

SEMINAR NOTICE

*Department of Physics and Engineering Physics
University of Saskatchewan*

SPEAKER: Drew Bertwistle, PhD, P.Eng
Canadian Light Source

TOPIC: *Swift Electrons and Brighter Beams-Future Accelerator
Developments for the CLS*

DATE: February 12th, 2019

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

PLACE: Physics 103

ABSTRACT:

The genesis of circular accelerators began when Ernest Lawrence and his PhD student, Milton Livingston, conceived of accelerating protons to 1 MeV with a magnet, vacuum chamber, and RF. Eighty-nine years we have the Canadian Light Source (CLS), a 2900 MeV synchrotron storage ring. The technology has vastly improved but the paradigm remains the same. Academics come together with graduate students and continue to challenge the limits of accelerating and manipulating charged particles. We will begin with a high-level overview of the present CLS accelerator systems. This will be followed by accelerator research initiatives, and *graduate student opportunities*, in storage ring design for brighter photon beams, computational studies in characterizing electromagnetic wake fields, and the potential of a new laboratory for electron source research, RF development, and ultrafast scattering.

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