



# PHYSICS AND ASTRONOMY SEMINAR

**Dr. Joseph Bramante**

Perimeter Institute

## **“Dark Matter Heating Nearby Neutron Stars to BBQ Temperatures”**

### Abstract

I will discuss how future measurements of infrared emission from nearby neutron stars can be used as a largely model-independent probe of dark matter interactions with Standard Model particles. This relies on a recently discovered effect that even non-annihilating dark matter has on old neutron stars. The resulting sensitivity to dark matter interactions exceeds the reach of many terrestrial dark matter searches.

Thursday March 16, 2017

2:30 p.m.

Clearihue Building

Room A206