

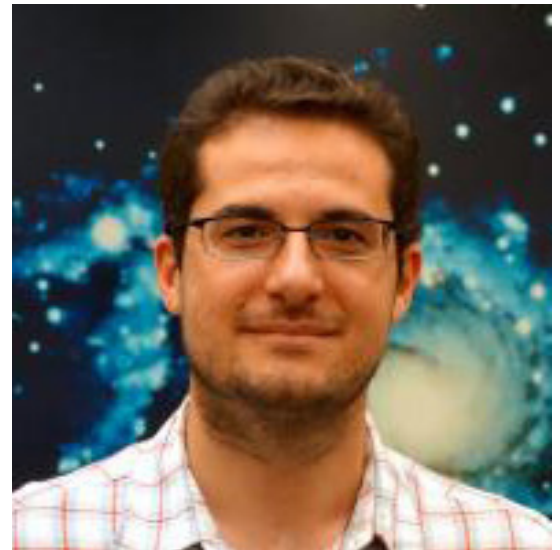
PHYSICS AND ASTRONOMY COLLOQUIUM

Antonios Kontos, Ph.D.

MIT Kavli Institute of Astrophysics and Space Research

New nuclear physics tools for the study of Classical Novae and X-ray Bursts

Classical Novae and X-ray bursts are explosive astrophysical events driven by nuclear reactions. These reactions mainly involve protons or alpha particles and a heavier nucleus. Due to the high temperatures that develop in these environments, the nuclei that take part in the reaction flow may be stable or unstable. In order to better understand these stellar fireworks, we have to measure all those reactions rates that significantly affect the reaction flow. In the first part of my presentation I will give an overview description of the nuclear physics behind Classical Novae and X-ray Bursts. The second part will focus on new experimental developments at the National Superconducting Cyclotron Laboratory that will help answer long-standing questions in nuclear astrophysics.



TUESDAY, FEBRUARY 24, 2015 | 4:00 PM | HAWKING AUDITORIUM



PHYSICS & ASTRONOMY
TEXAS A&M UNIVERSITY