



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

## **PHYSICS & ASTRONOMY COLLOQUIUM**

**Date:** **Thursday, 9<sup>th</sup> February 2017**  
**Time:** **1:30 p.m.**  
**Location:** **Physics & Astronomy Seminar Room 100**

### **Dr. Jason Rowe**

Physics Department  
Université de Montréal

***“From Pixels to Planets: A history of transiting extrasolar planets with a behind-the-scenes look and first-hand account of the Kepler Mission”***

#### **ABSTRACT**

We live in an era of exoplanet discovery. It is truly astounding to look at the evolution of exoplanet research over the past few decades. We have quickly moved from discoveries of individual planets to announcing discoveries a few thousand at a time. My work has covered a wide variety of current exoplanet research that covers fundamental parameters, atmospheres and composition. I am actively involved in the immediate scientific goal to complete the statistical census of exoplanets in the inner regions (less than 1AU) of their host star and to populate the mass-radius diagram for exoplanets.

I will present an overview of the history and status of transiting extrasolar planets and present an insider view of the operations and discoveries from NASA's workhouse Kepler mission. I will show how current and future facilities and instruments such as CSA-BRITE, NASA-K2, SPIRou/CFHT, NASA-TESS, JWST/NIRISS and the Thirty Meter Telescope will push exoplanet discovery space towards the characterization of planets with properties potentially similar to the Earth.

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