

Monday, September 21, 2015
THE FATE OF PROJECTILES
1:45 p.m. Pathology and Anatomy Lecture Hall

Chair: Lutz Hecht

- 13:45 Burchell M. J. * Wickham-Eade J.
[*Fragmentation of Basalt Projectiles in Hypervelocity Impacts in the Laboratory*](#) [#1034]
We present data from laboratory experiments concerning fragmentation of basalt projectiles in impacts on water at between 0.6 and 5.3 km/s (equivalent to peak shock pressures from 1 to 26 GPa). Fragment size distributions have been studied.
- 14:00 Daly R. T. * Bruck Syal M. Schultz P. H.
[*Experiments and Numerical Models Provide Complementary Information About Projectile Survival and Delivery*](#) [#1080]
We compare results for projectile delivery and retention derived from both numerical models and hypervelocity impact experiments. The two approaches provide different and complementary information on the fate of the projectile.
- 14:15 Kohout T. * Gritsevich M. Grokhovsky V. I. Yakovlev G. A. Haloda J. Halodova P. Michallik R. M. Penttilä A. Muinonen K.
[*Chelyabinsk LL5 Chondrite — Insight into Shock Effects on S-Type Asteroids*](#) [#1022]
Chelyabinsk meteorite consists of material with various shock levels. Effect of shock on material physical properties and reflectance spectra was investigated. Implication of S-type asteroid regolith evolution will be discussed.
- 14:30 Ebert M. * Hamann C. Hecht L. Deutsch A. Kenkmann T.
[*Bridging the Gap Between Laboratory and Nature: Geochemical Clues from Experimental Approaches*](#) [#1055]
This study shows that the impact experiments and laser-induced melting experiments of the MEMIN research group were able to produce a wide range of features very similar or even identical to those of well-described impactites from terrestrial craters.
- 14:45 DISCUSSION
- 15:00 *Coffee Break*