

Tuesday, March 22, 2016

[T313]

POSTER SESSION I: PLANETARY MISSION CONCEPTS: MOON

6:00 p.m. Town Center Exhibit Area

Niles P. B. Eppler D. B. Kennedy K. J. Lewis R. Spann J. F. et al. **POSTER LOCATION #211**
[Research Objectives for Human Missions in the Proving Ground of Cis-Lunar Space](#) [#2734]

Discussion of the possible research objectives for future human missions to the Proving Ground in cis-lunar space.

Jolliff B. L. Petro N. E. Shearer C. K. Cohen B. A. Liu Y. et al. **POSTER LOCATION #212**
[South Pole-Aitken Basin Sample-Return Science: Critical Clues for Planet Formation](#) [#2818]

Sample return from Moon's South Pole-Aitken Basin addresses processes that affected the early solar system and is thus a high priority for planetary science.

Clark P. E. Malphrus B. Brown K. Reuter D. MacDowall R. et al. **POSTER LOCATION #213**
[Lunar Ice Cube Mission: Determining Lunar Water Dynamics with a First Generation Deep Space CubeSat](#) [#1043]

Lunar Ice Cube, a science requirements-driven deep space exploration 6U cubesat mission was selected for a NASA HEOMD NextSTEP slot on the EM1 launch.

Hayne P. O. Greenhagen B. T. Paige D. A. Camacho J. M. Cohen B. A. et al. **POSTER LOCATION #214**

[Lunar Flashlight: Illuminating the Lunar South Pole](#) [#2761]

Lasers shine on Moon / Shadows brighten for first time / Small mission profits.

Hardgrove C. Bell J. Starr R. Colaprete T. Robinson M. et al. **POSTER LOCATION #215**

[The Lunar Polar Hydrogen Mapper \(LunaH-Map\) CubeSat Mission](#) [#2654]

The Lunar Polar Hydrogen Mapper (LunaH-Map) is a 6U CubeSat mission selected by NASA SMD to reveal abundances of lunar polar hydrogen using neutron spectroscopy.

Kamps O. M. Flahaut J. D. Foing B. H. **POSTER LOCATION #216**
[Lunar Polar Sites and Rover Traverse Planning for a Study on Volatiles and Ices](#) [#2412]

Results of a site selection and comparison project as preparation for a rover traverse planning near the lunar poles for a tele-operated, sample return mission.

Zuo W. Li C. L. Zhang Z. B. Zeng X. G. Zou Y. L. et al. **POSTER LOCATION #217**
[Scientific Data and Its Release of Chang'e-3 Mission](#) [#1353]

This article describes the scientific data of Chang'e-3 mission which was obtained through the four science instruments CE-3 lander and Yutu rover each carried.

Kim K. J. van Gasselt S. Ju G. H. Lee S.-R. Wöhler C. et al. **POSTER LOCATION #218**
[Framework of Lunar Landing Site Selection and Resource Analysis for the 2020 Korean Lunar Mission](#) [#1706]

This contribution reports on activities and concepts related to the Lunar landing site selection and resource analysis for the 2020 Korean Lunar Mission.

Kerber L. Nesnas I. Ashley J. W. Malaska M. J. Parcheta C. et al. **POSTER LOCATION #219**
[A Concept for Exploring the History of Lunar Mare Deposits with the Axel Extreme Terrain Rover](#) [#2969]

Lunar mare pits provide access to the cross-sections of the lunar maria. The AXEL Extreme Terrain Rover can provide the mobility necessary to explore them.

McDonald F. E. Martin D. J. P. Steenstra E. S. Paisarnsombat S. Venturino C. S. et al. **POSTER LOCATION #220**

[A Long Duration Human-Assisted Robotic Sample Return Mission to the Schrödinger Basin Part 1: Traversing the Basin Center](#) [#1464]

A lunar farside rover traverse, planned as part of the HERACLES mission concept, to return ~30 kg of sample and address in situ resource utilization potential.

Martin D. J. P. McDonald F. E. Steenstra E. S.
Paisarnsombat S. Venturino C. S. et al.

POSTER LOCATION #221

[*A Long Duration Human-Assisted Robotic Sample Return Mission to the Schrödinger Basin Part 2: Traversing Towards the Basin Wall*](#) [#1468]

A three year HERACLES-based mission concept to the Schrödinger basin to return at least 30 kg of samples from 8 geologic units, including SPA basin material.

Foing B. H.

POSTER LOCATION #222

[*Highlights from MoonVillage Workshop at ESTEC, December, 2015*](#) [#2719]

We present highlights from the ESA/ILEWG Moon Village Workshop 2015 in ESTEC addressing Moon Habitat Design, Science and Technology, and Engaging Stakeholders.

Batenburg P. Winter D. Calzada A.

Jaime Albalat A. Kleinschneider A. M. et al.

POSTER LOCATION #223

[*Towards a Moon Village: Results from ESTEC 2015 Workshop Splinter Sessions*](#) [#2798]

We report on ESTEC 2015 Moon Village Workshop specific sessions on Moon Habitat Design, science and technology potentials, and engaging stake-holders.