Tuesday, July 28, 2015
ASTEROIDS AND COMETS: REMOTE OBSERVATIONS
8:30 a.m. Sibley Auditorium

Chairs: **Michael Zolensky**
Vishnu Reddy

8:30 a.m. Hartmann W. K. *
Physical Mechanism of Comet (and Asteroid) Outbursts: The Movie **[#5002]**
A film made during impact experiments at NASA Ames illustrates a mechanism in which regolith can become gas charged and then erupt to create outbursts as observed on comets (and "asteroids" such as 2060 Chiron).

8:45 a.m. McSween H. Y. *
Mineralogy of Ceres: Comparison with CM Carbonaceous Chondrites **[#5049]**
Ceres spectroscopy indicates a link to the mineralogy of CM carbonaceous chondrites, although the alteration pathways and conditions may have varied.

9:00 a.m. Reddy V. * Nathues A. Le Corre L. Li J.-Y. Schäfer M. Hoffmann M. Russell C. T. Mengel K. Sierks H. Christensen U.
Nature of Bright Spots on Ceres from the Dawn Framing Camera **[#5161]**
We report latest results from the Dawn Framing Camera observations of bright spots on Ceres. Our analysis suggests that these bright spots are water ice associated with impact craters. We will present results of potential meteorite analogs for Ceres.

9:15 a.m. Zolensky M. E. * Fries M. Chan Q. H.-S. Kebukawa Y. Steele A. Bodnar R. J.
The Mineralogy of Ceres (*Or Something an Awful Lot Like It)* **[#5270]**
The mineralogy of Ceres is available via analysis of xenolithic materials found in two H chondrites.

9:30 a.m. Zolotov M. Yu. *
Physical Chemistry of Impact-Generated Fluids and Bright Spots on Ceres **[#5384]**
Bright-spots on Ceres could be temporal water ice deposits formed atop impact-generated hydrothermal systems.

9:45 a.m. Beck P. * Quirico E. Moroz L. V. Schmitt B. Arnold G. Ciarniello M. Bonal L. Capaccioni F. Filacchione G. Erard S. Leyrat C. Bockelée-Morvan D. Tosi F. Raponi A. Capria M. T. De Sanctis M. C.
The Nucleus of 67P Observed by VIRTIS/Rosetta: Different from Carbonaceous Chondrites and Similar to D-Type Asteroids? **[#5188]**
We will discuss observations of the crust of 67P by VIRTIS/Rosetta and compare with carbonaceous chondrites and D-type asteroids.

10:00 a.m. Nakamura T. * Iwata T. Kitasato K. Abe M. Osawa T. Matsuoka M. Nakauchi Y. Arai T. Komatsu M. Hiroi T. Imae N. Yamaguchi A. Kojima H.
Reflectance Spectra Measurement of Various Carbonaceous Chondrites Using Hayabusa-2 Near Infrared Spectrometer **[#5206]**
We measured reflectance spectra of nine carbonaceous chondrites using the NIRS3 flight model. The results indicate that NIRS3 can characterize key properties such as water contents and temperature of surface material of asteroid 1999JU3.