SEMINAR NOTICE

Department of Physics and Engineering Physics University of Saskatchewan

SPEAKER: Evan McDonough

University of Winnipeg

TOPIC: Cosmological Condensed Matter Physics

DATE: Tuesday February 7th, 2023

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

PLACE: Physics 103

Abstract:

Particle physics and condensed matter physics find a natural meeting point in dense astrophysical systems, such as neutron stars. If dark matter is a particle with a very small mass, condensed matter physics can be relevant on cosmological scales, leading to phenomena such as exotic phases of matter (superfluid, superconducting) and vortex formation within galaxies. Models of this type can be tested in a wide array of experimental arenas, ranging from the large-scale structure of the universe to particle physics experiments.