



University  
of Victoria

# PHYSICS AND ASTRONOMY COLLOQUIUM (In Person Only)

**Dr. Matt Dobbs**  
McGill University

“How Did We Get Here? Unraveling the Evolution of the Universe  
with New, Made-in-Canada Instruments”

## Abstract

The sky is a rich laboratory for discovering the laws of nature that govern the evolution of the universe. I'll start by introducing the measurements that have cemented our cosmological model, Lambda CDM, then describe the next technological milestones that help unveil the composition and fate of our universe with a new generation of "digital" radio telescopes being designed and built here in Canada. The talk will focus on the interplay between technological advance, discovery and human adventure. I'll include results and stories from the South Pole Telescope, CHIME and the CHORD observatories. The presentation is intended to engage both undergraduates that are new to cosmology and the adventures of building telescopes at the corners of the earth, and seasoned astrophysicists ready to digest new results from these instruments.

**Wednesday, December 04, 2024**  
**3:30pm PST**  
**BWC A104**