

**Hydration of the lunar surface revealed by meteoroid impacts**

This talk summarizes how signatures of near-surface water released into the lunar exosphere were detected using observations collected by the Neutral Mass Spectrometer onboard the Lunar Atmosphere and Dust Environment Explorer spacecraft during its 8 month-long mission. The water signatures were measured as distinct episodic, short-lived signal increases above the instrument background level. Data analyses reveals that these fluctuations capture variations of the underlying source of water released into the exosphere by meteoroid impacts. Therefore, they carry information on both the nature of the impactors that triggered the water release into the exosphere and the nature of the reservoir that was sequestering the water beforehand.

**Thursday, October 20th**

4:00-5:00 p.m.

CAS 502 and on zoom

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