## Abstract Submitted for the MAR08 Meeting of The American Physical Society

Final-state effects in radio-frequency spectrum of ultracold Fermions SOURISH BASU, ERICH MUELLER, Cornell University — We model the effects of final-state interaction on the radio-frequency spectrum of a two-component superfluid Fermi gas near resonance. We show how the spectrum evolves as one tunes from weak to strong interactions. Aside from the continuum resulting from the breaking of Cooper pairs, for certain interaction strengths, we predict a sharp peak resulting from converting a pair in one channel to a pair in another channel.

Sourish Basu Cornell University

Date submitted: 16 Nov 2007 Electronic form version 1.4