



# SPACE PHYSICS SEMINAR

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“The lakes of Titan”

**Thursday, October 4, 2012**

**Refreshments at 3:30pm in CAS 500**

**Talk begins at 4:00pm in CAS 502**

**Abstract:**

Hidden under a thick atmosphere, Titan’s surface remained a mystery throughout the 20th century. It was not until the Cassini-Huygens Mission arrived at Saturn nearly a decade ago and began investigating the Saturnian system, did we begin to appreciate the beauty and complexity of this world. Among the most captivating revelations has been the discovery of an active hydrological cycle in which methane (and ethane) rains onto the surface, carving streams and rivers out of the icy bedrock, feeding hydrocarbon lakes and seas, and eventually, evaporating back into the atmosphere. Using Cassini Visual and Infrared Mapping Spectrometer (VIMS) and Synthetic Aperture RADAR (SAR) data, we are learning more about these lakes and seas and how they have influenced the evolution of Titan’s surface.