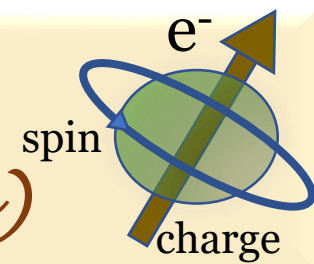




W2S Seminar

(Webinar series on Spintronics)



Electric Field Control of Magnetism for Beyond-CMOS Electronics

Speaker:

Prof. Ramamoorthy Ramesh
University of California, Berkeley

Date and time:
13.01.2022 at
8.00 pm IST
i.e. 3.30 pm CET

Abstract

Complex oxides exhibit a rich spectrum of functional responses, including magnetism, ferroelectricity, highly correlated electron behavior, superconductivity, etc., providing the ideal playground for interdisciplinary scientific exploration with an eye towards real applications. The oxide community has been exploring the science of such materials as crystals and in thin film form by creating epitaxial heterostructures and nanostructures. A small subset of these materials exhibit multiple order parameters; these are known as multiferroics, enabling electric field control of magnetism at room temperature. Current work is focused on ultralow energy (1 attoJoule/operation) electric field manipulation of magnetism as the backbone for the next generation of ultralow power electronics. In this talk, I will describe our progress to date on this exciting possibility. The talk will conclude with a summary of where the future research is going.

To attend the lecture please visit: **Passcode: 394716** Zoom link:
<https://us06web.zoom.us/j/81375298592?pwd=ZUpiU0FOLzBoUUNXb0V0azhQOTdqUT09>

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