



SPACE PHYSICS SEMINAR

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Winds on Mars

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725 Commonwealth Ave.

Refreshments at 3:30pm in CAS 500

Talk begins at 4:00pm in CAS 502

Abstract:

The NASA Phoenix Mars mission was the first mission to successfully land in a polar region of Mars and the mission lasted 152 sols. The landing site was of meteorological interest as it provided unprecedented observations of the northern polar weather and its interaction with the north pole and the subsurface ice. Amongst the meteorological suite of instruments was a mechanical anemometer, known as the Telltale. Using the onboard imaging system, the Surface Stereo Imager, images of the Telltale were used to determine wind speeds and directions. Being only the fourth anemometer on the surface of Mars, and the first in a polar region, the Telltale dataset offers unique insight into the meteorological aspects of the north polar region and has been used to study atmospheric stability, aeolian dust movement, slope wind effects and has directly assisted the Phoenix lander science objectives.