

SEMINAR NOTICE

*Department of Physics and Engineering Physics
University of Saskatchewan*

SPEAKER: Ethan Runge, PhD Candidate
Department of Physics & Engineering Physics

TOPIC: *Vertical Trace Gas Profiles from an Infrared Fourier Transform Spectrometer.*

DATE: Tuesday March 14th, 2023

TIME: 3:30-4:30 p.m.

PLACE: *Physics 103*

Abstract:

The Limb Imaging Fourier-Transform Spectrometer Experiment (LIFE) instrument is a balloon-borne prototype designed to take vertical images of atmospheric limb emissions in the mid-infrared with the intent to determine vertical trace gas profiles for greenhouse gases such as H₂O, O₃, CH₄, and N₂O. The instrument seeks to demonstrate the validity of using commercially available components in instrument design to reduce uncertainty in observational records and modelling parameters for dynamic, temporal and radiative effects in the upper troposphere/lower stratosphere (UTLS) region of the atmosphere.