

Abstract Submitted  
for the DAMOP06 Meeting of  
The American Physical Society

**Heteronuclear Feshbach Resonances in a Bose-Fermi Mixture of  $^{40}\text{K}$  and  $^{87}\text{Rb}$**  M. L. OLSEN, T. D. CUMBY, D. S. JIN, JILA, National Institute of Standards and Technology and University of Colorado, and Department of Physics, University of Colorado, Boulder, CO 80309 — Feshbach resonances have proven to be a valuable tool in the study of atomic gases. These resonances allow control over both the sign and magnitude of the interaction between two atoms. We have observed four magnetically tunable heteronuclear Feshbach resonances between fermionic  $^{40}\text{K}$  and bosonic  $^{87}\text{Rb}$ . We report on studies of interactions in the mixture of the two species near a Feshbach resonance.

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Date submitted: 01 Feb 2006

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