

Old Dominion University Department of Physics

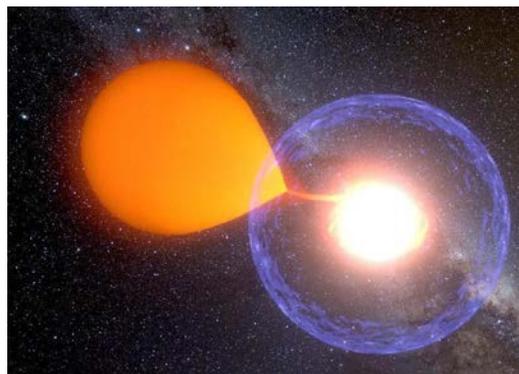
Colloquium

Tuesday, October 25, 2016

"Infrared Spectroscopy of Classical Novae"

**David Lynch
Thule Scientific**

Abstract: A nova is a thermonuclear runaway on the surface of white dwarf in a close binary stellar system. Material (mostly hydrogen) flows through the inner Lagrange point and accretes onto the surface of a white dwarf until it reaches ignition temperature, approximately twenty million degrees K. The sudden explosion ejects a small amount of material which rapidly expands, causing the white dwarf to increase in brightness by many orders of magnitude for a few days or weeks. By spectroscopically monitoring the changes in the infrared spectra of novae (along with other observations throughout the spectrum) the physical conditions in the ejected nova shell can be deduced and used to understand the highly nonequilibrium dynamics of novae.



Presentation: **OCNPS 200 @ 3:00 pm**
Refreshments: **OCNPS Atrium @ 2:30 pm**

All interested persons are cordially invited to attend.