

Thursday, March 22, 2012

POSTER SESSION II: MAIN BELT ASTEROIDS: LUTETIA, IDA, AND OTHERS

6:00 p.m. Town Center Exhibit Area

Okamura N. Hasegawa S. Hiroi T. Ootsubo T. Müller T. G. Usui F. Sugita S.

[3- \$\mu\$ m Spectroscopic Observations of Asteroid 21 Lutetia Using Akari Satellite](#) [#1918]

We investigate the presence of 3- $\mu$ m absorption band of asteroid 21 Lutetia based on the observational results obtained by the AKARI satellite. As a result, the 3- $\mu$ m absorption bands are found to have a very shallow absorption or no obvious absorption.

Andrews D. J. Morse A. D. Barber S. J. Leese M. R. Morgan G. H. Sheridan S.

Wright I. P. Pillinger C. T.

[Ptolemy: Operations at 21 Lutetia as part of the Rosetta Mission and Future Implications](#) [#2113]

Ptolemy is an evolved gas analyzer onboard the Philae lander of the Rosetta mission. Attempts were made to detect the exosphere of asteroid 21 Lutetia during a July 2010 targeted flyby; the results are presented here and future implications discussed.

Granahan J. C.

[Revisiting 243 Ida Galileo Infrared Spectra](#) [#1162]

Radiance spectra data files are being assembled for the Galileo Near Infrared Mapping Spectrometer observations of asteroid 243 Ida and its satellite Dactyl. These calibrated data are being prepared for archival in the NASA Planetary Data System.

Hirabayashi M. Scheeres D. J.

[Fission Limits for Bifurcated Asteroids: The Case of Kleopatra](#) [#2256]

Based on radar and optical measurement of Kleopatra we show that it is spinning near, but less than, its fission limit. Our method is also applied to five other asteroids to map out their spin limits before they are susceptible to spin fission.

Blagen J. R. Gaffey M. J. Fieber-Beyer S. K.

[Testing the Gefion Family as a Possible Parent Body for the L-Chondrite Meteorites](#) [#1643]

A goal has been to find the origin of the L-chondrite meteorites. This study uses infrared spectroscopy to assess the mineralogy of Gefion family asteroids to test whether the family is a source of the L chondrites, and if it is a genetic family.

Crane K. T. Emery J. P. Lim L. F.

[Shape and Thermal Modeling of a Selection of M-Type Asteroids](#) [#1425]

We have determined the shape and thermally modeled six M-type asteroids that, because of their spectral signatures or lack thereof, radar albedos, and other thermal and physical properties, are likely candidates for metallic core progeny.