W2S Seminar
(Webinar series on Spintronics)

spin
charge

Spin Caloritronics - a complex interplay between spin, charge and heat currents

Speaker:
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Date and time:
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Via Zoom

Abstract

The discovery of new phenomena which couples spin, charge and heat currents is now at the forefront of contemporary condensed matter physics. The primary motivation here is to facilitate the generation, and manipulation of spin currents in magnetic systems, and to formulate device architectures where these spin currents can be gainfully employed. Of particular interest is the Spin Seebeck Effect, which pertains to the generation of a (magnon driven) spin current in a magnetic material when subjected to a temperature gradient. In this talk, I would present an overview of the development of this area of research. This would include the means by which thermal spin currents can be generated, and different experimental geometries which are used for its detection. Some of our work on the temperature dependence of the spin Seebeck effect in some oxide systems would also be described.

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