



**Western University**  
**Department of Physics and Astronomy**

## **PHYSICS & ASTRONOMY COLLOQUIUM**

**Date:** **Thursday, 25<sup>th</sup> January 2018**  
**Time:** **1:30 p.m.**  
**Location:** **Physics & Astronomy Seminar Room 100**

### **Dr. Jillian Scudder**

Department of Physics & Astronomy  
Oberlin College

### ***“The hunt for cosmic monsters: understanding galaxies in the confused FIR sky”***

#### **ABSTRACT**

Observing galaxies in the Far-Infrared (FIR) gives us a unique window into the star formation rates of very high redshift, dusty galaxies. These galaxies are generally thought to be forming stars at a prodigious rate, heating their dust within their host galaxy, which then radiates in the FIR. However, observing this luminous dust is difficult, even with a space-based telescope such as the Herschel Space Observatory, as the resolution of the images returned is quite poor. It is often assumed that a bright source in the FIR belongs to a single, highly star forming galaxy, but this is impossible to verify with low resolution images. In this talk I will discuss a method of determining how many galaxies are blurred together into a single FIR detection, and what these results imply for our understanding of star formation in the younger Universe..

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