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**KRb Feshbach Molecules** KANG-KUEN NI, J.J. ZIRBEL, S. OS-PELKAUS, J. YE, S. JIN, University of Colorado — We have produced heteronuclear Feshbach molecules from an ultracold gas mixture of K40-Rb87 in an optical dipole trap. We can create more than 30,000 molecules at about 100 nK and we have observed molecule lifetimes as long as 20 ms near the Feshbach resonance. We will report on measurements of the Feshbach molecule lifetime as a function of magnetic-field detuning from resonance. These results are compared with theoretical predictions for vibrational quenching of heteronuclear Feshbach molecules.

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