Tuesday, March 21, 2017  

**POSTER SESSION I: LUNAR SURFACE PROPERTIES AND POTENTIAL LANDING SITES: A CHALLENGE OF TODAY AND OUR DESTINY OF TOMORROW**

6:00 p.m. Town Center Exhibit Area

**POSTER LOCATION #329**

*The Lunar Reconnaissance Orbiter Cornerstone Mission: A Focused and Synergistic Study of Fundamental Solar System Processes at the Moon [#2448]*

LRO is in the first year of a two-year extension, running through September 2018, to study the fundamental processes recorded on the Moon.

**POSTER LOCATION #330**

*Selecting and Certifying Landing Sites for MoonRise in South Pole-Aitken Basin [#1326]*

Existing orbital imaging and geophysical remote sensing data are used for site selection and certification of landing site safety in South Pole-Aitken Basin.

**POSTER LOCATION #331**

*Rock Size-Frequency Distributions at Lunar Landing Sites [#1800]*

We used LRO NAC images covering the seven lunar landing sites to identify rocks at the landing sites and generate RSFDs on log-log plots at each landing site.

**POSTER LOCATION #332**

*An Analysis of Illumination Conditions by Altitude for a Landing Site Near the Lunar North Pole [#1376]*

We demonstrated the necessity of changing the altitude of candidate landing sites for the illumination simulation.

**POSTER LOCATION #333**

*Spectral and Mineralogical Analysis of Chang’e-5 Candidate Landing Site in Northern Oceanus Procellarum [#2079]*

We employ the M3 hyperspectral imaging data to evaluate the spectral and mineralogical variations of three basaltic units at Chang’e-5 candidate landing site.

**POSTER LOCATION #334**

*Apollo Landing Sites 16 and 17: Spectral Mapping and Crater Statistics Reevaluated [#1987]*

Apollo 16 and 17 landing sites are investigated with Kaguya data to define units of crater counting. Results are used to reevaluate crater statistics.

**POSTER LOCATION #335**

*Thermophysical Behavior of the Uppermost Lunar Surface from Diviner High Time-Resolution, Post-Sunset Observations [#3041]*

We report on the results to date of a campaign to observe post-sunset thermal behavior of the uppermost lunar surface with Diviner.

**POSTER LOCATION #336**

*Dynamical Movement Processes of Individual Lunar Surface Grains [#1769]*

To investigate movement of individual lunar surface grains, we measured $^{10}$Be and $^{26}$Al in 20 lunar grains from the top layers of lunar cores, 15008 and 76001.
Habitability and Radiation Environment Within Lunar Pits

We modeled the radiation shielding of lunar pit walls to determine human safety without using deep caves. ~20% of pits are safe, and some have entrance ramps.

A Comparison of Topographic Roughness of the Moon, Mars, and Mercury

We mapped topographic roughness of the Moon, Mars, and Mercury using laser altimeter data, and analyzed their scale dependence on volcanism and impact cratering.

Characterizing Lunar Regolith, Emplacement, and Degradation Processes Associated with Impact Features

Preliminary results from a technique that integrates Mini-RF, Diviner, and LROC NAC data to provide more robust constraints on regolith degradation and age.

Landing Site Selection for the SpaceIL Mission to the Moon

SpaceIL is an Israeli spacecraft in development, planned to land on the Moon. We review the landing site selection process.

Landing Site Assessment for Phase Two of eDSH-Enabled Lunar Missions Being Examined as an ISECG-GER Mission Scenario

Evaluation of five-year, five-landing site humans to the lunar surface campaign.

Understanding the Surface Modifications at Landing Site Due to Spacecraft (Soft) Landing on the Moon

Numerical investigations carried out to understand the disturbance caused to lunar surface during soft landing. Results for a particular case are presented.

Possible Landing Site for Future Chang’e Mission: Relation Between Magnetic Field and Dust Distribution Over the Mare Ingenii’s Cave

The Mare Ingenii area may be possible landing site for future China Chang’e mission. To understand the distribution dust of the area surface is important.