

**Thursday, October 27, 2011**  
**CAVE DETECTION AND ROBOTIC EXPLORATION**  
**1:00 p.m. Classroom A**

**Chairs: Heather Jones**  
**Thomas Billings**

- 1:00 p.m. Titus T. N. \* Wynne J. J. Jhabvala M. D. Cushing G. E. Cabrol N. A.  
[Cave Detection Using Oblique Thermal Imaging](#) [#8024]
- 1:30 p.m. Mitchell E. J. \* Mitchell J. N. Patrick E. L. Mandt K. E. Younkin K. N.  
[In-Situ Meteorology and Elemental Composition of Cave Atmospheres in Texas](#) [#8007]
- 2:00 p.m. Chanover N. J. \* Glenar D. A. Voelz D. G. Xiao X. Tawalbeh R. Uckert K. Boston P.  
Brinckerhoff W. Getty S. Mahaffy P.  
[Rapid Assessment of High Value Samples: A Miniature AOTF-LDTOF Spectrometer Suite for Cave Environments](#) [#8019]
- 2:30 p.m. BREAK
- 3:00 p.m. Peterson K. M. \* Jones H. L. Whittaker W. L.  
[Mission Design for Combined Lander-Rover Modeling of a Skylight](#) [#8028]
- 3:30 p.m. Ximenes S. W. \* Elliott J. O. Bannova O. Nakagawa R. Y.  
[Reference Mission Architecture for Lunar Lava Tube Reconnaissance Missions](#) [#8013]
- 4:00 p.m. Billings T. \* Runyan M.  
[Exploring with MoonBats, from the Caverns of the Moon to Saturn's Rings](#) [#8015]
- 4:30 p.m. Ruby D. W. \* Wynne J. J. Titus T. N.  
[Novel Volumetric Cave Mapping Process Utilizing Existing Technologies](#) [#8031]
- 5:00 p.m. DISCUSSION