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**Fermions in a 3-D Disordered Potential** JOSHUA ZIRBEL, STANIMIR KONDOV, WILLIAM MCGEHEE, BRIAN DEMARCO, University of Illinois at Urbana-Champaign — We report our progress toward a study of ultra-cold, fermionic  $^{40}\text{K}$  in a 3-D disordered potential [1]. The potential is formed by crossing two optical speckle fields which create fine-grained disorder in three-dimensions having a length scale of about 700 nm. Transport of the non-interacting cloud through the potential will be discussed. We will also present the use of a hybrid magneto-optical trap [2] to cool  $^{40}\text{K}$ .

[1] M. White *et al.*, Phys. Rev. Lett. **102**, 055301 (2009).

[2] Y.-J. Lin *et al.*, Phys. Rev. A **79**, 063631 (2009).

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