



# PHYSICS AND ASTRONOMY SEMINAR

## Dr. Richard Hill

TRIUMF

### “Effective Theories, Dark Matter and Neutrinos”

#### Abstract

Many searches for physics beyond the standard model involve a quantitative understanding of nucleon and nuclear responses to weak probes. Heavy WIMP effective theory is introduced and used to highlight important applications of perturbative and nonperturbative QCD calculations in dark matter searches. Related applications to neutrino-nucleus cross sections for the accelerator neutrino oscillation program are discussed.

Tuesday, January 26, 2016

1:00 p.m.

Engineering Computer Science Building  
Room 130