CRATERING ON THE MOON

Wednesday, March 23, 2016

10:15 a.m. Waterway Ballroom 1

Chairs: Harald Hiesinger
        Peter Schultz

10:15 a.m. Spudis P. D. * Sliz M. U.
*Impact Melt from the Lunar Crisium Multi-Ring Basin [#1463]*
We have identified remnants of the Crisium basin impact melt sheet. We characterize its chemical composition and compare it to other lunar basins.

10:30 a.m. Schultz P. H. *
*Impactor Footprints or Transient Craters: Origin of Basin Gravity Anomalies [#2931]*
The inner peak ring and interior ring of impact basins are proposed to reflect the zone of downward displacement initiated at the earliest stages of cratering.

10:45 a.m. Curren I. S. * Paige D. A. Esturas L.
*An Impact Model for the Origin of Rocky Surfaces and Melt Deposits at the Antipode of Tycho Crater [#2756]*
Impact at Tycho / Ejecta to antipode / Rubble, melt, and flow.

11:00 a.m. Dhingra D. * Head J. W. Pieters C. M.
*Elevation Differences on the Floors of Complex Craters: Insights into the Crater Evolution Processes [#2718]*
We note elevation differences among large, coherent floor sections of complex craters and are exploring the likely causal geological scenarios.

*Radial Gravity Anomalies Associated with Secondary Crater Chains Surrounding the Orientale Basin Found in GRAIL Data [#2776]*
Gravitational signatures associated with secondary crater chains at Orientale, found in GRAIL data, are discussed in terms of density anomaly and their source.

*Characterizing Hidden Impact Basins Discovered by GRAIL Gravity Data [#2208]*
New ancient lunar impact basins have been uncovered thanks to the GRAIL mission’s gravity measurements. We have dated and characterized these new basins.

11:45 a.m. Speyerer E. J. * Povilaitis R. Z. Robinson M. S. Thomas P. C. Wagner R. V.
*Impact of Secondary Surface Changes on Regolith Gardening [#2645]*
LROC NAC temporal observations provide our first detailed look at new impacts and secondary surface changes that are altering and gardening the lunar regolith.