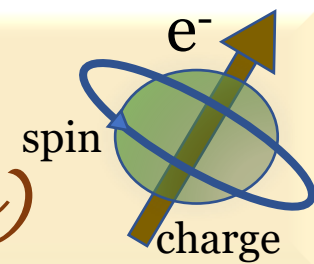




W2S Seminar

(Webinar series on Spintronics)



Magnetic anisotropy and Spin Seebeck Effect

Speaker:

Prof. Hari Srikanth

Department of Physics

University of South Florida, Tampa, FL USA

Date and time:

19.11.2020 at

6.30 pm

Via

Zoom

Abstract

Spin caloritronics is a topical area of interest for the spintronics community given the need for new thermoelectric/thermomagnetic devices for energy harvesting. However, the origin of spin Seebeck effect (SSE) and its relationship with surface and interface magnetic anisotropy have remained unresolved issues. In this talk I will discuss the distinct correlation between magnetic anisotropy with the field and temperature dependence of SSE in yttrium iron garnet (YIG)/Pt heterostructures as well as other systems. We have shown that the introduction of a thin intermediate organic semiconductor such as a C_{60} layer (~ 5 nm) has a big impact on the surface anisotropy of YIG leading to increased spin mixing conductance and significant enhancement in SSE in heterostructures. Overall I will discuss the possibility of tuning the interface anisotropy for improved spin caloritronic devices.

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