Thursday, May 21, 2015 FROM MANY, ONE 2:50 p.m. E200 Auditorium

Chairs: Daniel Berman Michael Zanetti

- 2:50 p.m. Bugiolacchi R. * Bamford S. Tar P. Joy K. Crawford I. Grindrod P. Thaker N. Lintott C. J.
 <u>Moon Zoo Citizen Science Project Analysis, Evaluation, and Conclusions</u> [#9003] This work represents an evaluation of the crater count output of citizen scientists taking part in the Moon Zoo project, an online large-scale mapping of lunar surface features.
- 3:05 p.m. Mandt K. E. * Greathouse T. K. Retherford K. D. Gladstone G. R. Hendrix A. R. Hurley D. Pryor W. Koeber S. D. Robinson M. *Lunar Reconnaissance Orbiter Lyman Alpha Mapping Project (LRO-LAMP) Detection of a Geologically Young Crater Within the Faustini Permanently Shaded Region* [#9048] Using LRO-LAMP maps of the Lyman-alpha albedo of two lunar south pole Permanently Shaded Regions we detect two small craters (<2km) that must be younger than 1.2 Myr.</p>
- 3:20 p.m. BREAK
- 3:30 p.m. Alessi E. M. * Valsecchi G. B. Rossi A. <u>A Fast Analytical Tool to Model Cratering Asymmetries on Synchronous Satellites</u> [#9011] We present a simple analytical tool based on the extension of the Opik theory, which assesses efficiently the distribution of impacts on the surface of a synchronous satellite, given a population of planet-crossing small bodies with inclined orbits.
- 3:45 p.m. Marques J. S. Pina P. *
 <u>Automated Crater Delineation</u> [#9020]
 An algorithm to delineate impact craters based on Edge Maps and Dynamic Programming is presented.
 The global performance obtained on 1045 craters from Mars (5 m to about 200 km in diameter), achieved 96% of correct contour delineations.
- 4:00 p.m. Galloway M. J. Paxman J. Benedix G. K.* Tan T. Towner M. C. Bland P. A. <u>Auomated Crater Detection and Counting Using the Hough Transform and Canny</u> <u>Edge Detection</u> [#9024] We analyse the performance of a Hough Transform (HT) for application to automated crater detection. We present tests of the CDA using high resolution images of the martian surface. The CDA will ultimately be parallelized to run on a supercomputer.
- 4:15 p.m. Huang Y.* Minton D. A. Richardson J. Cohen B. Fassett C. Zellner N. <u>Simulating Three Dimensional Regolith Transport with the Cratered Terrain Evolution Model</u> [#9049] Because of ability of craters to mix and transport materials, impacts could potentially change the spatial and temporal distribution of impact-related products generated by an impact over time. We propose a updated version of CTEM to address them.
- 4:30 p.m. DISCUSSION