



University  
of Victoria

# PHYSICS AND ASTRONOMY SEMINAR (Online)

**Dr. Nicholas Rodd**  
CERN

**“Looking beyond Dark Matter in Axion Haloscopes”**

## Abstract

“The coming decade will bring dramatic improvement in the axion dark-matter program as new experimental designs move beyond the proof of principle stage. In this talk I will outline two signals beyond dark matter that these instruments could discover. The first is a population of relativistic axions that were produced in the early universe and persist as a residual Cosmic axion Background (CaB). The second is high-frequency gravitational waves; I will outline how exploiting an analogy between axion and gravitational-wave electrodynamics allows for axion haloscopes to be converted into gravitational-wave telescopes.”

Wednesday, April 6, 2022

1:00 p.m. PDT

via Zoom: Zoom link available on Uvic Event Calendar