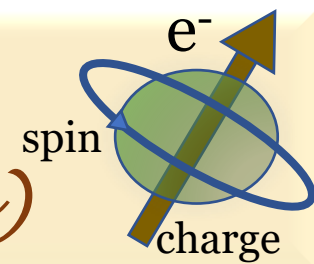




W2S Seminar

(Webinar series on Spintronics)



Spin on Topological Quantum Materials

Speaker:

Dr. Saroj Prasad Dash

Associate Professor

Quantum Device Physics Laboratory

Chalmers University of Technology, Sweden.

Date and time:

05.11.2020

6.30 pm

via Zoom

Abstract

The electrical creation and control of spin polarization in topological quantum materials are promising for applications in spintronics and quantum technologies. By utilizing the unique spin textures of the electronic bands of the topological insulators, Weyl semimetals and giant Rashba spin-orbit materials, novel charge-spin conversion effects could be observed up to room temperature. We will finally discuss the observation of gate-tunable charge-spin conversion and spin galvanic effects in topological material and graphene heterostructures. These developments can lead to all-electrical topological spintronic devices in van der Waals heterostructure, which can be essential building blocks in future device architectures.

If interested to attend then please visit <https://www.niser.ac.in/w2s-seminar/index.php>