Thursday, August 11, 2016

SPECIAL SESSION: SURFACE AND INTERIOR DYNAMICS OF METEORITE PARENT BODIES
3:30 p.m. Room C

Chairs: Wladimir Neumann
         Doris Breuer

3:30 p.m. Prialnik D. *
         Modelling the Internal Structure and Evolution of Small Icy Bodies of the Solar System [#6444]
         The evolution of the internal structure of icy bodies of the solar system is simulated by numerical codes.
         The results are compared to available observations. The activity of comets and the differentiated
         structure of large bodies can be explained.

3:45 p.m. Kawabata Y. * Nagahara H.
         Crystallization and Cooling Conditions for the Magma Ocean of the Asteroid 4 Vesta [#6229]
         A new model combining fluid dynamics and thermodynamics for Vesta magma ocean shows that it had
         a lid with ~1 km thickness and the orthopyroxene size should be as large as ~1 cm, which satisfy fairly
         thick diogenite cumulate with Mg#>80.

4:00 p.m. Tkalcec B. J. * Brenker F. E.
         High Temperature Solid-State Plastic Deformation in Ureilite NWA 5996 [#6282]
         Structural investigation of ultramafic monomict ureilite NWA 5996 has revealed clear evidence for the
         occurrence of solid-state plastic deformation.

         Evaluating the Evidence for Magnetic Dynamos in Chondritic Parent Bodies [#6078]
         We present paleomagnetic data suggesting that the LL chondrite parent body lacked a magnetic
dynamos. We then further test the dynamo hypothesis for the CV parent body by mapping magnetization in
Kaba.

4:30 p.m. Padovan S. * Tosi N. Plesa A.-C.
         Basin-Forming Impact Events on Mercury: Effects on Melt Production and Depth of the
         Source Region [#6256]
         In this work we investigate to which degree large impact events on Mercury can modify the underlying
mantle dynamics and how the presence of post-impact volcanism or lack thereof can be related to the
planet's interior properties.

4:45 p.m. Hartmann W. K. * Daubar I.
         Utilizing Small Impact Craters to Clarify the History of Martian Surfaces [#6435]
         New data on the production size distribution of primary plus field secondaries (P+fS) Martian craters,
down to 1–2 m, are compared with current data on production size distributions of primary craters.