

Seminario

Departamento de Física Teórica

“Solitons in monoaxial chiral magnets: equilibrium, dynamics and scattering of spin waves”

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Magnonics is an emergent field whose ultimate goal is to replace electric currents by spin waves in electronic devices. It is attracting an enormous interest due to the advantages of such replacement from the point of view of performance and power consumption. The media on which spin waves propagate is a stable ordered magnetic state of some magnetic material. Specially interesting from the point of view of magnonics are the magnetic states of chiral magnets, in which the magnetization field can be either uniform, helical, conical, or solitonic. We present some recent results on the equilibrium states of monoaxial chiral helimagnets, on their dynamics induced by polarized electric currents, and on the scattering of spin waves by solitons in such systems.

Fecha: Lunes 5 de junio de 2023

Hora: 12:00

Lugar: Seminario de Física Atómica, Molecular y Nuclear