

Tuesday, July 28, 2015

POSTER SESSION: IMPACT CRATERING:  
MAGNETICS AND PLANETARY-SCALE IMPACTS

5:30 p.m. Hearst Memorial Mining Building (HMMB) Floor Three

Bezaeva N. S. Badyukov D. D. Kars M. Feinberg J. M. Rochette P. Gattacceca J. Raitala J.  
[Magnetic Properties of Agglutinate-Like Particles from Planar Shock-Recovery Experiments on Basalts](#) [#5009]

We conducted planar shock-recovery experiments using a light gas gun and copper projectiles sent to basaltic targets at about 6 km/s. Agglutinate-like particles (ALP) were formed as a result of shock. Here we present the magnetic properties of ALP.

Bezaeva N. S. Demory F. Rochette P. Gattacceca G. Gabriel T. Quesnel Y.

[The Effect of Hydrostatic Pressure up to 1.45 GPa on the Morin Transition of Hematite-Bearing Rock: Implications for Martian Crustal Magnetization](#) [#5016]

We quantified the effect of hydrostatic pressure up to 1.45 GPa on the Morin transition of hematite-bearing rock via direct magnetic measurements using a high pressure cell and a SQUID magnetometer. Hematite is present in the martian crust.

Essa K. S. Kletetschka G.

[Magnetic Anomalies on Mars are Deep Seated](#) [#5019]

Magnetic data set from 400 km altitude of Mars is interpreted using SMA method for twelve profiles chosen across significant magnetic regions to estimate the depth and shape. The results demonstrate that the depth varies between 55 km and 227 km.

Echaurren J. C.

[Apollo Basin, Moon: Estimation of Impact Conditions](#) [#5341]

The Apollo Basin is a, pre-Nectarian, multi-ring basin located within the large South Pole-Aitken Basin (SPA). Multispectral data from both Galileo and Clementine showed that the composition of materials in Apollo is distinct...

Hartmann W. K.

[Terminal Cataclysm Epistemology: A Cataclysm that Never Happened?](#) [#5026]

The "terminal cataclysm" or "late heavy bombardment," LHB) concept of the last 40 years exhibits curious epistemology, with changing definitions and inconsistent evidence. The classic spike of basin-forming impacts at 3.9 Ga ago is no longer viable.