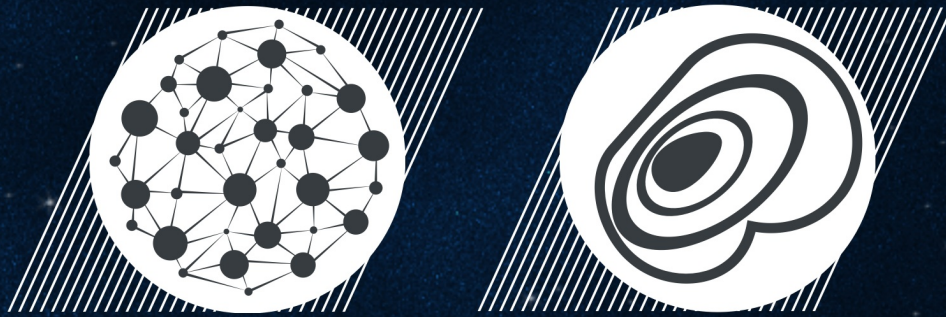


Astro Seminar Series



Gilbert Holder
McGill University

Mapping dark matter on the largest and smallest scales

Dark matter is everywhere, but its nature remains unclear. Through gravitational lensing, we can now make maps of dark matter on a wide range of scales.

I will talk about the two ends of the scale: gravitational lensing of the cosmic microwave background providing maps on Gpc scales, approaching the scale of the cosmological horizon, and strong lensing of dusty star-forming galaxies providing maps of dark matter substructure on scales of 100 pc or less. In addition to providing new insights into the relation between dark matter and luminous matter, the small-scale maps can be used to test the nature of dark matter itself while the large-scale maps can be used to give new perspectives on neutrino masses.

Tuesday Nov 24, 3:30pm

**Bell Room (103)
Rutherford Physics Building**