On-line SPICE-SPIN+X Seminars

Wednesday, 13th July 2022, 15:00 (CET)

The seminar will be via Zoom (Meeting ID: 875 1511 2996) and live streamed in the SPICE YouTube Channel.

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Magneto-ionics: using ionic motion to control magnetism

Reliable and dynamic control of magnetic properties in technologically relevant magnetic materials is at the heart of a variety of emerging practical applications in spintronics. Gate voltage-controlled ionic diffusion in magnetic devices has shown to provide non-volatile control of perpendicular magnetic anisotropy, the Dzyaloshinskii Moriya interaction, as well as the velocity and pinning of magnetic domain walls, opening a solid path towards novel multifunctional spintronics devices. In this talk, I will present an overview of this exciting field, what it means for practical applications, and discuss the physical mechanisms involved.