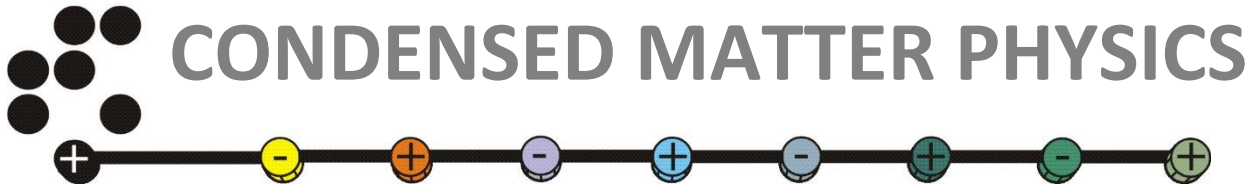


F-5 SEMINAR



*Friday, November 24, 2023
at 10:15 AM*

*in the seminar room of physics (room 106)
Condensed Matter Physics, Jožef Stefan Institute*

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Oxide-based memristive devices with non-standard mechanisms

Neuromorphic computing seeks to replicate the architecture and information processing mechanisms of the mammalian brain. Memristors are defined as metal/insulator/metal micro or nanostructures able to alter their electrical resistance between different states, emulating the adaptive, analog synaptic weight of brain synapses.

In this presentation I will describe results on thin film-based memristive systems beyond the conventional ones -based on point defect electromigration- displaying a rich physics and additional properties such as memcapacitance. I will focus on memristors based on ferroelectric and topotactic redox oxides. These systems could lead to neuromorphic devices with enhanced functionalities and lower energy consumption.

You are cordially invited to attend.