Tuesday, March 8, 2011
POSTER SESSION I: MARS: LARGE VOLCANOS AND LAVA FLOWS
6:00 p.m. Town Center Exhibit Area

Beddingfield C. B. Burr D. M.
Formation and Evolution of Surface and Subsurface Structures Within the Large Caldera of Olympus Mons, Mars **[#2386]**
Mapping of tectonic features in Olympus Mons' largest caldera provides data for comparison to results from published physical experiments. From this basis, we deduce a depth for the magma chamber and a scenario of caldera evolution.

Musiol S. Williams D. A. van Gasselt S. Platz T. Dumke A. Neukum G.
Investigation of a Landslide Mechanism for the Formation of the Olympus Mons Scarp and Aureole Lobes **[#1932]**
Olympus Mons scarp and aureole lobes are investigated with methods of mapping, terrain model analysis and morphometry. Results suggest a landslide mechanism.

Crown D. A. Ramsey M. S. Berman D. C.
Lava Flow Fields of Southern Tharsis, Mars: Mapping, Morphologic, and Chronologic Studies **[#2352]**
Mapping of lava flows fields in the southern Arsia Mons and Daedalia Planum regions of Mars combined with analyses of flow morphology and populations of small impact craters are used to document the styles, magnitudes, and ages of volcanism in southern Tharsis.

El Maarry M. R. Dohm J. M. Marzo G. A. Fergason R. Heggy E. Goetz W.
Pack A. Markiewicz W. J.
Evidence of Hydrothermal Activity at Apollinaris Patera, Mars **[#1966]**
Our research corroborates the Viking-era investigations that point to Apollinaris Patera, Mars as a site of high potential for magmatic/hydrothermal activity. Here we list our key findings.

El Maarry M. R. Heggy E. Dohm J. M.
Assessment of a Possible Volcanic Paleolake at Apollinaris Patera, Mars: Constraints on the Composition of the Inner Caldera and Fan Deposits Using the Shallow Sounding Radar (SHARAD) **[#2027]**
We explore the hypothesis that a volcanic paleolake existed in the caldera of Apollinaris Patera, Mars, and has been responsible for the formation of extensive fan deposits draping the volcano's southern flank using data from the shallow sounding radar SHARAD.

Morgan G. A. Campbell B. A. Carter L. M. Plaut J. J.
Investigating the Stratigraphy and Three Dimensional Structure of the Youngest Lava Flows on Mars Using the SHARAD Radar **[#2629]**
We have followed up previous SHARAD studies of Elysium Planitia by conducting a focused investigation of the eastern portion of the region. We will present the spatial distribution of multiple subsurface reflectors located below the lava flows.

Gwinner K. Head J. W. Wilson L. Fassett C. Dissmore S.
Surface Ages of the Volcanic Deposits of Pavonis Mons and Implications for the Magma Supply of Tharsis **[#2466]**
Episodic activity linking deposition on flanks, calderas, and adjacent plains in a repetitive pattern, compatible with other findings on timescales of magma supply, is documented for >0.5 Ga, implying a primary center for magma ascent up to the present.