



University  
of Victoria

# PHYSICS AND ASTRONOMY COLLOQUIUM (In-Person)

**Romeel Davé**  
University of Edinburgh

**“Some Surprising Results from the Simba Simulations”**

## Abstract

“Cosmological simulations of galaxy formation have matured rapidly in the last few years, with recent models combining structure formation, hydrodynamics, stellar and black hole growth, and associated feedback processes to accurately reproduce the demographics of the galaxy population. The input physics required to do so can have consequences that run counter to conventional notions of how galaxies form and evolve. In this talk I present our Simba simulations, a state-of-the-art suite that uses novel approaches for modeling black hole growth, AGN feedback, and dust to yield a galaxy population that uniquely reproduces key observations. I will then discuss some unexpected outcomes from Simba that offer surprising takes on how galactic feedback processes interact with and impact their cosmic ecosystem.”

Wednesday, November 1<sup>st</sup>, 2023

3:30 p.m. PST

ECS 125

Zoom link available on event calendar

