



Western University
Department of Physics and Astronomy

PHYSICS & ASTRONOMY COLLOQUIUM

Date: **Thursday, 13th September 2018**
Time: **1:30 p.m.**
Location: **Physics & Astronomy Seminar Room 100**

Dr. Alycia Weinberger

Department of Terrestrial Magnetism
Carnegie Institution of Washington

“Circumstellar Disk Diversity and Clues to Planet Formation”

ABSTRACT

I will present three projects that all relate to the evolution and composition of circumstellar disks. The ultimate goal of my studies is to understand how exoplanetary compositions and architectures arise from the diversity of disks. Part 1 will present new results from dust scattering calculations and show HST and Magellan Adaptive Optics multi-wavelength imaging of disks to search for water ice and organics. Part 2 will discuss a survey using the APGOEE-2 spectrograph of young stars in Upper Scorpius and how we can trace the lifetimes and dissipation mechanisms for disks as a function of location and age. Part 3 will discuss new results from SOFIA and ALMA to study the long-term evolution of debris disks.

HOST: S. Metchev

COFFEE + light snacks will be available in the Atrium, 2nd floor, at 1:15 p.m.