

W2S Semínar (Webínar seríes on Spíntronics)



Rashba systems for in-memory spin computing



Speaker:

Dr. Sara Varotto

CNRS/Thales, France

Politecnico di Milano, Italy

Date and time: 26.05.2022 at 8.00 pm IST i.e. 4.30 pm CET

Abstract

Spin-orbit systems open new possibilities for in-memory computing architectures, more efficient than conventional CMOS-based ones. The Magneto-Electric Spin-Orbit logic unit designed by Intel combines a nonvolatile memory element and a spin-orbit readout logic.

In my talk I will propose a simplified scheme based on the ferroelectric control of the Rashba states and related spin-charge interconversion. We will explore two-dimensional electron gas systems in oxides (SrTiO3 and KTaO3), as well as Ferroelectric Rashba Semiconductors (GeTe).

To attend the lecture please visit: Passcode: 091976 Zoom link: <u>https://us06web.zoom.us/j/86205440712?pwd=Qm1ZWHI3eStBQmRRbH</u> <u>RtdW9KdEJDZz09</u>

<u>Contact:</u> Dr. Subhankar Bedanta (Convenor W2S) Email: w2s-spintronics@niser.ac.in

For more information on W2S seminars please visit : <u>https://www.niser.ac.in/w2s-seminar/</u>