Abstract Submitted
for the DAMOP07 Meeting of
The American Physical Society

BEC apparatus for optical lattice experiments REBEKAH SCHILLER, STEPHAN ALBERT, DANIEL PERTOT, DAVID SPROLES, DANIEL GREIF, AZURE HANSEN, DOMINIK SCHNEBLE, Department of Physics and Astronomy, Stony Brook University — We report our progress on a BEC transporter apparatus for experiments with ultracold atomic gases in optical lattices. Using a moving-coil quadrupole magnetic trap, laser-cooled clouds of ^{87}Rb atoms are transported along a 2D path into a glass cell. For evaporation, a TOP trap geometry is used which incorporates the quadrupole coils and affords large optical access for subsequent optical trapping and manipulation. We will discuss our experimental setup and recent results.

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Date submitted: 03 Feb 2007 Electronic form version 1.4