

Abstract Submitted
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An Optical Dipole Trap for ^{87}Rb ¹ JUSTIN BROWN,
DWIGHT WHITAKER, Williams College — Using a high numerical aperture optical system, we have loaded ^{87}Rb atoms into an optical dipole trap created by a 100 W CO_2 laser. The design of our system allows us to load our trap under a wide range of conditions. We will discuss key parameters to maximize the transfer of atoms from our MOT cloud to the dipole trap in preparation for evaporative cooling en route to BEC. In addition, we present thoughts on techniques to further increase the number of atoms in the dipole trap.

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