Monday, March 16, 2015 **[M101]**
RESULTS FROM RECENT LUNAR MISSIONS: LADEE, GRAIL, CHANG'E-3
8:30 a.m. Waterway Ballroom 1

Chairs: **Richard Elphic**
Maria Zuber

8:30 a.m. Cook A. M. * Wooden D. H. Colaprete A. Glenar D. A. Stubbs T. J.
First Detection of Dust in the Lunar Tail: LADEE UVS Measurements **[#2147]**
The LADEE UVS (Lunar Atmosphere and Dust Environment Explorer UV/Visible Spectrometer) Team presents the first evidence that the Moon's tail may contain dust.

8:45 a.m. Horanyi M. * Szalay J. Kempf S. Schmidt J. Gruen E. et al.
LDEX Observation of the Dust Environment of the Moon **[#1684]**
The talk will report on the analysis of the observations of Lunar Dust Experiment (LDEX) onboard the recently completed LADEE mission.

9:00 a.m. Stubbs T. J. * Glenar D. A. Wang Y. Sarantos M. Colaprete A. et al.
Influence of Meteoroid Streams on the Lunar Environment: Results from LADEE **[#2984]**
The meteoroid stream mass fluxes and ejecta production rates are estimated and compared with observations from the LADEE mission.

9:15 a.m. Colaprete A. * Wooden D. Cook A. Shirley M.
An Examination of LADEE UVS Spectral Variability Associated with the Geminid Meteor Shower **[#2364]**
UVS spectra taken at around the time of the Geminid meteor showers are compared, showing changes in some emission line strengths.

9:30 a.m. Hurley D. M. * Benna M. Cook J. C. Halekas J. S. Grava C. et al.
Comparing LAMP Polar Measurements to LADEE Equatorial Measurements of Helium in the Lunar Exosphere **[#2844]**
We compare three datasets relating to helium in the lunar exosphere. A model is used to interpret the spatial and temporal variability of lunar helium.

9:45 a.m. Matsumoto K. * Yamada R. Kikuchi F. Kamata S. Ishihara Y. et al.
Internal Structure of the Moon Inferred from Apollo Seismic Data and Selenodetic Data from GRAIL and LLR **[#1696]**
A lunar internal structure model from Apollo seismic data and the latest selenodetic data indicates at least 50-km-thick low-velocity zone above the CMB.

10:00 a.m. Milbury C. * Johnson B. C. Melosh H. J. Collins G. S. Blair D. M. et al.
The Effect of Pre-Impact Porosity on the Gravity Signature of Lunar Craters **[#1966]**
Impact modeling/Porosity, gravity/Mantle uplift, yes!

10:15 a.m. Kiefer W. S. * Macke R. J. Britt D. T. Irving A. J. Consolmagno G. J.
The Density and Porosity of Lunar Impact Breccias and Impact Melt Rocks and Implications for GRAIL Gravity Modeling of the Orientale Impact Basin Structure **[#1711]**
The measured densities of Apollo impact melt breccias provide an important context for interpreting GRAIL gravity observations of lunar impact basins.

10:30 a.m. Zuber M. T. * Smith D. E. Goossens S. J. Andrews-Hanna J. C. Head J. W. et al.
Gravity Field of the Orientale Basin from the Gravity Recovery and Interior Laboratory (GRAIL) Mission **[#1447]**
The Endgame mapping strategy was designed to provide highest-resolution coverage over the Orientale basin to yield a gravity map of a multi-ring impact basin.

10:45 a.m. Keane J. T. * Matsuyama I.
Cleaning Up Degree-2: The Contribution of Impact Basins and Mascons to the Gravity Fields of the Moon, Mercury, and Other Terrestrial Planets **[#2967]**
Impact basins and mascons complicate the degree-2 gravity fields of the Moon and Mercury, and obscure past histories of true polar wander.

11:00 a.m. Jozwiak L. M. * Head J. W. Neumann G. A. Wilson L.
The Effect of Evolving Gas Distribution on Shallow Lunar Magmatic Intrusion Density: Implications for Gravity Anomalies **[#1580]**
We assess how the evolution and loss of volatiles affects lunar shallow magmatic intrusion density and compare to GRAIL observations.

11:15 a.m. Sood R. * Chappaz L. Milbury C. Blair D. M. Melosh H. J. et al.
Earhart: A Large, Previously Unknown Lunar Nearside Crater Revealed by GRAIL Gradiometry **[#1883]**
GRAIL data applied to detect, characterize, and validate the presence of buried craters. Forward modeling supports the detection and validates their existence.

11:30 a.m. Goossens S. * Lemoine F. G. Sabaka T. J. Nicholas J. B. Mazarico E. et al.
Global and Local Gravity Field Models of the Moon Using GRAIL Primary and Extended Mission Data **[#1395]**
We present updated global and local gravity field models of the Moon using GRAIL data only.

11:45 a.m. Li H. * Li C. L. Liu J. J. Zhang H. B. Su Y. et al.
The Chang'e 3 Mission: One Year Overview **[#1732]**
Chang'e-3 has accomplished its yearlong nominal mission. We summarize preliminary results obtained by each science instrument as well as data accessibility.