

Thursday, March 20, 2014

[R722]

**POSTER SESSION: SMALL BODY OBSERVATIONS:
REFLECTIONS, INSPECTIONS, AND COMPUTATIONS
6:00 p.m. Town Center Exhibit Area**

Maturilli A. Helbert J. D'Amore M. Ferrari S. Saladino R. **POSTER LOCATION #381**

[*A Spectral Library of Emissivity Measurements for Asteroid Analogs*](#) [#1341]

NASA, JAXA and ESA plan to send sample return missions to asteroids. At PEL we measured emissivity of meteorites, sulfates, carbonates, phyllos as analogs.

Lim L. F. Moskovitz N. A. Thomas C. A. Howell E. S. Emery J. P. et al. **POSTER LOCATION #382**

[*Thermal Emission Photometry of Three Near-Earth Asteroids in L' and M'*](#) [#1695]

We successfully acquired JKL' M' (1.2–4.7 μm) spectrophotometry of three sub-km near-Earth asteroid radar targets.

Burbine T. H. **POSTER LOCATION #383**

[*Determining Band Centers from Asteroid Spectra*](#) [#1646]

A MATLAB program has been written to determine band centers with uncertainties from S-type asteroid spectra.

Ryan E. L. Noll K. S. Woodward C. E. **POSTER LOCATION #384**

[*An Optical Color Survey of Hilda Group Asteroids: Testing Giant Planet Migration Models*](#) [#2812]

Various models of giant planet migration predict distinct source regions for the Hilda asteroids. We present preliminary optical colors to test these models.

Lust N. B. Britt D. T. **POSTER LOCATION #385**

[*Observations and Analysis of 2577 Litva*](#) [#2571]

Over several weeks we have made observations of the binary asteroid 2577 Litva. We present our analysis using developed techniques for low S/N observations.

Vodniza A. Q. Pereira M. R. **POSTER LOCATION #386**

[*Study of the Asteroid 1998 QE2*](#) [#1042]

We captured a mutual event (eclipse) and we calculated the orbital elements of this asteroid. The parameters were calculated based on 191 observations.

Maturilli A. Helbert J. D'Amore M. Ferrari S. **POSTER LOCATION #387**

[*On the Effect of Emerging Angle on Emissivity Spectra: Application to Small Bodies*](#) [#1352]

We studied the influence of emerging angle on emissivity spectra measured in air and in vacuum, with particular attention to asteroids-like conditions.

Okamura N. Hasegawa S. Usui F. Hiroi T. Ootsubo T. et al. **POSTER LOCATION #388**

[*Spectroscopic Observations of Dark Main-Belt Asteroids in the 2.5–3.1 \$\mu\text{m}\$ Range*](#) [#1375]

We report reflectance spectra of 33 dark asteroids observed by AKARI over 2.5–3.1 μm , which has not been observed before because of severe telluric atmosphere absorption.

Thomas I. R. Bowles N. E. Donaldson Hanna K. L.

Connolly H. C. Killgore M. et al. **POSTER LOCATION #389**

[*The Effects of Varying Environmental Conditions on the Emissivity Spectra of Meteorites*](#) [#1989]

An environmental simulation chamber was used to measure the emissivities of a selection of ground meteorites under isothermal and asteroid-like conditions.

Gaffey M. J. Reddy V. Fieber-Beyer S. Cloutis E. **POSTER LOCATION #390**

[*Asteroid \(354\) Eleonora: Plucking an Odd Duck*](#) [#1453]

(354) Eleonora was previously identified as an anomalous S-asteroid. Our work has determined a probable composition and revealed problems with the CCD data.

Doressoundiram A. Roques F. Liu C.-Y. Maquet L. **POSTER LOCATION #391**
[MIOSOTYS: Exploring the Outer Solar System Small Bodies with Stellar Occultations](#) [#1214]

MIOSOTYS is a ground-based instrument aimed at probing the transneptunian disk with stellar occultations. We present observing campaigns and results.

Noll K. S. Benecchi S. D. Ryan E. L. Grundy W. M. **POSTER LOCATION #392**
[Ultra-Slow Rotating Outer Main Belt and Trojan Asteroids: Search for Binaries](#) [#1703]

The Hubble Space Telescope was used to search for companions to eight long-period outer main belt and Trojan asteroids. No companions were detected.

Springmann A. Taylor P. A. Howell E. S. Nolan M. C. Benner L. A. M. et al. **POSTER LOCATION #393**

[Radar Shape Model of Binary Near-Earth Asteroid \(285263\) 1998 QE2](#) [#1313]
Asteroid and Moon / 1998 QE2 / With radar we model.

Mori Y. Hirata N. Hayabusa-2 Shape Reconstruction Study Group **POSTER LOCATION #394**
[Asteroid Shape Reconstruction by Open-Source Structure from Motion Tools](#) [#1760]

Applicability of the open-source shape reconstruction tools, Bundler and PMVS2, to the exploration mission data is evaluated.

Mittal T. Goldstein D. Nugent P. **POSTER LOCATION #395**
[Detection and Characterization of the Sub-km Asteroid Population in the Main Asteroid Belt](#) [#2905]

We present a novel algorithm for detection of subkilometer-scale asteroids in wide-field surveys (e.g., Dark Energy Survey) and deep imaging archives (e.g., Keck).

Fieber-Beyer S. K. Gaffey M. J. Hardersen P. S. **POSTER LOCATION #396**
[Potentially Hazardous Asteroid 2007 LE: Probable Parent Body of the Black Chondrite Rose City and Daughter of Asteroid \(6\) Hebe](#) [#1428]

The binary, PHA, 2007 LE, is the first ever result where a specific meteorite has been linked to a NEO for which a mainbelt parent body has been identified.

Melwani Daswani M. Morlok A. Wolters S. D. Grady M. M. **POSTER LOCATION #397**
[Mid-Infrared Reflectance Spectroscopy of Calcium-Aluminium-Rich Inclusions: A Way to Detect Primitive Asteroids?](#) [#2436]

Mineral-specific features in mid-infrared reflectance spectra of CAI in primitive meteorites can be observed in asteroid spectra observed by space telescopes.

Roberts R. V. Gaffey M. J. **POSTER LOCATION #398**
[Update on Testing the Gefion Dynamical Family as a Possible Source of the L-Chondrites](#) [#1263]

The Gefion dynamical family has been proposed as the source for L chondrites. We update the spectral investigation undertaken to test this hypothesis.

Messenger S. Connolly H. C. Jr. Lauretta D. S. Bottke W. F. **POSTER LOCATION #399**
[Investigating the Geological History of Asteroid 101955 Bennu Through Remote Sensing and Returned Sample Analyses](#) [#1904]

NASA's OSIRIS-REx mission will return samples of asteroid Bennu in 2023. We review our approach to unraveling the history of Bennu by returned sample analyses.

Elvis M.

POSTER LOCATION #400

[How Many Ore-Bearing Asteroids?](#) [#1048]

Using a Drake Equation formalism I estimate how many asteroids contain either platinum group metals or water suitable for commercial mining.

Probst L. W. Desch S. J.

POSTER LOCATION #401

[Gravitational Potential of Haumea with a Rocky Core](#) [#2706]

We present models of the internal structure of the rapidly rotating Kuiper belt object Haumea such that its rocky core and ice surface are equipotentials.