

Wednesday, May 25, 2016
LUNAR INTERIOR AND TECTONICS
1:30 p.m. Hess Room

Chairs: Amanda Nahm
Renee Weber

- 1:30 p.m. Kiefer W. S. * Andrews-Hanna J. C. Evans A. J. Head J. W. III Matsuyama I. McGovern P. J. Nimmo F. Soderblom J. M. Sori M. M. Taylor G. J. Weber R. C. Wieczorek M. A. Williams J. G. Zuber M. T.
[*GRAIL Mission Constraints on the Thermal Structure and Evolution of the Moon*](#) [#6031]
 The GRAIL mission provided new constraints on the Moon's thermal evolution, including the abundance of radioactive elements, the extent of early lunar radius change, volume of early cryptomatism, and thickness of a low conductivity megaregolith.
- 1:45 p.m. Matsuyama I. * Nimmo F. Keane J. T. Taylor G. J. Chan N. H. Williams J. G. Wieczorek M. A. Kiefer W. S.
[*GRAIL, LLR, and LOLA Constraints on the Interior Structure of the Moon*](#) [#6002]
 We infer the likely lunar interior structures by solving the inverse problem using the observed mass, moment of inertia, and tidal Love numbers k_2 and h_2 as constraints.
- 2:00 p.m. Andrews-Hanna J. C. *
[*Re-Evaluating the Geophysical Evidence for a Procellarum Impact Basin on the Lunar Nearside*](#) [#6061]
 Geophysical evidence does not support the existence of a Procellarum basin. The thin crust is a result of primordial long-wavelength variations. Topography data reveals no evidence for a basin rim. Gravity reveals magmatic-tectonic structures.
- 2:15 p.m. Kumamoto A. * Haruyama J. Kobayashi T. Yamaguchi Y. Yamaji A. Oshigami S. Ishiyama K. Nakamura N. Goto Y.
[*Studies Based on Global Subsurface Radar Sounding of the Moon by SELENE \(Kaguya\) Lunar Radar Sounder \(LRS\)*](#) [#6012]
 This is review of the studies based on subsurface radar sounding of the Moon by SELENE. The paleoregolith layers found by SELENE indicates the subsurface lava boundaries, and enable us to perform studies on the volcanism and tectonics in the maria.
- 2:30 p.m. Keane J. T. * Matsuyama I. Siegler M. A.
[*New Insights into Lunar True Polar Wander*](#) [#6085]
 Recent studies have revealed two new classes of lunar paleopole (the primordial fossil figure pole and the late polar volatile paleopole), opening up possibility of a unified chronology of the lunar rotational dynamics.
- 2:45 p.m. Nahm A. L. * Dudde A.-K. Hauber E.
[*Relative Ages of Graben and Wrinkle Ridges on the Nearside of the Moon Reveal Contradictory Relationships*](#) [#6008]
 Relative ages of graben and wrinkle ridges on the nearside of the Moon reveal contradictory relationships.
- 3:00 p.m. Break