

Thursday, March 13, 2008

**POSTER SESSION II: REMOTE SENSING APPROACHES, ADVANCES, AND APPLICATIONS**  
**6:30 p.m. Fitness Center**

Helbert J. Maturilli A.

*The Heat is On — In the Planetary Emissivity Laboratory (PEL) at DLR Berlin* [#2408]

We will report here on the next development step of the PEL which is the addition of a planetary simulation chamber. This chamber will allow to measure samples under vacuum and at temperatures up to 500°C.

Parente M.

*A New Approach to Denoising CRISM Images* [#2528]

We propose an algorithm for removal of striping and spiking noise in CRISM hyperspectral images as an alternative to the ones currently available to researchers. We prove its usefulness by showing its results on images and summary parameter maps.

Coradini A. De Sanctis M. C. Capria M. T. Ammannito E. Fonte S. Filacchione G. Magni G.  
Bini A. Ficai Veltroni I.

*VIR-Visual InfraRed Mapping Spectrometer of Dawn Mission* [#1556]

We will describe VIR, the Mapping Spectrometer onboard Dawn, and its expected performances in terms of understanding both Vesta and Ceres.

Ammannito E. Boccaccini A. Mazzoni A. Piccioni G. Coradini A. De Sanctis M. C.

*The Development Model of VIR-MS: Laboratory Spectroscopy Supporting the Dawn Mission* [#1871]

The purpose of this abstract is to describe the laboratory set-up we have prepared to support the Dawn mission. We have assembled and calibrated the DM imaging spectrometer onboard the mission. It will be used to collect reflectance spectra.

Nettles J. W. Wyatt M. B.

*Use of Optical Remote Sensing Analysis Techniques to Measure Modal Mineralogy Using X-Ray Elemental Phase Maps* [#2198]

We present a demonstration of using spectral analysis techniques used in remote sensing studies to measure mineral modes using X-ray phase maps. Image analysis of phase maps can provide a wealth of petrographic information on thin section phases.

Sharma S. K. Misra A. K. Lucey P. G. Lentz R. C. F.

*Integrated Remote Raman and LIBS Instrument with 532 nm Laser Excitation for Characterizing Minerals at 9 m* [#2331]

We have developed an integrated remote LIBS and Raman spectroscopy instrument using a single 532 nm pulsed laser source. This instrument will be a powerful active remote sensing tool for characterizing surface mineralogy on future rover missions.

Mungas G. S. Gursel Y. Dreyer C. B. Sepulveda C. S. Johnson K. R. Boynton J. E. Beegle L. W.  
*Integrating Micro-LIBS with Camera Handlens and Microscope Probe for Space Exploration* [#2492]

Describes the development of an integrated camera, handlens, and microscope probe for planetary investigations. The instrument integrates visible reflected light imaging with LIBS spectroscopy and images from infinity down to high resolution microscopy.