

Abstract Submitted
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Magnetic-Gradient Cold-Atom Launching BENEDICT FEINBERG, HARVEY GOULD, RAPHAËL JANNIN, CHARLES T. MUNGER JR., HIROSHI NISHIMURA, Lawrence Berkeley National Laboratory — We have extended our simulations (<http://meetings.aps.org/Meeting/APR17/Session/F1.39>) of beam transport of ultra cold ($2 \mu\text{K}$) and cold ($130 \mu\text{K}$) neutral Cs atoms. In addition to falling under gravity, focusing, and reversing direction, ultra cold atoms in our simulations are now longitudinally bunched and accelerated, reaching 0.5 m above their starting point. An experimental apparatus to test the simulations is being constructed. Experimental progress will be described.

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