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**AS NEW ROVER SEARCHES FOR LIFE IN MARS-LIKE CHILEAN DESERT
ADLER PLANETARIUM VISITORS WILL FOLLOW ALONG**

**Interactive displays and video conferences to track
"Life in the Atacama" remote rover mission in near real-time**

Chicago, IL – In September and October 2004, Carnegie Mellon University will send Zoë, its newest rover, to the Atacama Desert in Northern Chile as practice for future life-seeking missions to Mars. As Zoë searches for life in the arid, Mars-like environment, Adler Planetarium visitors will be able to see exactly what the rover sees in near real-time.

The three-year, \$3 million project, "Limits of Life in the Atacama," is part of NASA's astrobiology program focusing on finding life in harsh environments. Researchers will utilize the Atacama, whose desert environment is similar to Mars, to refine robotic, remote life-seeking technologies that may be used in future missions to Mars.

The rover will be guided remotely from Carnegie Mellon University in Pittsburgh by scientists from NASA, the Jet Propulsion Laboratory, the University of Tennessee, the British Antarctic Survey and the European Space Agency.

On September 18 and October 9 and 10, the Adler will host live video conferences with mission participants. Beginning the first week in September, new exhibits in the Adler's CyberSpace gallery will enable visitors to virtually navigate the desert terrain of the Atacama in the Adler's Vision Stations (immersive mini-domes) using EventScope, a public version of the 3-D visualization software that mission scientists are using to guide Zoë.

"The 3-D software from EventScope lets you explore these strange remote environments along with the rovers whether they are in the Atacama or on Mars," said Adler Astronomer Mark SubbaRao. "The images you will see in the Vision Stations come directly from the rover's cameras and are updated daily, following the rover's progress."

"Using 3-D visualization technology, we've developed a spatial interface that the scientists will use to guide the rover and receive science data," said Peter Coppin,

(more)

Research Fellow at the Carnegie Mellon STUDIO for Creative Inquiry and Director of the EventScope Project. "The goal is to enable people here in the U.S. to remotely experience the Atacama as if they were there physically. The interface at Adler is based on the same technology as the science interface, but we've adapted it for the museum environment."

Zoë's predecessor, a rover named Hyperion, was not able to conclusively detect indicators of life in the Atacama during its 2003 mission, even though scientists know that the arid region is home to organisms ranging from microbes to mammals. Zoë will try to improve on Hyperion's record using experimental fluorescence imaging techniques.

"Our goal is to make genuine discoveries about the limits of life on Earth and to create technology that can be applied to future NASA missions," said David Wettergreen, associate professor at Carnegie Mellon's Robotics Institute and leader of the project. "Ultimately, we want to create an astrobiologist without a space suit," said Nathalie Cabrol, a planetary scientist at NASA Ames and the SETI Institute, who will lead the science team for the Atacama investigation.

To learn more about new discoveries on Mars being made by the rovers Spirit and Opportunity, visit the Adler's life-size Mars rover replica currently on exhibit and see *Mars Rocks!*, now showing in the Adler Planetarium's historic Sky Theater.

For more information on the Atacama project: <http://www.eventscope.org/atacama>

The Adler Planetarium & Astronomy Museum, America's first planetarium, has inspired more than 35 million visitors since its opening in 1930. Nine state-of-the-art exhibition galleries located in the stunning Sky Pavilion present modern space exploration and the history of astronomy. The world's first StarRider Theater, the most technologically advanced, audience-interactive planetarium, features virtual flights through the cosmos. The Adler's mission to present the human quest to better understand the Universe is led by our scientists and historians, working at the forefront of research in astronomy and its fascinating history. The Adler Planetarium is located at 1300 S. Lake Shore Drive, Chicago. The Adler is open everyday except for Thanksgiving and Christmas Day. For more information, call the Adler Planetarium at 312.922-STAR, or check out our website at www.adlerplanetarium.org.

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