Tuesday, March 22, 2016 [T308]
POSTER SESSION I: LUNAR IMPACT CRATER STUDIES
6:00 p.m. Town Center Exhibit Area

Byrne C. J. ***POSTER LOCATION #153***
A Sequenced Catalog of the Moon's Largest Craters and Basins **[#1337]**
This new sequenced catalog of lunar basins and craters > 200 km in diameter provides more resolution to lunar history, showing better detail in the EHB and LHB.

Byrne C. J. ***POSTER LOCATION #154***
The Rim of the South Pole-Aitken Basin: New Empirical Evidence **[#1354]**
A 3-D simulation of the South Pole-Aitken Basin is confirmed by removing a model of the far side bulge from the topography: the conventional rim is a peak ring.

Robbins S. J. ***POSTER LOCATION #155***
Developing a Global Lunar Crater Database, Complete for Craters ≥1 km **[#1525]**
To the Moon, rocks come / Forming craters upon it / How many? We'll see…

Bermingham K. R. Walker R. J. ***POSTER LOCATION #156***
Tracing the Genetics of Lunar Impactors **[#1485]**
Tracing the genetics of lunar impact events through the application of newly refined Ru isotope analytical techniques using N-TIMS.

Miljkovic K. Collins G. S. Wieczorek M. A.
Johnson B. C. Soderblom J. M. et al. ***POSTER LOCATION #157***
Subsurface Morphology and Scaling of Lunar Impact Basins **[#1764]**
Target properties effect impact-basin formation. This work refined impact scaling laws and analyzed lunar basin subsurface morphology as observed by GRAIL.

Krüger T. Kenkmann T. ***POSTER LOCATION #158***
New Insights into the Formation of Complex Crater Rims: Structural Uplift, Ejecta Thickness and Transient Crater Measurements of Complex Lunar Mare Craters **[#2079]**
We measured the structural uplift, ejecta thickness and transient crater cavities of complex lunar mare craters.

Williams J.-P. Paige D. A. Greenhagen B. T. Sefton-Nash E. ***POSTER LOCATION #159***
Large Impacts on the Moon: Rays, Halos, and Melts **[#2444]**
A compilation of over five years of Diviner data highlights how impact craters have modified regolith thermophysical and radiative properties globally.

Elliott J. Huang Y.-H. Minton D. A. Freed A. M. ***POSTER LOCATION #160***
The Length of Lunar Crater Rays Explained Using Secondary Crater Scaling **[#2774]**
Rays criss-cross the Moon / Why are some relatively / Longer than others?

Matiella Novak M. A. Neish C. Zanetti M. Kobs Nawotniak S. Hughes S. ***POSTER LOCATION #161***
Terrestrial Analogs for Self-Secondary Impact Features — Comparing Lunar Features to Features at Kings Bowl, Idaho **[#2716]**
We compare self-secondary impact features within the lava field at Kings Bowl to self-secondary impact features within the impact melt of Aristarchus Crater.

Xiao Z. Prieur N. C. Stephanie S. C. ***POSTER LOCATION #162***
Emplacement History of Self-Secondaries **[#1441]**
The emplacement history of self-secondaries in the frame of impact cratering process in general is discussed based on morphology, count, and shock mechanics.

Mahanti P. Robinson M. S. Thompson T. J. van der Bogert C. H. ***POSTER LOCATION #163***
What Accelerates the Degradation of Small Lunar Craters? — Unexpected, Contrasting Rates Observed at Apollo 16 and 17 Regions **[#1202]**
Degradation rates at Apollo 16 - Cayley plains and Apollo 17 mare plains are estimated from depth-to-diameter ratio statistics of small lunar crater populations.

Huang Y. H. Minton D. A. Elliott J. Hirabayashi T. Freed A. M. et al. ***POSTER LOCATION #164***
The Role of Vertical Mixing Process Across Mare and Highland Contacts **[#2521]**
Recursive impacts / Mixing down but asking more / Always regolith.

Atwood-Stone C. Bray V. J. McEwen A. S. ***POSTER LOCATION #165***
Crater Concentric Ridges on the Moon and Mercury: Antidunes? **[#2082]**
Ridges in the ejecta of fresh, few-km lunar craters are reexamined using high-resolution datasets to investigate their morphologies and different formation hypotheses.

Cassanelli J. P. Head J. W. ***POSTER LOCATION #166***
Did the Orientale Impact Melt Sheet Undergo Large-Scale Igneous Differentiation by Crystal Settling? **[#1174]**
We explore crystal settling as a mechanism for large-scale igneous differentiation of the lunar Orientale basin impact melt sheet.

Xie M. Zhu M.-H. ***POSTER LOCATION #167***
Estimates of Primary Ejecta and Local Material for the Orientale Basin on the Moon **[#1747]**
We propose a model to re-investigate the thickness distribution of primary ejecta and local material of the Orientale basin on the Moon.

Kring D. A. Kramer G. Y. Collins G. S. Potter R. W. K. ***POSTER LOCATION #168***
Using the Schrodinger Basin on the Moon to Infer Properties of the Buried Chicxulub Crater Peak Ring **[#1659]**
The dramatically exposed Schrodinger peak ring basin on the Moon provides clues to the buried peak ring of the K-T boundary Chicxulub impact crater.

Ding X. Z. Pang J. F. Han K. Y. Wang L. ***POSTER LOCATION #169***
Features and Genesis of the Impact Crater and Accumulation of Sinus Iridum Area of the Moon **[#1828]**
Based on morphological features, the lunar impact craters can be divided into seven types and the accumulative materials are divided into six types and nine accumulative formations.

Zhang F. Zhu M.-H. ***POSTER LOCATION #170***
Intrusions Below Volcanically Buried Craters in Mare Fecunditatis Indicated by Extrusive Features Associated with Mare Ridge Ring Structures **[#1798]**
Our study focused on the relationship between magma ascent and some volcanically buried craters in Mare Fecunditatis on the Moon.

Ishihara Y. Chiba T. Haruyama J. Otake H. Ohtake M. ***POSTER LOCATION #171***
Structural and Geological Interpretation of the Posidonius Crater: Did the Posidonius Crater Floor Float on Basal Sill? **[#1210]**
We interpreted of the Posidonius crater's structure based on Kaguya data. We propose that the central part of the crater floor was floated on basal sill.

Öhman T. Kramer G. Y. McGovern P. J. ***POSTER LOCATION #172***
Geomorphologic Sketch Mapping of a Fresh Lunar Crater Eimmart A **[#1948]**
Eimmart A on the NE rim of Crisium is one of the freshest craters. Ejected melt distribution is not controlled by topography, but interior melt distribution is.