Thursday, March 22, 2018 [R615]
POSTER SESSION II: LUNAR GEOPHYSICS: GRAVITY, TECTONICS, AND MAGNETISM
6:00 p.m. Town Center Exhibit Area

Baek S.-M. Kim K.-H. Garrick-Bethell I. Jin H. ***POSTER LOCATION #257***
Modeling for the Complicated Magnetic Anomalies in the Southern Part of Mare Crisium **[#1160]**
This study investigates the complicated magnetic anomalies in the southern part over the Mare Crisium for understanding the history of the lunar dynamo.

Ghosh J. Arora G. Basu Sarbadhikari A. ***POSTER LOCATION #258***
Lunar Magnetic Field Anomaly — Global Distribution and Possible Origin **[#1972]**
Global lunar magnetic field anomaly represents a regional trend due to lunar dynamo.

Garrick-Bethell I. Poppe A. R. Fatemi S. ***POSTER LOCATION #259***
The Lunar Paleomagnetosphere: Insights into Field Enhancements, Isotopic Fractionation of the Ancient Solar Wind, and Volatile Production **[#2439]**
We present the first plasma simulations of the Moon's paleomagnetosphere.

Evans A. J. Tikoo S. M. Andrews-Hanna J. C. ***POSTER LOCATION #260***
The Lunar Core Dynamo Energy Dilemma **[#2372]**
Is there sufficient energy within the lunar core to sustain the ancient dynamo-generated magnetic field indicated by returned Apollo samples? Probably not.

Chi P. J. ***POSTER LOCATION #261***
Spacecraft Measurements of Lunar Core Effects on Low-Altitude Magnetic Field **[#2978]**
We examine both model calculation and spacecraft measurements of the lunar core effects at low altitudes.

Bellas A. Zhong S. J. ***POSTER LOCATION #262***
Long-Wavelength Convection in the Moon with a Weak Lower Crust **[#2751]**
Under what conditions can the Moon experience dominantly degree-1 mantle convection and mare basalt volcanism in one hemisphere?

Deng L. W. Kono Y. Shen G. Y. ***POSTER LOCATION #263***
Sound Velocities of an Fe-Si Alloy at High Pressure and High Temperature Conditions: Implications to Lunar and Mercurian Cores **[#1319]**
We conducted high pressure and high temperature sound velocity measurements of Fe-Si alloy with application for lunar and mercurian cores.

Fuqua Haviland H. Poppe A. R. Fatemi S. Delory G. T. ***POSTER LOCATION #264***
Improved Methods for Time Domain Electromagnetic Sounding of the Moon **[#2891]**
We analyze plasma hybrid models to fully characterize the influence of upstream conditions on a downstream observer seeing induction and wake current systems.

Martin E. S. Watters T. R. ***POSTER LOCATION #265***
A Tectonic Origin for Non-Mascot Related Lunar Graben **[#2846]**
Preliminary results suggest that non-mascon related graben are tectonic in origin.

Togashi S. ***POSTER LOCATION #266***
Modeling of Mass Balances for Bulk Silicate Moon Models (LPUM, TWM, and cBSM) by Applying the GRAIL Crustal Model **[#1318]**
Mass contribution of the source mantle for the feldspathic crusts was calculated by applying the GRAIL crust model and the FAN-host magma based on plagioclase.

Zhong S. J. Phillips R. J. Qin C. ***POSTER LOCATION #267***
How Much Does the Lunar Fossil Bulge Contribute to the Moon's Degree-2 Gravity and Topography Anomalies? **[#2683]**
We seek to distinguish contributions to lunar degree-2 gravity anomalies from crustal compensation and tidal-rotational fossil bulge.

Watters T. R. DeFelice D. R. ***POSTER LOCATION #268***
Wrinkle Ridges and Ancient Rifts Bordering Procellarum and Frigoris Identified in GRAIL Gravity Data **[#2044]**
Wrinkle ridge are spatially correlated with prominent GRAIL Bouguer gravity gradient linear anomalies that border Procellarum and Mare Frigoris.

Blasizzo A. Y. ***POSTER LOCATION #269***
A Comparative Study of Lunar and Martian Wrinkle Ridges **[#1099]**
A morphologic comparison is conducted on wrinkle ridges in Mare Imbrium and Mare Serenitatis and in Isidis Planitia and Utopia Planitia with use of DEM data.

Williams J.-P. Bandfield J. L. Paige D. A. Powell T. Taylor S. et al. ***POSTER LOCATION #270***
Large Lunar Cold Spots: Ages and Distribution **[#2275]**
Lunar cold spots are associated with young impacts and concentrated in the western hemisphere due to synchronous rotation. The largest cold spots are not.

Russell P. S. Paige D. A. Greenhagen B. ***POSTER LOCATION #271***
Thermophysical Behavior of Lunar Coldspots from Diviner High Time-Resolution, Post-Sunset Observations **[#2979]**
Results of a comprehensive "twilight" campaign, targeting 18:00–19:00 local time. Analysis is on variability in the thermophysical structure of the upper ~1 cm.

Martinez-Camacho J. M. Hayne P. O. Elder C. M. ***POSTER LOCATION #272***
Thermal Inertia of Rocks on the Moon **[#2556]**
We use measurements at the Surveyor landing sites to model surface temperatures on the Moon. This allows us to restrain the thermal inertia to fit observations.