SEMINARIO
Departamentos de Física Teórica I y II
Universidad Complutense de Madrid

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TITULO: Classification of Mixed State Topology in 1D

LUGAR: FACULTAD DE CIENCIAS FÍSICAS UCM
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ABSTRACT:

We show how to extend the identification and classification of one dimensional symmetry protected topological (SPT) phases to the case of a general mixed state. I will review some of the concepts used for pure states using a concrete spin-1 model, and demonstrate their extension to mixed states using a numerical matrix product state method. We find that starting from a topological ground state and applying various types of noise, there is a transient regime where the system is driven out of equilibrium while retaining its topological properties.