

SEMINARIO
Departamentos de Física Teórica I y II
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TITULO: Topological states with Majorana fermions in open quantum systems

LUGAR: FACULTAD DE CIENCIAS FÍSICAS UCM

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ABSTRACT

The possibility of generating states with topological order and Majorana fermions by means of engineered dissipation is discussed. The specific systems studied are spinless atomic fermions in 1D and 2D optical lattices coupled to a bath. The key feature of the dissipative dynamics described by a Lindblad master equation is the existence of Majorana edge modes, representing a non-local decoherence free subspace.