Thursday, March 21, 2013 **[R719]**
POSTER SESSION: CRATERS:
STATISTICS, MAPS, OBSERVATIONS, AND TECHNIQUES
6:00 p.m. Town Center Exhibit Area

Byrne C. J. ***POSTER LOCATION #205***
A Proposed Explanation of How Craters and Basins Become more Shallow with Size **[#1412]**
The transition between simple and complex craters occurs when the ambient pressure at the crater depth is about 10 kg per meter squared for all rocky bodies.

Kneissl T. Michael G. ***POSTER LOCATION #206***
Crater Size-Frequency Measurements on Linear Features — Buffered Crater Counting in ArcGIS **[#1079]**
In this work we would like to introduce the buffered crater counting analysis as a new functionality of the CraterTools software for ArcGIS.

Pina P. Marques J. S. ***POSTER LOCATION #207***
Accurate Delineation of Impact Craters by Image Analysis **[#1128]**
Two image analysis solutions for the delineation of craters are introduced and tested: one based on polar coordinates, the other on mathematical morphology.

Vijayan S. Vani K. Sanjeevi S. ***POSTER LOCATION #208***
Crater Detection, Classification and Contextual Information Extraction in Lunar Images Using Profile-Based Algorithm **[#1931]**
CDA capable to detect craters, classify them according to their type (round/flat floor), indicates presence of ejecta and associates with corresponding crater.

van der Bogert C. H. Hiesinger H. Krüger T. McEwen A. S. Dundas C. ***POSTER LOCATION #209***
New Evidence for Target Property Influence on Crater Size-Frequency Distribution Measurements **[#1962]**
Measurements of craters in the strength- to gravity-scaling transition range show target properties explain significant discrepancies in CSFDs for coeval units.

Wagner R. V. Robinson M. S. Speyerer E. J. Mahanti P. ***POSTER LOCATION #210***
Topography of 20-km Diameter Craters on the Moon **[#2924]**
We characterized the slopes of five 20-km-diameter lunar craters of varying ages, and found that the maximum angle of granular material is 36°.

Kuriyama Y. Ohtake M. Haruyama J. Iwata T. Hirata N. ***POSTER LOCATION #211***
Implications for Timescale of Central Peak Formation Estimated by Impact Melts on Central Peaks of Lunar Craters **[#1402]**
We confirmed half of Copernican-aged lunar complex craters have impact melt on their central peaks, and this could constrain timescale of peak formation.

Li Y. Xiao Z. Y. Tang Z. S. ***POSTER LOCATION #212***
The Unreliability of Small Crater Counts: A Case Study in Sinus Iridum on the Moon **[#2284]**
Discusses unreliablities in age dating by contamination of secondaries and the anomalous distribution of craters smaller than 1 km at various locations in Sinus Iridum.

Bray V. J. Artemieva N. A. Neish C. D. McEwen A. S. McElwaine J. N. ***POSTER LOCATION #213***
Impact Melt Entrained in the Ballistic Ejecta of Lunar Craters **[#2782]**
We are surveying ejecta blankets of fresh lunar craters with LROC and Mini-RF to study the complex interaction of ejecta and impact melt.

Williams J.-P. Pathare A. V. ***POSTER LOCATION #214***
The Size-Frequency Distribution of Small Craters on the Moon and Mars **[#2832]**
The size distribution of terrestrial fireballs, scaled appropriately for the Moon and Mars, can reproduce crater retention ages of young surfaces.

Tornabene L. L. Ling V. Osinski G. R. Boyce J. M. Harrison T. N. et al. ***POSTER LOCATION #215***
A Revised Global Depth-Diameter Scaling Relationship for Mars Based on Pitted Impact Melt-Bearing Craters **[#2592]**
Here we present a revised global depth-diameter relationship for Mars based on pitted-impact melt-bearing craters.

Wulf G. Pietrek A. Kenkmann T. ***POSTER LOCATION #216***
Blocks and Megablocks in the Ejecta Layers of a Double-Layer-Ejecta (DLE) Crater on Mars **[#1453]**
We present the block distribution and orientation of coarse materials exposed at the surface of the two distinct ejecta layers of a DLE crater on Mars.

Harrison T. N. Tornabene L. L. Osinski G. R. ***POSTER LOCATION #217***
Emplacement Chronology of Double Layer Crater Ejecta on Mars **[#1702]**
We investigate morphological evidence to determine the depositional order of the inner vs. outer ejecta layers of martian double layer ejecta craters.

Pietrek A. Wulf G. Kenkmann T. ***POSTER LOCATION #218***
Detailed Geological Mapping (1:80,000-Scale) of Steinheim Crater, Mars **[#1465]**
We present a detailed geological map of the ejecta blanket and crater interior of Steinheim Crater, a DLE crater on Mars.

Ding N. Bray V. J. McEwen A. S. Mattson S. S. Tornabene L. L. et al. ***POSTER LOCATION #219***
Mapping the Ritchey Crater Central Uplift, Mars **[#2798]**
We are mapping the central uplifts of large craters and reconstructing the pre-impact stratigraphy, to better understand the Noachian stratigraphy of Mars.

Robbins S. J. Hynek B. M. ***POSTER LOCATION #220***
The Population of Secondary Impact Craters on Mars **[#2644]**
Population of martian secondary craters examined on a global and local basis shows they can be a significant contaminant at the kilometer level.

Watters W. A. Geiger L. Fendrock M. ***POSTER LOCATION #221***
Shape Distribution of Fresh Martian Impact Craters from High-Resolution DEMs **[#3081]**
We present the shape distribution of simple, fresh martian impact craters (20 m $< D <$ 5 km) measured from HiRISE-derived digital elevation models.

Damptz A. L. Dombard A. J. ***POSTER LOCATION #222***
Testing Models for the Formation of the Equatorial Ridge on Saturn's Moon Iapetus via Crater Counting **[#3036]**
We develop a database to examine the crater population, test the various models of ridge formation, and assess the age of the ridge.