

SEMINAR NOTICE

*Department of Physics and Engineering Physics
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SPEAKER: Magnus Ivarsen, Post Doc
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TOPIC: *Plasma turbulence, directly embedded in the ionosphere
by the pulsating aurora.*

DATE: Tuesday September 26th, 2023

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

PLACE: *Physics 103*

Abstract:

The pulsating aurora consists of pulsating or flashing patches of auroral emissions and occurs frequently at night. The precipitating particles in the pulsating aurora are accelerated by wave-particle interactions in the magnetosphere, and the pulsations are thought to arise from the intermittency of the chorus wave phenomenon. Using a host of Canadian and European instruments, we show a case of the pulsating aurora directly structuring the ionospheric plasma, with certain turbulent quantities exhibiting a 1:1 relationship. We discuss the many implications these findings have for the study of ionospheric irregularities.