**SEMINAR NOTICE**

*Department of Physics and Engineering Physics*
*University of Saskatchewan*

---

**SPEAKER:** Dr. Locke Spencer, Department of Physics & Astronomy
University of Lethbridge

**TOPIC:** *The Far-Infrared Universe: progress in FIR astrophysics from star formation to the cosmic microwave background and beyond.*

**DATE:** Tuesday, November 3rd, 2015

**TIME:** 3:30-4:30pm.

**PLACE:** Rm. 103, Physics Building

**ABSTRACT:**

Over half of the energy emitted by the Universe appears in the relatively unexplored Far-Infrared (FIR) spectral region, which is virtually opaque from the ground and must be observed by space-borne instrumentation. The European Space Agency (ESA) Planck and Herschel Space Observatories, launched together on 14 May 2009, have both provided pioneering observations in this spectral range from star and planet formation to the intensity and polarization of the cosmic microwave background. Both the Herschel and Planck teams are in the final stages of the post operations phase of their missions (and direct funding), and have extensive data archives which are now publicly available. Many areas across all astrophysics will benefit from advances in the next generation of FIR instrumentation; these advances include cooled apertures, increased detector sensitivity, and enhanced spatial resolution through interferometry. Recent FIR results are presented with a discussion of the development of, and Canadian participation in, the FIR roadmap and the future of FIR astrophysics.

Coffee and Cookies will be served in the Physics lounge at 3:00 pm. for those attending the seminar.