

Abstract Submitted
for the DAMOP05 Meeting of
The American Physical Society

Investigating the BCS-BEC crossover region using ultra-cold fermionic atoms JOHN STEWART, MARKUS GREINER, CINDY REGAL, DEBORAH JIN, JILA, National Institute of Standards and Technology and University of Colorado, Department of Physics, University of Colorado, Boulder, CO 80309-0440 — Recently, ultra-cold atom experiments have allowed researchers access to the BCS-BEC crossover. Starting with a two-component gas of ^{40}K atoms cooled to quantum degeneracy, a magnetic field Feshbach resonance is used to create strong, tunable interactions in the gas. We report on recent experiments including the observation of pair-correlated atoms through the atom shot-noise in time-of-flight absorption images.

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Date submitted: 28 Jan 2005

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