

# SEMINAR NOTICE

*Department of Physics and Engineering Physics  
University of Saskatchewan*

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**SPEAKER:** Dr. Yuki Nagai, Centre for Computational Science & e-Systems, Japan Atomic Energy Agency

**TOPIC:** *Nematic topological superconductivity in a doped topological insulator  $Cu_xBi_2Se_3$*

**DATE:** November 28th, 2016

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

**PLACE:** Physics 175

## **ABSTRACT:**

Recently, the evidence of “nematic” superconductivity has been found in Cu-intercalated topological insulator  $Bi_2Se_3$ . The nematic means that there is only two-fold rotational symmetry. The topological insulator  $Bi_2Se_3$  becomes a superconductor below  $T_C = 3K$  with Cu-doping. Although the crystal structure has three-fold rotational symmetry, angular-dependent heat capacity measurement has shown that the superconducting state has only two-fold rotational symmetry. In this talk, to discuss the recent results on nematic topological superconductivity, I would like to introduce superconductivity, topology, and nematicity in condensed matter physics.

*Coffee and Donuts will be served in Physics 175 shortly before the seminar for those attending the seminar.*