillos J.

Kronast F. et al.

POSTER LOCATION #343

[A Time Resolved Paleomagnetic Record for the Pallasite Parent Body \[#1976\]](#)

We present a time resolved record of core dynamo activity driven by core solidification on the Main Group pallasite parent body.

Bramble M. S. Patterson W. R. III Milliken R. E. Yang Y.

Donaldson Hanna K. L. et al.

POSTER LOCATION #344

[Radiometric Calibration of Thermal Emission Data from the Asteroid and Lunar Environment Chamber \(ALEC\) \[#1598\]](#)

We report on the calibration of thermal IR data from the Asteroid and Lunar Environment Chamber, and demonstrate our ability to reproduce emissivity spectra.

Maturilli A. Helbert J. Rosas Ortiz Y. M. Michalik T. Otto K. **POSTER LOCATION #345**
[Bi-Directional Reflectance of Asteroid, Cometary, and Solar System Small Bodies \(SSSB\) Analogues at Low-Temperature Environments](#) [#1347]

PSL is extending its measurement capabilities towards low-T reflectance measurements, for sample temperature from 70 to 270 Kelvin.

Shannon J. L. Hartzell C. M. **POSTER LOCATION #346**
[Preliminary Validation and Simulation of the STRATA-1 Microgravity Granular Segregation Experiment](#) [#2260]

The experimental validation and simulation of the STRATA-1 granular segregation experiment using LIGGGHTS, an open-source, discrete element method software.

Hildebrand A. R. Hanton L. T. J. Ciceri F. Nowell R. Lyytinen E. et al. **POSTER LOCATION #347**
[Characteristics of a Well Recorded, Bright, Meteorite-Dropping Fireball, British Columbia, Canada, September 4, 2017](#) [#3006]

A bright fireball occurred over southern British Columbia, Canada on September 4, 2017, recorded by security cameras, infrasound arrays, and satellite systems.