

Topological excitations in Bose-Einstein condensates

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Abstract:

Spinor and/or dipolar Bose-Einstein condensates can host a rich variety of topological excitations due to their internal degrees of freedom and anisotropic nature of the interaction. In this talk, I will present some of the recent developments on this topic such as the Kibble-Zurek mechanism, knot excitations, non-Abelian vortices, and vortex tiling.