

**Tuesday, August 6, 2013**  
**POSTER SESSION: EXTRATERRESTRIAL CRATERING**  
**4:00 p.m. Alumni Hall**

Milbury C. Johnson B. C. Melosh H. J.

[\*Hydrocode Simulation of the Transition from Central Peak to Peak-Ring Crater Morphology for the Moon\*](#) [#3013]

We present results from impact simulations for complex and peak-ring craters for the Moon.

Nussbaumer J. W.

[\*Evidence for Impact into Ice Rich Terrain and Melting to Produce Glaciation and Valley Networks in the Aeolis/Zephyria Region, Mars\*](#) [#3065]

The spatial association between a 30 km crater in the Aeolis/Zephyria Region, Mars and paleochannels suggest that the impact was responsible for their formation.

Ackiss S. E. Seelos K. D. Buczkowski D. L.

[\*Mineralogic Mapping of Huygens Crater, Mars: A Transect of the Highlands Crust and Hellas Basin Rim\*](#) [#3095]

Huygens Crater, intersected by the Hellas rim, is a well preserved peak ring crater on Mars. By mapping the distribution of different mineral types, we hope to offer unique insight into the emplacement and alteration history of the highlands crust.

Kring D. A. Burns J. O. Hopkins J. B. Norris S. Lazio T. J. W.

[\*Exploration of the Schrodinger Peak-Ring Basin on the Lunar Farside\*](#) [#3105]

A close look at the geology of the Schrödinger basin for mission opportunities.

Otto K. Jaumann R. Krohn K. Matz K.-D. Preusker F. Roatsch T. Scholten F. Simon I.

Stephan K. Raymond C. A. Russell C. T.

[\*Spiral Features and the Coriolis Effect on Vesta's Basin Rheasilvia\*](#) [#3029]

We investigated the spiral features associated with Vesta's south polar basin Rheasilvia and analysed the contribution of the Coriolis effect.

Barlow N. G. Boyce J. M. Wilson L.

[\*The Role of Base Surge in the Formation of Martian Low-Aspect-Ratio Layered Ejecta \(LARLE\) Craters\*](#) [#3058]

Martian Low-Aspect-Ratio Layered Ejecta (LARLE) craters are characterized by an extensive but thin layer extending beyond the normal layered ejecta blankets. We propose that base surge is responsible for producing the LARLE layer.

Calla O. P. N. Mathur Shubhra. Jangid Monika.

[\*Comparison of Dielectric Constant of Apollo 17 Samples with MINI-RF and TALS\*](#) [#3007]

DC of Apollo 17 samples have been compared with the Campbell's model DC using Mini-RF data and results are compared with the DC of TALS measured at laboratory. Results from above three sources are almost equal and model can be applied over equatorial region.

Calla O. P. N. Mathur Shubhra. Jangid Monika.

[\*Water Ice Detected at Secondary Craters on Peary Floor Using Mini-SAR and Mini-RF\*](#) [#3008]

PSR shows large variation in CPR range for Mini-SAR when compared with Mini-RF data. High CPR values together with low degree of polarization(m) and relative phase LH-LV ( $\delta$ ) signify presence of water ice in the secondary craters of Peary.

Wright S. P. Farrand W. H.

[\*Spectral, Chemical, and Petrographic Comparisons of Hydrovolcanic Tephra with Basaltic Impactites: Relevance for Mars\*](#) [#3071]

The origin of glasses and subsequent alteration products is not easily interpreted by planetary rovers. Basaltic hydrovolcanic tephra collected worldwide and impact melts from Lonar Crater have been examined using Mars Rover-like instrumentation.

Buhlmann E.

[\*Searching for a Giant Impact Structure in the Flin Flon-Snow Lake Area, Manitoba\*](#) [#3103]

Symmetric clusters of Early Proterozoic VMS deposits in the Flin Flon-Snow Lake mining district of Manitoba, centre on a 3.8 km circular structure. High Fe, Ti, P basalts and a 2.3 ppb Ir anomaly link the 140 km district to a possible impact event.