

Abstract Submitted
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Experiments with single site addressable 3D optical lattice.¹ XIAO LI, KARL D. NELSON, DAVID S. WEISS, Pennsylvania State University — We will describe an experiment directed toward making a neutral atom quantum computer. We have loaded and imaged hundreds of single Cs atoms in a random half of the sites in a 3D optical lattice with 5 micron spacing. We will briefly discuss 3D Raman sideband cooling in this lattice, our state detection method, and our approach to addressing individual lattice sites without affecting atoms at other sites.

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