

Abstract Submitted
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Dynamics of Bose-Einstein condensates and degenerate Fermi gases in disorder potentials¹ JIAJIA CHANG, CHRIS HAMNER, PETER ENGELS, Washington State University — Ultracold atoms placed in disorder potentials have recently attracted much attention from both an atomic physics perspective as well as from a condensed matter perspective. In our experiment we study the effects of a 1D disorder potential on the collective dipole motion of a Bose-Einstein condensate and a degenerate Fermi gas. We observe damping in both cases though the mechanism for the damping is predicted to be different in each case. We also investigate the damped dipole motion of a Bose-Fermi mixture in a harmonic trap. Our recent and ongoing experiments will be presented.

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JiaJia Chang
Washington State University

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