

Abstract Submitted
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Hamiltonian monodromy in the spectrum and dynamics of a spin-1 Bose condensate AUSTEN LAMACRAFT, University of Virginia — A spin-1 Bose condensate in a magnetic field in the single mode approximation – valid for sufficiently small condensates – represents a rather simple dynamical system. In this talk I will show that there is nevertheless scope for some rather unusual behavior. In particular, this system displays the phenomenon of *Hamiltonian monodromy*, a topological obstruction to the existence of global action-angle variables. I will discuss the signatures of this phenomenon in the classical dynamics and quantum spectrum

Austen Lamacraft
University of Virginia

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