

# SEMINAR NOTICE

*Department of Physics and Engineering Physics  
University of Saskatchewan*

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**SPEAKER:** Dr. Mark Boland  
Physics and Engineering Physics

**TOPIC:** *Particle Accelerators: Engines of Discovery*

**DATE:** Tuesday March 4<sup>th</sup>, 2025

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

**PLACE:** *Physics 103*

## **Abstract:**

Particle accelerators have been invaluable research tools since they were developed at the start of the modern physics area. They have been instrumental in development of science in many fields, reportedly used in almost 40% of Nobel Prizes in Physics, as well as being awarded Nobel Prizes in Physics in their own right. This seminar will focus on two types of circular accelerators, one for generating synchrotron radiation and another for colliding particles. The basic operational principles and physics required to generate high energy particle accelerators will be presented. There are over 40,000 particle accelerators in operation in the world at the moment and more being designed and built all the time. A glimpse at the future direction for particle accelerators will be provided, including the motivation for ever larger accelerators and the possible direction of new technology to achieve the design goals.

Coffee and Cookies available in Physics 177 lounge at 3:00pm to those attending the seminar.