

SEMINAR NOTICE

*Department of Physics and Engineering Physics
University of Saskatchewan*

SPEAKER: Daniel Letros, Phd Candidate, Institute of Space & Atmospheric Studies, Physics and Engineering Physics

TOPIC: *Remote Sensing of Atmospheric Aerosols with the Aerosol Limb Imager.*

DATE: Tuesday January 9th, 2024

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

PLACE: *Physics 103*

Abstract:

Atmospheric aerosols are any kind of liquid droplets or fine particulate matter that is suspended in the atmosphere. These aerosols are highly variable and have a net cooling effect on the climate. Their properties and variability make measuring them of high importance to climate observation and modelling. The Aerosol Limb Imager (ALI) is a multi-spectral polarimetric imager designed for the purpose of retrieving aerosol number density and particle size information in the stratosphere and the upper-troposphere.

To date, multiple iterations of the ALI instrument concept have been developed at the University of Saskatchewan and demonstrated on stratospheric balloon platforms. This presentation will provide contextual background information on atmospheric aerosols, explain the design and observations of ALI, show results demonstrating the efficacy of ALI in measuring atmospheric aerosols, and summarize the state of the project as well as future applications.