SPECIAL SESSION: SMALL METEORITE IMPACTS – FROM ATMOSPHERIC ENTRY TO ENVIRONMENTAL EFFECTS II
10:30 a.m. Room D

Chairs: Natalia Artemieva
Witold Szczućinski

10:30 a.m. Watters W. A. * Collins G. S. Hundal C. Radford A. Tornabene L. L.
Dependence of Secondary Crater Shape on Impact Velocity [#6502]
We have characterized the transition in crater shape from “splash” to hypervelocity impacts as a function of impactor speed using the morphometry of small martian secondary craters in HiRISE stereo-derived DEMs, as well as computer simulations.

10:45 a.m. Speyerer E. J. * Wagner R. V. Povilaitis R. Z. Robinson M. S. Thomas P. C.
Significance of New Impact Events on the Lunar Surface [#6539]
Random impacts by cometary and asteroidal materials shape the surfaces of all solid solar system bodies. Temporal observations by the Lunar Reconnaissance Orbiter Camera provide our first detailed look at new primary craters and secondary impacts.

11:00 a.m. Luther R. * Prieur N. C. Tasdelen E. Wünnemann K. Werner S. C.
Shock Melting, Crater Formation, and Ejecta Distribution in the 17th March 2013 Lunar Impact Event [#6494]
We measure crater characteristics by LRO-NAC images. By these constraints, we model the impact using the iSALE shock physics code. We determine melt volumes and ejecta distribution for various impact scenarios.

11:15 a.m. Folco L. * D’Orazio M.
The Kamil Crater (Egypt): A Type Structure for Small Impact Craters on Earth [#6427]
Kamil Crater can be considered as a type structure that could serve as ground-truth for experimental and numerical models for small impact craters on Earth.

11:30 a.m. Losiak A. * Belcher C. Hudspith V. Bronikowska M. Zhu M. Jõeleht A.
Kaali Impact Crater: Impact-Produced Charcoal Sheds Light on the Processes Associated with the Formation of Small Craters [#6219]
Charcoal found within proximal ejecta of a 100-m in diameter Kaali structure was produced at the same time as the impact crater. Our study analyses possible charcoal formation mechanisms.

Environmental Effects of Small Meteorite Impact in Unconsolidated Sediments — Case of Iron Meteorite Shower in Morasko, Poland [#6433]
We show record of environmental consequences of mid-Holocene small meteorite impact. It is based on sedimentological, geochemical and biological indicators studied in lake deposits, which revealed relatively small extent of the impact effects.