Friday, May 5, 2017 LUNAR MAGNETISM 3:15 p.m. Aula Conference Room

Topics include discussion of lunar impact magnetism and a chapter summary covering this topic.

Chairs: Mark Wieczorek Sonia Tikoo

3:15 p.m. Laneuville M. * Taylor J. Wieczorek M.

Distribution of Radioactive Heat Sources and Magnetic Field [#6019]

We consider updated distributions of heat sources based on GRAIL results to understand the structure of the PKT. The remanent magnetization pattern suggests an inhomogeneous distribution within the PKT, which has implication for the global evolution.

3:30 p.m. Tikoo S. M. * Weiss B. P. Shuster D. L. Suavet C. Wang H. Grove T. L.

<u>A Three-Billion-Year History for the Lunar Dynamo</u> [#6025]

The paleomagnetic record of young regolith breccia 15498 suggests that the lunar core dynamo may have persisted beyond 2.5 Ga.

3:45 p.m. Oran R. * Weiss B. P.

<u>Impact-Amplified Magnetic Fields as a Possible Source of Crustal Magnetization</u> [#6014] Latest advancements in testing the hypothesis that crustal magnetization can be explained by impact-amplified magnetic fields in basin antipodes.

4:00 p.m. Rückriemen T. * Breuer D. Spohn T.

Compositional Convection in a Fe-FeS Core of the Moon [#6035]

We investigate dynamo lifetimes associated with bottom-up and top-down crystallization in a Fe-FeS lunar core. To do so we employ a 1D thermo-chemical evolution model. The resulting dynamo lifetimes are too short to explain the observations.

4:15 p.m. Wieczorek M. A. * Weiss B. P. Breuer D. Fuller M. Gattacceca J. Halekas J. Hood L.

Nimmo F. Oran R. Purucker M. Soderlund K. Tikoo S.

Recent Advances in Lunar Magnetism [#6036]

In this contribution, our current understanding of lunar magnetism will be reviewed. Advances made in the past decade since the publication of the first New Views of the Moon book will be emphasized.

4:30 p.m. DISCUSSION