
Topological solitons in chiral magnetism

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Abstract

Chiral symmetry breaking described by Lifshitz invariants gives rise to a class of topological solitons, the so-called chiral skyrmions. This form of chirality occurs in various condensed matter systems including ferromagnets and liquid crystals. We shall discuss the occurrence of modulated phases in appropriate parameter regimes and the stabilization of isolated chiral skyrmions as a new excited state.

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