

Tuesday, March 22, 2016

[T305]

POSTER SESSION I: MEGABYTE IMPACT STUDIES
6:00 p.m. Town Center Exhibit Area

- Korycansky D. G. *POSTER LOCATION #85*
[*Numerical Simulations of the Chelyabinsk and SL9 Impacts*](#) [#1388]
 Results from hydrodynamic simulations of the Chelyabinsk and SL9 impacts are presented. Sensitivity to initial conditions (“chaos”) is evident.
- Korycansky D. G. Catling D. C. Zahnle K. J. *POSTER LOCATION #86*
[*Atmospheric Erosion by Planetary Impacts*](#) [#1381]
 We present results from simulations of planetary atmospheric erosion by impacts. Our results support the scaling proposed by V. Shuvalov for impact mass loss.
- Kuzmicheva M. Yu. Losseva T. V. *POSTER LOCATION #87*
[*Additional Heating: Interaction of Impact Ejecta with an Expanding Fireball*](#) [#1329]
 An ejecta heating above Curie point and melting in a fireball is examined. Gneiss Bombs deposited in breccias of Popigai crater resemble the modeling ejecta.
- Artemieva N. A. Shuvalov V. V. *POSTER LOCATION #88*
[*Mass Deficiency Problem in Large Meteorite Falls*](#) [#1749]
 Using numerical models of meteoroid’s entry, we show that large bodies are transformed into tiny fragments, “cosmic dust,” which are not easy to recover.
- Artemieva N. A. Zanetti M. *POSTER LOCATION #89*
[*Modeling Small Impact Craters on Ejecta Blankets: Self-Secondaries Versus Unrecognizable Primaries*](#) [#2143]
 High angle ejecta are able to create small craters on a freshly deposited ejecta blanket while small primary craters may be hidden on its rough surface.
- Harris T. H. S. *POSTER LOCATION #90*
[*Inferred Ejecta Launch Location from Suborbital Ballistic Emplacement*](#) [#1214]
 Oblique terrestrial impacts into volatiles may leave no obvious shock or cratering signatures. Proxies may present to locate and study such events: example....
- Raggio D. Bland M. Abramov O. Kring D. Kumar A. et al. *POSTER LOCATION #91*
[*Advancements in Scaling Models for Ejecta Blankets of Lunar Impact Craters*](#) [#1401]
 Using Lunar Reconnaissance Orbiter Laser Altimeter data to assess the accuracy of models developed using Apollo landing data on 100 lunar impact craters.
- Jögi P. M. Paige D. A. *POSTER LOCATION #92*
[*Retrieving Ballistic Parameters from the Ray Patterns of Impact Ejecta on the Moon; Mainly that of the Tycho Crater*](#) [#2686]
 Lunar ray patterns provide tests of impact and ejecta dynamics models. We extract model restricting ballistic launching parameters from detailed LROC images of such rays.
- Silber E. A. Osinski G. R. Grieve R. A. F. *POSTER LOCATION #93*
[*Differences in Transitional Crater Morphologies as a Function of Impactor Properties*](#) [#1086]
 We use numerical modeling to investigate the influence of the projectile properties on the observed morphological differences in transitional craters on Moon.
- Potter R. W. K. Head J. W. *POSTER LOCATION #94*
[*Investigating the Formation and Structure of Procellarum-Sized Lunar Basins*](#) [#1119]
 Numerical modeling is used to study the effects of mega-scale impacts on to the Moon.

Potter R. W. K. Head J. W.

POSTER LOCATION #95

[*Lunar and Mercurian Impact Basin Formation: Similar or Dissimilar? Insights from Numerical Modeling*](#) [#1117]

Numerical models suggest the dynamic phase of basin formation is similar on the Moon and Mercury. Observed differences are likely due to post-impact processes.

Werner S. C. Zhu M.-H. Wünnemann K. Rolf T.

POSTER LOCATION #96

[*Mass Delivery onto Terrestrial Planets — Insight from Scaling Laws and Basin Record*](#) [#1844]

We derived numerically basin–projectile size scaling laws to reconcile the crater record with mass delivery onto terrestrial planets and candidate projectile sources.

Minton D. A. Fassett C. I.

POSTER LOCATION #97

[*Crater Equilibrium as an Anomalous Diffusion Process*](#) [#2623]

Her blanket of stone / The Moon is a soft mistress / More silken with time.

Holsapple K. A. Henych T.

POSTER LOCATION #98

[*On the Evolution of the Main Belt Asteroids*](#) [#2897]

We perform Monte Carlo analyses of the effects of a large number of impacts into individual asteroids. The outcomes are distributions of spin vs. asteroid size.

Galiazzo M. A. Silber E. A. Bancelin D. Wiegert P. Osinski G. R.

POSTER LOCATION #99

[*V-Type NEAs: Orbital Dynamics and Collisional Interactions with Terrestrial Planets*](#) [#1393]

Statistics of close encounters and impacts between V-NEAs, basaltic Near-Earth Asteroids, and the terrestrial planets, within 10 Myr.

Lisse C. M. Sitko M. L. Marengo M.

POSTER LOCATION #100

[*KIC 8462852: Further Evidence for Late Heavy Bombardments in the Astronomical Record*](#) [#2965]

The discovery of the 20% drop in starlight from the main sequence star KIC 8462852 has prompted a host of followup studies converging on giant exocomet infall.