



RSPP seminars



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“Titan's Atmospheric Chemistry from TEXES/IRTF”

Titan is one of the most enigmatic bodies in our solar system. Though it is dominated almost entirely by molecular nitrogen, methane persists at a mole fraction of between 1 - 5% throughout Titan's atmosphere. The photodissociation of these molecule hundreds of kilometers above Titan's surface initiates a hydrocarbon factory that produces a wide variety of organic molecules, including ethane, propane, and methylacetylene, among others. The very low abundance of molecules makes them challenging to detect via remote sensing. In this talk, a recent survey of Titan's atmosphere using very high resolution mid-infrared spectroscopy by the TEXES instrument at the NASA Infrared Telescope Facility will be discussed, including the first unambiguous detection of allene on Titan.

Monday, May 20th at 2 pm in **Physics LTA**