Friday, October 24, 2014  
FUTURE EXPLORATION: STRATEGIES AND OPPORTUNITIES  
1:30 p.m.   Bldg. 200, Room 100  

Chairs: Clive Neal  
Benjamin Greenhagen  

1:30 p.m. Klaus K. *  
The Space Launch System and the Proving Ground: Pathways to Mars [#3014]  
The SLS provides a critical heavy-lift launch capability enabling diverse deep space missions including human exploration, planetary science, astrophysics, heliophysics, planetary defense, and commercial space exploration.  

1:45 p.m. Huber S. A.   Thornton J. P. *   Hendrickson D. H.  
Astrobotic Technology: Commercial Lunar Payload Delivery Service [#3063]  
This paper describes Astrobotic Technology’s financial and technical model for delivery of commercial lunar landing capabilities through government partnership.  

2:00 p.m. Greenhagen B. T. *   Donaldson Hanna K. L.   Thomas I. R.   Bowles N. E.   Allen C. C.  
Pieters C. M.   Paige D. A.  
The Benefits of Sample Return: Connecting Apollo Soils and Diviner Lunar Radiometer Remote Sensing Data [#3067]  
Here we present a comprehensive study to reproduce an accurate simulated lunar environment, evaluate the most appropriate sample and measurement conditions, collect thermal infrared spectra of Apollo soils, and correlate them with Diviner observations.  

2:15 p.m. Shearer C. K. *   Lawrence S.   Jolliff B. L.  
Robotic Sample Return I: Advancing our understanding of Planetary Differentiation [#3041]  
We examine the role of lunar SR for advancing our knowledge of the early differentiation of the Moon and other planetary bodies.  

2:45 p.m. Lawrence S. J. *   Jolliff B. L.   Shearer C.   Robinson M. S.   Stopar J. D.   Braden S. E.  
Speyerer E. J.   Hagerty J. T.   Denevi B. W.   Neal C. R.   Draper D. S.  
Robotic Sample Return II: Addressing Fundamental Exploration Themes [#3062]  
A campaign of automated sample return to specific locations identified by recent mission results as a critical aspect of an integrated exploration strategy is discussed; specific ROIs are identified to inform future hardware choices.  

3:05 p.m. Shearer C. K. *   Neal C. R.   Jolliff B. L.   Wieczorek M. A.   Mackwell S.  
A New Moon. An Initiative to Integrate new Lunar Information into our Fundamental Understanding of the Moon and the next Stages of Lunar Exploration [#3040]  
We propose a new initiative that will integrate recent mission observations into producing a richer understanding of the Moon, revealing new clues about the history of the solar system, and providing new information for renewed lunar exploration.  

3:35 p.m. DISCUSSION