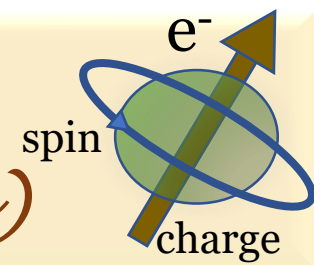




W2S Seminar

(Webinar series on Spintronics)



Spin-charge interconversion with oxide 2DEGs

Speaker:

Prof. Manuel Bibes

Université Paris-Saclay and
UMPhy CNRS/Thales, France

Date and time:

12.08.2021 at
8.00 pm IST
i.e. 4.30 pm CET

Abstract

The two-dimensional electron gas (2DEG) forming at the interface between SrTiO_3 and other oxides shows many interesting features such as high mobility, low temperature superconductivity and Rashba spin-orbit coupling (SOC). In this talk I will show how this latter property can be harnessed to interconvert spin and charge currents with great efficiency through the direct and inverse Edelstein effects. I will present results from spin-pumping (for spin-charge conversion) and unidirectional transport (for charge-spin conversion) and show that the conversion amplitude and sign can be largely tuned by a gate voltage leading, in some specific cases, to non-volatile effects.

To attend the lecture please visit

Zoom link: <https://us06web.zoom.us/j/97405614646>

Contact: Dr. Subhankar Bedanta (Convenor W2S)

Email: w2s-spintronics@niser.ac.in

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