



University  
of Victoria

# PHYSICS AND ASTRONOMY COLLOQUIUM (In Person & Online)

**Dr. Chris Hayward**  
Flatiron Institute

**“What can high-redshift, infrared-luminous galaxies tell us about galaxy formation physics and cosmology?”**

## Abstract

“Interstellar dust is pervasive throughout the Universe, and most light from young, massive stars is absorbed by dust and reradiated as thermal emission in the infrared. Submillimeter galaxies (SMGs), a class of very infrared-luminous distant galaxies, are some of the most extreme star-forming galaxies known, forming stars at rates hundreds or even thousands of times greater than our own Milky Way. I will review our understanding of this enigmatic population, which has challenged galaxy formation theories since their discovery in the late 1990s. I will highlight how the population provides novel constraints on galaxy formation physics, cosmology, and possibly even the nature of dark matter. I will also show how they serve as beacons of galaxy clusters in the process of formation.”

Wednesday, November 30, 2022

3:30 p.m. PST

Bob Wright Centre B150

Zoom link available on Uvic Event Calendar