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Abstract for an Invited Paper for the DAMOP20 Meeting of the American Physical Society

Optical tweezer arrays with gray molasses CINDY REGAL, JILA, University of Colorado

I will overview our work on using gray molasses for near-deterministic loading and cooling of single atoms for scaling atomby-atom array assembly. I will also discuss our progress towards low-entropy arrays of ground-state bosonic rubidium atoms, and lastly present a brief overview of a new apparatus that will harness a cryogenic environment for atom arrays.