

Thursday, March 24, 2016

[R612]

**POSTER SESSION II: ASTEROID SPECTROSCOPY AND CLASSIFICATION:
A STUDY OF LUMPING AND SPLITTING BEHAVIOR IN HUMAN BEINGS
6:00 p.m. Town Center Exhibit Area**

Fieber-Beyer S. K. Gaffey M. J. Hardersen P. S. *POSTER LOCATION #169*
[Near-Infrared Spectroscopy of Three 3:1 Kirkwood Gap Asteroids](#) [#1481]

NIR observations, data reduction, and analysis of asteroids (17) Thetis, (900) Rosalinde, and (2834) Christy Carol will be presented.

Lucas M. P. Emery J. P. Hiroi T. Milliken R. E. *POSTER LOCATION #170*
[Spectral Properties of Primitive Achondrite Meteorites: Establishing S-Type Asteroid-Meteorite Connections](#) [#3003]

We present laboratory spectra for 12 partially melted primitive achondrites meteorites; they provide a basis for spectral comparison to S-subtype asteroids.

Roush T. L. Blewett D. T. Cahill J. T. S. *POSTER LOCATION #171*
[Modeling Magnetite Reflectance Spectra Using Hapke Theory and Existing Optical Constants](#) [#2289]

Existing magnetite optical constants used in Hapke calculations do not closely reproduce laboratory reflectance spectra of magnetite.

Sklute E. C. Hiroi T. Pieters C. Milliken R. Glotch T. D. et al. *POSTER LOCATION #172*
[Preliminary VNIR Optical Constants of Bytownite Using Radiative Transfer Theory](#) [#2147]

Bytownite is a common rock forming mineral on the Earth, Moon, Mars, and Venus. Optical constants for Bytownite are determined using radiative transfer theory.

Kiddell C. B. Cloutis E. A. Reddy V. *POSTER LOCATION #173*
[Grain Size Effects on the Spectral Variability of Carbonaceous Meteorites](#) [#2643]

Effects of grain size on the spectral variability of dark carbonaceous asteroids. We examined the effects of grains, dust, and slabs on reflectance spectra.

Klima R. L. Barnouin O. Ernst C. M. Izenberg N. R. Kahn E. *POSTER LOCATION #174*
[Visualization of Near-Infrared Spectral Data of Eros Using the Small Bodies Mapping Tool](#) [#2572]

We introduce spectral mapping capabilities for visualizing spectral data of Eros in a geological context using the Small Bodies Mapping Tool.

Burbine T. H. *POSTER LOCATION #175*
[How Well Does the Bus-DeMeo Taxonomy Classify Meteorite Spectra?](#) [#2425]

This study tests how well the Bus-DeMeo taxonomy classifies meteorite spectra into different asteroid taxonomic classes.

Bertaux J.-L. Montmessin F. Gondet B. Bibring J.-P. Rebérac A. et al. *POSTER LOCATION #176*
[UV-Visible Reflectance of Phobos from SPICAM and OMEGA and Comparison with Deimos](#) [#2177]

The UV reflectance spectra of Phobos and Deimos show a still unidentified strong absorption band, as revealed by OMEGA and SPICAM on board Mars Express.

Donaldson Hanna K. L. Warren T. Bowles N. E. *POSTER LOCATION #177*
[Spectral Characterization of Desiccated Phyllosilicate Samples as Analogues for Phobos and Primitive Solar System Bodies](#) [#2184]

Spectral characterization of nontronite and desiccated nontronite measured under Earth-like and Phobos-like conditions.

- Hong P. K. Miyamoto H. Niihara T. Dohm J. M. *POSTER LOCATION #178*
[Relationship Between Albedo and Reflectance Spectra of Asteroids](#) [#1809]
We analyze the relationship between geometric albedo and reflectance spectra of asteroids. We show distinct trends among the various asteroid types.
- Arai T. Okada T. Tanaka S. Fukuhara T. Demura H. et al. *POSTER LOCATION #179*
[Earth and Moon Observations with TIR Onboard Hayabusa2 Spacecraft](#) [#1801]
TIR is an infrared thermal imager onboard the Hayabusa2 spacecraft. In this study, current performances of TIR are introduced by Earth and Moon observations.
- Oszkiewicz D. Skiff B. Moskovitz N. Marciniak A. *POSTER LOCATION #180*
[Photometric Survey of Inner Main Belt V-Type Asteroids](#) [#1519]
In this study we focus on determining rotational properties of selected V-type asteroids in the inner main belt to test their links to asteroid (4) Vesta.
- Rozitis B. Emery J. Lowry S. Rozek A. Wolters S. et al. *POSTER LOCATION #181*
[Thermal Emission Light-Curves of Rapidly Rotating Asteroids](#) [#1447]
Thermal emission light-curves obtained by Spitzer/IRAC are used to characterize asteroid geophysics and the YORP effect on 20 rapidly rotating asteroids.
- Palmer E. M. Heggy E. Kofman W. W. Moghaddam M. *POSTER LOCATION #182*
[Characterizing Vesta's Surface Roughness Using High-Incidence Bistatic Radar Observations by the Dawn Communications Antenna](#) [#3036]
The first bistatic radar experiment at a small body was conducted by Dawn at asteroid Vesta. Vesta's surface roughness is compared to that of the Moon.
- Noll K. S. Grundy W. M. Ryan E. L. Benecchi S. D. *POSTER LOCATION #183*
[Detection of a Resolved Trojan Binary](#) [#2632]
We report detection of the third known resolved binary Trojan using the Hubble Space Telescope and a novel technique for identifying close pairs.
- Vodniza A. Q. Pereira M. R. *POSTER LOCATION #184*
[The Asteroid 1998 WT24](#) [#1138]
The asteroid 1998 WT24 flew past Earth on Dec. 11, 2015 at a distance of 11 lunar distances. Astrometry was carried out and we calculated the orbital elements.
- Hewson K. P. Benedix G. K. Bland P. A. Roberts M. Evans N. et al. *POSTER LOCATION #185*
[Trace Elements in Meteorite Fusion Crust](#) [#1969]
We present trace element studies of fusion crusts in four meteorites of different classes.
- Senshu H. Kurosawa K. Okamoto T. Matsui T. *POSTER LOCATION #186*
[Laboratory Simulation of Shooting Star by Using a Two-Stage Light Gas Gun](#) [#2142]
We conducted a experimental study to simulate shooting stars in the laboratory. We successfully obtained spectroscopic data of the simulated shooting stars.
- Gucsik A. Nishido H. Ninagawa K. Kereszturi A. Nakamura T. et al. *POSTER LOCATION #187*
[Micro-Raman Spectroscopy of a Plagioclase Particle from the Hayabusa-1 Sample Return Mission](#) [#3042]
This abstract may also apply to future sample-return missions such as Hayabusa2 and its mineralogy.