

Space Physics Seminar Thursday, November 6, 2014

SHARAD Studies of Mars: From the Base of the Ice Caps to the Ionosphere

Bruce Campbell

*Smithsonian National Air and Space Museum
Center for Earth and Planetary Studies*

Abstract:

SHARAD is a radar sounding instrument on the Mars Reconnaissance Orbiter, designed to map reflections from geologic interfaces and ice layering to depths of up to a few kilometers below the surface. The instrument provides spectacular views of the polar caps, detects shallow ice deposits in the plains, and maps lava flow and sedimentary layers connected with the intertwined history of volcanism and water on Mars. During dayside operations, SHARAD also probes the ionosphere to track spatial and time-dependent changes in total electron content. This talk highlights recent work on all of these topics.

3:00 pm

Refreshments
CAS Room 500

3:30 pm

Seminar
CAS Room 502

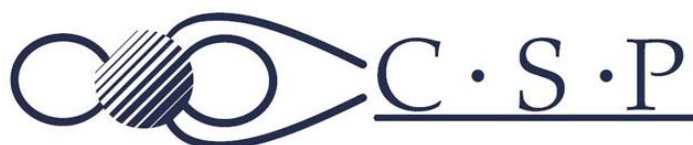
Next Week

- Louis Lanzerotti
*New Jersey Institute of
Technology*

- Space Weather: Affecting
Life and Technologies on
Earth and in Space (joint
with ME)



[http://www.bu.edu/csp/
edoutreach/seminar/](http://www.bu.edu/csp/edoutreach/seminar/)



725 Commonwealth Avenue
Boston, MA 02215