## Abstract Submitted for the DAMOP08 Meeting of The American Physical Society

Cross-Molecular Coupling in Combined Photoassociation and Feshbach Resonances MATT MACKIE, JAKE KESSELMAN, Temple University — Photoassociation of a Feshbach-resonant condensate has revealed a shift of the laser resonance that is blue (red) below (above) the Feshbach resonance, as well as a rate constant that vanishes at a particular below-resonance magnetic field and saturates near-resonance at unprecedented values ( $\sim 10^{-7} \text{ cm}^3/\text{s}$ ). Here we report that cross-molecular coupling, enabled by the shared dissociation continuum, is implicated as the culprit behind these observations.

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