Tuesday, March 21, 2017 **[T334]**
POSTER SESSION I: MARTIAN CRATERS AND IMPACT PROCESSES
6:00 p.m. Town Center Exhibit Area

Hoover R. H. Robbins S. J. Putzig N. E. Courville S. Fenton L. K. ***POSTER LOCATION #489***
Analysis of Thermal Inertia to Understand the Near-Surface Properties of Layered Ejecta Craters and Southern Hemisphere Dunes on Mars **[#1062]**
Analysis of derived thermal inertia values and comparisons to two-layer thermal models to characterize near-surface properties of dunes and craters on Mars.

Barlow N. G. Boyce J. M. Mouginis-Mark P. J. ***POSTER LOCATION #490***
Evidence for Two Fundamental Types of Layered Ejecta Craters on Mars and Proposed Nomenclature System **[#1159]**
We present morphometric evidence that two types of double layer ejecta craters exist on Mars. We propose the distinctive type be called Bacolorian craters.

Barlow N. G. ***POSTER LOCATION #491***
Revision of the "Catalog of Large Martian Impact Craters" and Comparison to Other Martian Crater Databases **[#1562]**
The "Catalog of Large Martian Impact Craters" is being revised. Important differences between it, Catalog 1.0, and the Robbins crater database are described.

Pietrek A. Hergarten S. Kenkmann T. ***POSTER LOCATION #492***
The Morphometry of Longitudinal Striations on Long Run-out Landslides and DLE Impact Craters on Mars **[#2110]**
A morphometric comparison of longitudinal striations on landslides and impact craters to evaluate the possibility of a common formation mechanism.

Holo S. Kite E. S. Mayer D. P. Robbins S. J . ***POSTER LOCATION #493***
Modeling the Effect of Obliquity on Mars Elliptical Crater Orientations **[#2121]**
A semi-analytic forward model constrains long-term mean Mars obliquity from its effect on the distribution of elliptic crater orientations on Mars.

Mouginis-Mark P. J. Boyce J. M. Sharpton V. L. Garbeil H. ***POSTER LOCATION #494***
Determination of Mars Crater Morphometric Data: Insights from High Resolution Digital Elevation Models **[#1208]**
We use topographic data derived from stereo CTX and HiRISE images to develop new insights into the depth/diameter relationship of fresh martian impact craters.

Breton S. Quantin Nataf C. ***POSTER LOCATION #495***
Automatic Crater Morphometry Extraction **[#2078]**
Increasing coverage of DEM on Mars allows to create large data base of crater morphometry. We present an automatic extraction of crater depth and its result.

Komasu G. Ruj T. Miyamoto H. Dohm J. M. Ormö J. et al. ***POSTER LOCATION #496***
The Hellas Basin on Mars: Further Exploration of Its Anomalous Shape **[#1845]**
We investigate morphometric and geological characteristics of the Hellas Basin on Mars in order to gain insights on the nature of the Hellas impact process.

Rader L. X. Fassett C. I. Levy J. S. King I. R. Chaffey P. M. et al. ***POSTER LOCATION #497***
The Geographic Distribution of Boulder Halo Craters at Mid-to-High Latitudes on Mars **[#1294]**
This study surveys of boulder halo crater locations in the 50° to 80°N and 50° to 80°S latitude bands on Mars.

Hundal C. B. Golombek M. P. Daubar I. J. ***POSTER LOCATION #498***
Characteristics and Superposition Relationships of Secondary Craters from Fresh Rayed Craters in Elysium Planitia, Mars **[#1731]**
We discuss the secondary superposition relationships used to constrain the ages of seven fresh rayed craters (1.5–13.9 km) in Elysium Planitia, Mars.

Peel S. E. Burr D. M. ***POSTER LOCATION #499***
Testing of Central Pit Formation Mechanisms Using Inferential Statistics **[#1020]**
To test proposed formation mechanisms for central pits in martian craters, we applied inferential statistical analyses to a subset of well-preserved examples.

Boyce J. M. Mouginis-Mark P. J. ***POSTER LOCATION #500***
Radial Grooves on Martian Layered Ejecta Deposits **[#1113]**
Morphometry of radial grooves on layered ejecta of martian crater suggest that two different mechanisms are involved in their formation.

McLaughlin J. A. Davatzes A. K. ***POSTER LOCATION #501***
Erosion and Basin Modification of Smaller Complex Craters in the Isidis Region, Mars **[#1190]**
Trends of features found / In martian crater basins / Rim degradation.

Piatek J. L. Murphy I. Tornabene L. L. Bina A. Barlow N. G. et al. ***POSTER LOCATION #502***
Thermophysical Characteristics of Well-Preserved Martian Craters Near the Transition Diameter **[#2752]**
Craters show, at night / Distinct units, ejecta / Similar, yet not.

Bina A. Tornabene L. L. Piatek J. L. Barlow N. G.
Osinski G. R. et al. ***POSTER LOCATION #503***
Visible and Thermophysical Mapping of Craters with Transitional Morphologies: Insights into the Nature and Extent of Crater Degradation on Mars **[#2856]**
Results of mapping and comparative analysis of the best-preserved and semi-degraded transitional craters on Mars. Constraints on type/extent of degradation.

Button N. E. Karunatillake S. Diaz C. Zadei S. Rajora V. et al. ***POSTER LOCATION #504***
Block Distribution Analysis of Impact Craters on Mars, Including the Tharsis Region and Elysium Planitia **[#2830]**
Block distribution patterns around impact craters on Mars are both measurable and quantifiable, including craters in the Tharsis Region and Elysium Planitia.

Hartmann W. K. Daubar I. J. Popova O. Joseph E. C. S. ***POSTER LOCATION #505***
Utilizing Primary Martian Crater Clusters to Study Meteoroid Properties and Secondary Crater Populations **[#1340]**
We suggest that many Mars impactors are weak enough to fragment at high altitudes, and we derive the frequency of "field secondary" craters.

Lagain A. Guimpier A. Bouley S. ***POSTER LOCATION #506***
Martian Double Craters Recognition by Dating Method **[#1108]**
Dating double craters formation on Mars could allow to discover many others.

Moretti P. J. Gregg T. K. P. ***POSTER LOCATION #507***
Variations in Target Porosity Affect Ejecta Morphology of a Martian Central-Pit Impact Crater **[#2341]**
Examination of CTX images of a martian central-pit impact crater reveal ejecta features consistent with subsurface variations in water content.