

**Thursday, March 13, 2008**  
**POSTER SESSION II: LUNAR SCIENCE:**  
**GEOPHYSICS, SURFACE SCIENCE, AND EXTRALUNAR COMPONENTS**  
**6:30 p.m. Fitness Center**

Huang S. P. Kiefer W. S. Neal C. R. Kömle N. Banaszkiwicz M. Wiczorek M. A. Tanaka S.  
*Three Deployment Options for the Heat Flow Component of the Long-lived Lunar Geophysics Instrument Package* [#1162]

We examine onsite drilling, gravitational penetration, and lander-attached deployment methods to deploy heat flow instruments in strategic locations across the lunar surface. The methods are applicable to both manned and robotic missions.

Nagihara S. Taylor P. T. Milam M. B. Lowman P. D. Nakamura Y.  
*Designing Heat Flow Experiments for Future Lunar Missions* [#1087]

In planning heat flow experiments for future robotic and human missions to the Moon, we discuss what improvements can be made over the ones carried out for the Apollo program.

Bulow R. Lognonné P.  
*A Seismometer at the Lunar South Pole* [#1595]

Given that a seismometer may soon be emplaced at or near the lunar south pole, we assess the possibility of detecting events from the known distribution of deep moonquake clusters and the likelihood of recovering seismic phases from the lunar core.

Weinberg J. D. Neal C. R. Lognonné P. Hood L. L. Huang S.  
*Lunar Geophysical Instrument Package (LGIP) I — Science and Instrumentation* [#1433]

This submission describes required modifications to be made to an existing seismometer, heat flow probe and surface magnetometer to create an integrated lunar geophysical instrument package (LGIP) for use in a global lunar network.

Weinberg J. D. Heshmatpour B. Neal C. R.  
*Lunar Geophysical Instrument Package (LGIP) II — Power and Probe Development* [#1435]

This submission describes power, architectural design and concept of operation issues for the development of an integrated lunar geophysical instrument package (LGIP) for use in a global lunar network.

Lewis L. R. Hsi H. K. Wallace R. B.  
*ALSEPs/EASEP — Apollo Era Lunar Surface Science Stations* [#1356]

A description is given of the the Apollo Lunar Surface Experiment Packages (ALSEP) systems deployed by the astronauts on each of the six Apollo lunar landing missions. The achieved systems level performances of the ALSEPs/EASEP systems are summarized.

Clark P. E. Lewis R. Millar P. S. Yeh P. S. Lorenz J. Leshin L. A.  
*Next Generation Lunar Science Experiment Packages* [#1301]

We are conceptualizing optimal design and identifying state-of-the-art components for generic state-of-the-art science packages for ultra cold and dark conditions of the lunar surface.

Bland P. A. Artemieva N. A. Collins G. S. Bottke W. F. Bussey D. B. J. Joy K. H.  
*Asteroids on the Moon: Projectile Survival During Low Velocity Impact* [#2045]

We find that numerous low velocity impact events will be recorded on the Moon; projectile material will be relatively unshocked, and contained within the crater; and the total mass of asteroidal material involved exceeds that present in regolith.