Abstract Submitted for the DAMOP06 Meeting of The American Physical Society

Investigation of a single boson species in a Feschbach resonance ANDREW CARMICHAEL, JUHA JAVANAINEN, University of Connecticut — We investigate the Hamiltonian for a single boson species in the presence of a Feshbach resonance which permits the creation of molecules. To simplify the model we consider the resulting bosonic molecules to be a classical field and investigate the resulting Heisenberg equations of motion for occupancies and correlation functions. Similarities with and differences to some previous work involving fermions are discussed.

Andrew Carmichael

Date submitted: 01 Feb 2006 Electronic form version 1.4