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Transfer of Ultracold 87Rb from a QUIC Magnetic Trap into a Far Off Resonance Optical Trap MING HE, WILLIAM A. VAN WIJNGAARDEN, York University — Ultracold 87Rb atoms were transferred from a QUIC magnetic trap into a far off resonance optical trap (FORT). FORTs were created by focusing a 150 mW laser beam having a wavelength of 852 nm to a spot having a radius of 20 and 30 μm. A probe laser then passed through the ultracold atom cloud after the magnetic trap was turned off to study the temporal evolution of the optically trapped atoms. Nearly a million atoms could be transferred into the FORT at temperatures as low as 1 μK with an efficiency as high as 50%.

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