



LIFE MEMBERS AFFINITY GROUP

## BUENAVENTURA AEROSPACE SOCIETY CHAPTER

### The Mars Rover and Sample Return Program

Deborah Bass, Ph.D, NASA JPL

**Thu July 16, 2015 at 6:30 pm**

CLU Ahmanson Richter Hall

Meetings are free and open to the public

Building on the success of Curiosity's landing, NASA [announced plans for a new robotic science rover](#) set to launch in 2020, based on the Curiosity design. The proposed 2020 rover mission is part of [NASA's Mars Exploration Program](#), a long-term effort of robotic exploration of the red planet. Designed to advance high-priority science goals for Mars exploration, the mission would address key questions about the potential habitability of the rover's landing site and directly search for signs of ancient life on Mars. The mission would also provide opportunities to gather knowledge and demonstrate technologies that address the challenges of future human expeditions to Mars. Dr. Bass will speak with us on this exciting new chapter of Mars exploration.



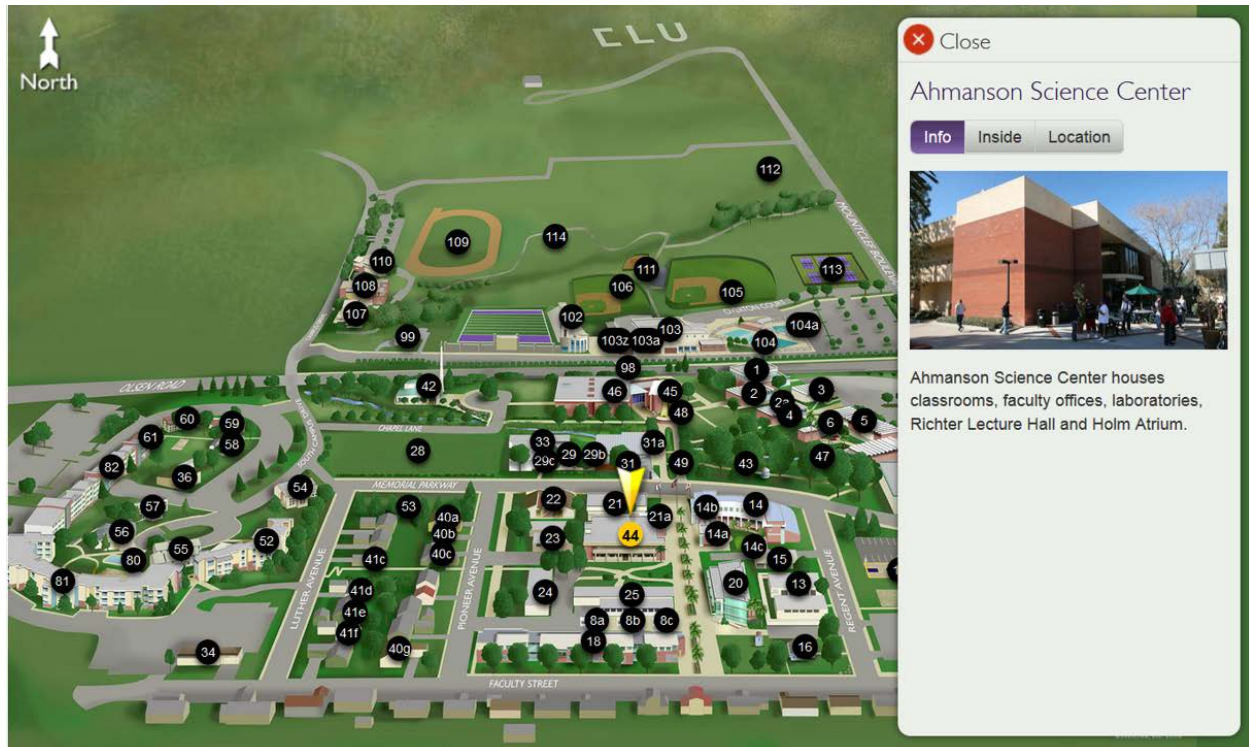
**Dr. Deborah Bass** is currently the Manager for the Mission Systems Engineering Section at NASA's Jet Propulsion Laboratory where she and her team focus on making spacecraft more user-friendly. Dr. Bass received her bachelor's degree in Geology from the University of Pennsylvania, and her PhD in Planetary Geology from UCLA. She has conducted independent research on the Martian water cycle, focusing on surface-atmosphere interactions. While a post-doc at SwRI San Antonio, Dr. Bass was involved with the ill-fated Mars Polar Lander and also the highly successful Cassini mission. When she joined JPL in 2001, she acted as the Science Operations System Engineer and later Deputy Science Team Chief for the Spirit and Opportunity rovers. After Spirit and Opportunity's prime missions, Dr. Bass moved to the Phoenix Mars Lander Project where she was appointed Deputy Project Scientist. Dr. Bass has spent time in Mars programmatics,

preparing and politicking for the future of Mars exploration. She was recently assigned to the 2020 Mars Rover in the capacity of Deputy Project Scientist. As the M2020 Deputy Project Scientist, she worked help to stabilize the first phase of Mars Sample Return by participating in the mission that will generate a storage "cache" of returnable rocks.

**Location:** California Lutheran University  
100 Ahmanson Science Building,  
60 West Olson Road, Thousand Oaks  
(see map on next page)  
Pizza/networking starts at 6:30 pm  
Talk starts at 7:00 pm

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#### Directions from Ventura:

Take the Ventura Freeway 101 South.  
Take Lynn Road Exit, turn left, drive 2.9 miles.  
Lynn Road turns into Olsen Road, drive .9 miles.  
Turn right onto Mountclef Boulevard - the University is on the right  
Turn Right onto Memorial Parkway  
Park on Memorial Parkway or adjacent streets.

#### Directions from Los Angeles:

Take the Ventura Freeway 101 North.  
Take Lynn Road Exit, turn right, drive 2.9 miles.  
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