Martes 26 de MARZO 2024

12.00 h

Sala de Grados
Facultad de Ciencias

Spin waves in presence of one dimensional magnetic solitons

Víctor Laliena

Universidad de Zaragoza

The dynamics of the spin waves is governed by a linearized version of the Landau-Lifshitz-Gilbert equation. The presence of a magnetic soliton induces a kind of potential for the spin waves, whose behaviour in this case shows analogies with the behaviour of quantum particles in presence of a potential (bound states, scattering). In this talk the interaction between spin waves and a soliton will be analyzed in some detail, discussing the features of bound states (Winter modes) and the peculiarities of scattering, and the analogies/differences with quantum particles.

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