Abstract Submitted
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Trap lifetime study of ultracold ground-state KRb molecules D. WANG, S. OSPELKAUS, K.-K. NI, M.H.G. DE MIRANDA, B. NEYENHUIS, D.S. JIN, J. YE, JILA, NIST and University of Colorado — We have produced near quantum degenerate $^{40}K^{87}Rb$ polar molecules in their rovibrational ground state using magneto-association followed by STIRAP transfer. Preliminary measurements show that trap lifetime of these fermion molecules is limited to $\sim$ 100 ms. We are investigating the KRb loss in the presence of either K or Rb atoms to look for evidence of chemical reactions at ultracold temperatures. This work is supported by the NSF and NIST.

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