Thursday, March 19, 2015
POSTER SESSION II: PROPERTIES OF IMPACT CRATERS ON MARS AND TITAN
6:00 p.m. Town Center Exhibit Area

Schurmeier L. R.  Dombard A. J.  
**POSTER LOCATION #186**
**The Effects of Low Thermal Conductivity Sand on the Relaxation of Titan’s Impact Craters** [#2913]
Are Titan’s craters/Relaxed or filled by dark sand?/Both! (Though mostly sand).

Liu Z. Y.-C.  Shirzaei M.  
**POSTER LOCATION #187**
**Constrain the Evolution of Martian Atmosphere Through Analysis of the Impact Ejecta** [#1496]
Use martian ejecta mapping as inputs to inversely estimate atmospheric density at the time of impact by aerodynamic modeling; evolution of martian atmosphere.

Weiss D. K.  Head J. W.  
**POSTER LOCATION #188**
**Testing the Glacial Substrate Model for Double-Layered Ejecta Craters on Mars** [#1081]
We test the hypothesis that the inner facies of double-layered ejecta (DLE) craters on Mars form as a landslide. Low-basal friction supports sliding on ice.

Barlow N. G.  
**POSTER LOCATION #189**
**Sizes and Distributions of the Two Morphologic Types of Double Layer Ejecta Craters in the Northern Hemisphere of Mars** [#2216]
Two types of DLE morphologies are identified. A study of craters in the 30°–75°N latitude zone finds that diameter is the major contributor to DLE type.

Schwegman R. D.  Osinski G. R.  Tornabene L. L.  
**POSTER LOCATION #190**
**Layered Ejecta Morphologies on Syrtis Major and Implications for Regional Geology** [#2645]
We investigate the regional distribution and nature of layered ejecta morphologies on Syrtis Major.

Schwegman R. D.  Osinski G. R.  Tornabene L. L.  
**POSTER LOCATION #191**
**A Morphometric Comparison of Martian Double Layered Ejecta Craters and Implications for the Effect of Target Lithology** [#2607]
We compare the morphometry of double layered ejecta craters situated on volcanic terrains to those on non-volcanic terrains.

Bendo N. J.  Schwegman R. D.  Osinski G. R.  
**POSTER LOCATION #192**
**A Comparative Study of the Morphometric Properties of Single Layered Ejecta Craters on Mars** [#2567]
The comparison of ejecta deposition of single layered ejecta craters in both volcanic and non-volcanic regions with respect to latitude.

Hynek B. M.  Herrick R. R.  
**POSTER LOCATION #193**
**Target Property Controls on Martian Impact Crater Morphologies** [#1046]
We tested the hypothesis that target properties influence final crater form on Mars using a global database and new geologic maps. It is true.

Herrick R. R.  Hynek B. M.  
**POSTER LOCATION #194**
**A Search for Impactor Effects on Martian Crater Morphologies at the Simple-Complex Transition Diameter** [#1661]
Martian craters of similar size (7 km < D < 9 km) in close proximity are examined to look for differences due to impactor properties.

Watters W. A.  Geiger L.  Fendrock M.  Gibson R.  
**POSTER LOCATION #195**
**Morphometry of Recent Simple Impact Craters on Mars: Size and Terrain Dependence** [#2465]
Elevation models from stereo HiRISE imagery were used to measure the dependence of simple crater morphometry on size, geologic setting, and modification state.
Maine A. Barlow N. G. Tornabene L. L.  
**POSTER LOCATION #196**

*Detailed Morphologic and Structural Mapping and Analysis of Esira, a Central Pit Crater Near Hypanis Vallis* [#2944]

We have mapped Esira, which is a central pit crater on Mars, in order to constrain a formation model for central pit craters on Mars.

D’Aoust B. Tornabene L. L. Osinski G. R. McEwen A. S.  
**POSTER LOCATION #197**

*Morphological, Structural, and Spectral Mapping of the Central Uplift of Alga Crater, Mars* [#2237]

The detailed morphological, structural, and spectral mapping of Alga, a 19-km-diameter complex crater exposing fractured massive bedrock, is presented.

Johnson M. K. Sharpton V. L.  
**POSTER LOCATION #198**

*Structural Mapping of Martian Crater Uplift to Test Acoustic Fluidization Models* [#1280]

High-resolution orbital images of Martin crater uplift on Mars reveals bedding orientations that are not consistent with acoustic fluidization models.

Banks M. E. Daubar I. J. Schmerr N. C. Golombek M. P.  
**POSTER LOCATION #199**

*Predicted Seismic Signatures of Recent Dated Martian Impact Events: Implications for the InSight Lander* [#2679]

Investigation of potential impact-produced seismic activity from recent martian impacts utilizing crater morphometry and spatial information for crater clusters.