## **SEMINAR NOTICE**

## Department of Physics and Engineering Physics University of Saskatchewan

**SPEAKER:** Garth Huber

University of Regina

**TOPIC:** The Electron-Ion Collider: A Major New Scientific

Facility to Probe the Heart of Nuclear Matter.

**DATE:** Tuesday October 24th, 2023

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

PLACE: Physics 103

## **Abstract:**

A major initiative of the international nuclear physics research community is the construction of the world's first electron-nucleus collider, with the flexibility to change the nuclear ion species as well as the beam energies.

For electron-proton collisions, the Electron-Ion Collider (EIC) would be the world's first collider where both beams are spin polarized. In 2020, the EIC has been approved for construction by the U.S. Department of Energy (US-DOE), at Brookhaven National Laboratory (Long Island, NY). The project is now in an advanced stage of conceptual design, with construction planned for 2024-29, and first operations in 2030-32. I will summarize the EIC science goals, introduce EIC Canada that coordinates Canadian participation in the EIC, and briefly highlight the University of Regina involvement at the new facility.