

Abstract Submitted
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Dynamical and Topological Stability of Coreless Vortices in a Spin-1 ^{87}Rb BEC RYAN OLF, G. EDWARD MARTI, SEAN LOURETTE, ANDREW MACRAE, DAN STAMPER-KURN, UC Berkeley — The order parameter provides a powerful framework for understanding the elementary and topological excitations of a system near its ground state. Away from the ground state, a system's dynamics become increasingly important and distinguishing topological and dynamical effects can become difficult. Spin-1 Bose-Einstein condensates (BEC) admit rich dynamics and two distinct order parameter spaces with different topologies, making them a versatile platform for both dynamical and topological studies of the system both in and out of equilibrium. In this talk we discuss recent experiments done in our lab investigating the dynamics and topology of spin textures in Spin-1 ^{87}Rb BEC.

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