

UNB Physics Department Seminar

Imaging Airglow with the PEARL All-Sky imager

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Gravity (not gravitational!) waves are, as the name suggests, periodic motions that occur in the Earth's atmosphere. These waves are often generated by mountains and storm systems, and can sometimes be observed with the naked eye as periodic patterns in the clouds. It is possible for gravity waves to propagate into the mesosphere and lower-thermosphere, where they can be observed as patterns in the airglow with periods from minutes, to days. Since gravity waves appear as small perturbations in irradiance of the observed airglow, special care is needed to positively identify and parameterize them, especially when doing so programmatically.

This seminar introduces one method of observing atmospheric gravity waves in atmospheric airglow measurements, and discusses work currently being done to improve these observations by further calibration, correlation, and validation of existing instruments and data sets from the PEARL Ridge lab at Eureka, Nunavut, in the Canadian high-arctic.



Thursday Feb. 7, 2019, 1:15--2:15 pm in
P204. Colloquium tea in P203 beforehand