

**YORK UNIVERSITY
DEPARTMENT OF EARTH AND SPACE SCIENCE AND
ENGINEERING
and
CENTRE FOR RESEARCH IN EARTH AND SPACE SCIENCE
S E M I N A R**

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Texas A&M University**

**Investigations of dust and ice aerosols
from the surface of Mars**

ABSTRACT

Atmospheric dust on Mars is part of a complex mass and energy cycle. Through its influence on radiative energy, it drives and responds to atmospheric dynamics. Its sources, sinks, and motions represent the dominant resurfacing process in the modern climate. In the last two decades, lander and rover-based investigations have significantly improved our understanding of the physical characteristics of the dust and of its role in atmospheric energy balance. During northern summer, the same investigations also probe water ice aerosols. Previous descriptions of the ice and its role in the horizontal and vertical transport of Martian water are challenged. Results of these investigations will be discussed

BIOGRAPHY



Mark Lemmon received a B.S. in Physics from the University of Washington in 1989 and a Ph.D. in Planetary Sciences from the University of Arizona in 1994. After being a postdoc at U of A, he joined Texas A&M University in 2000, joined the Atmospheric Sciences faculty in 2005, and is currently an Associate Professor. He has been a member of the Galileo Probe, Mars Pathfinder, Mars Polar Lander, Huygens Probe, and Mars Phoenix Lander science teams, and remains an active member of the Mars Exploration Rover and Mars Science Laboratory science teams.

Refreshments will be served at 3:15 p.m. in Room 105 Life Sciences Building.

DATE: Wednesday, August 13, 2014
TIME: 3:30 p.m.
LOCATION: Room 105, Life Sciences Building