Tuesday, March 8, 2011
POSTER SESSION I: ASTEROID STUDIES: FROM THE LAB TO THE MAIN BELT
6:00 p.m. Town Center Exhibit Area

McAdam M. M. Hibbitts C. A.
Temperature Dependence of Calcium and Sodium Montmorillonite at 2.6 μm **[#1026]**
In laboratory experiments we observed changes in the spectra of calcium montmorillonite and sodium montmorillonite upon desiccation and subsequently upon cooling. Both clays exhibit temperature dependent changes near 2.6 μm.

Souchon A. L. Pinet P. C. Chevrel S. D. Daydou Y. Baratoux D. Kurita K. Shepard M. K. Helfenstein P.
An Experimental Photometric Study of Natural Granular Surface Samples Using Hapke's Model **[#1785]**
We present an experimental photometric study of various granular volcanic surface samples using Hapke's modeling. Variations of photometric parameters display specific trends that can be related to physical properties of the samples.

Hardersen P. S. Mothe'-Diniz T. Cloutis E. A.
Constraining Meteorite Analogs for the Eos Dynamical Family via Mineralogical Band Analysis **[#2184]**
The Eos dynamical family displays weak near-infrared Band I and Band II spectral absorptions that suggest the surface presence of olivine ± pyroxene. Band analysis will be undertaken to constrain the possible meteorite analogs for the Eos family.

Maleszewski C. K. Jr. Masiero J. McMillan R. S. Mainzer A. Scotti J. V. Larsen J. A. WISE Team
Albedo and Taxonomic Class Relationships of Near-Earth Objects Observed by the Wide-Field Infrared Survey Explorer (WISE) **[#1219]**
This poster is a status report on a project that will determine the relationship between taxonomic class and albedos of NEOs using those observed by WISE. The completion of this study will constrain the physical properties and compositions of NEOs.

Fieber-Beyer S. K. Gaffey M. J. Kelley M. S. Reddy V. Reynolds C. M. Hicks T.
The 3:1 Kirksood Gap and the Maria Family: Genetic Family Membership and Plausible Source Body of Mesosiderites **[#1411]**
The present research uses NIR spectra to identify possible links between MAF members adjacent to the 3:1 resonance and meteorites in the terrestrial collections.

Welivitiya W. D. D. P. Sears D. W. G.
Analysis of Visual Reflectance Spectra of "Hungaria" Family of Asteroids **[#1274]**
By analyzing the reflectance spectra of Hungaria asteroids we suggest that an impact between one of many X/E asteroids and one of many A/S asteroids is the most probable origin for the Hungaria family of asteroids.

De Sanctis M. C. Migliorini A. Ammannito E. Capria M. T. Filacchione G. Lazzaro D. Luzia F. Marchi S.
NIR Spectral Observations of Candidate V-Type Asteroids **[#1668]**
The asteroids we have observed were selected from different dataset of possible V-type asteroids. Spectral data are needed to confirm if these objects are V-type asteroids and hence to better understand their relationship with Vesta.

Bodewits D. Kelley M. S. Li J.-Y. Landsman W. B. A'Hearn M. F.
Swift Observations of the Ejecta of Asteroid 596 Scheila **[#1462]**
Early December 2010, an unexpected dust cloud was discovered around the asteroid 596 Scheila. We report on observations using the UV-Optical Telescope onboard Swift. The ejecta plume might be driven by volatiles or by a collision with another asteroid.

Nimura T. Abe M. Hiroi T. Pieters C. M.
Estimating the Composition and the Degree of Space Weathering of Asteroids 6 Hebe, 433 Eros, and 25143 Itokawa by Reflectance Spectroscopy Using a New Modeling Approach **[#1655]**
We have estimated the mineral assemblage, chemical compositions of the component minerals, grain-size, and degree of space weathering of asteroids 6 Hebe, 433 Eros, and 25143 Itokawa from their visible and near-infrared reflectance spectra.

DeMeo F. E. Binzel R. P.
SMASS-Next: A Next Generation Asteroid Spectroscopic Survey **[#2055]**
We present first results of an observing campaign using FIRE on the 6.5-m Magellan Telescope at Las Campanas Observatory Chile to obtain near-infrared spectra of subkilometer near-Earth objects.

Marchis F. Enriquez J. E. Emery J. P.
NIR Spectroscopic Study of Multiple Asteroid Systems **[#2035]**
We are conducting a survey using an IRTF/SPEX instrument to derive the taxonomic class of this interesting subpopulation of SSSBs. The spectra of 21 of them were recorded in 2008 and 2010 and will be presented in this work.

Binzel R. P. DeMeo F. E. Lockhart M. Tokunaga A. Thomas C. A. Rivkin A. S. Bus S. J. Birlan M. Vernazza P. Burbine T. H.
Spectral Reconnaissance for 200 Near-Earth Object Mission Targets **[#2226]**
We present spectral characterization measurements for 200 near-Earth objects that are spacecraft mission candidates accessible with Delta-V of less than 7 km/sec.

Dave R. Emery J. P.
Near Earth Asteroid Thermal Modeling [NEATM] and Thermophysical Modeling of 10 Low Albedo NEAs Using Infrared Spectrograph (IRS) on NASA's Spitzer Space Telescope **[#2583]**
In support of the ExploreNEOs campaign of the Warm Spitzer program, the current project is a study of a sample of NEAs using the Infrared Spectrograph on NASA's Spitzer Space Telescope and Thermal (NEATM) and Thermophysical Modeling of the data.