

Abstract Submitted  
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**Cooling Strontium in a Narrow Line Magneto-Optical Trap** B.J. RESCHOVSKY, D.S. BARKER, N.C. PISENTI, G.K. CAMPBELL, JQI, University of Maryland and NIST, College Park, MD 20742 — We describe the behavior and performance of a magneto-optical trap (MOT) operating on the narrow ( $\Gamma/2\pi = 7.4$  kHz)  $^1S_0 - ^3P_1$  transition of strontium. We have successfully trapped multiple strontium isotopes at temperatures of less than  $1 \mu\text{K}$ . These cold samples are then transferred to a pancake-shaped optical trap where they are evaporatively cooled to quantum degeneracy.

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