

THE ROLE OF WATER IN PLANETARY SCIENCE

APRIL 11, 2007

12:00 NOON - 1:00PM

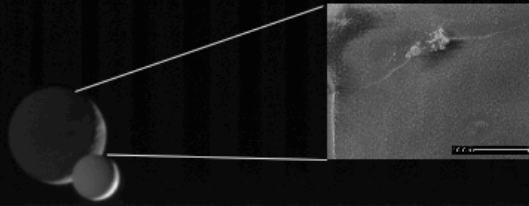
544 CAMPBELL HALL

DISCUSSION OF RELATED READINGS: 1:00PM-2:00PM

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AMY BARR



**GRAIN SIZE IN ICY
SATELLITES**

Observations of the Saturnian icy satellites returned by the Cassini spacecraft have begun to challenge existing ideas about icy satellite behavior. To close the gap between theory and observation, we must revisit issues in icy satellite geodynamics with a fresh perspective based on terrestrial analogs and laboratory experiments. I will talk about control of ice grain in satellite interiors size by silicate particles and by dynamic recrystallization, where ice grains break apart due to flow, and control of grain size by tidal flexing. These physical processes and the interplay between them may move us closer to understanding the forces that drive endogenic resurfacing on icy satellites.

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ORGANIZED BY MATE ADAMKOVICS (ASTRONOMY) & SARAH ZARANEK (EPS)