

Abstract Submitted  
for the DAMOP12 Meeting of  
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**A Next Generation Machine for Fermions in Optical Lattices Experiments** WUJIE HUANG, AVIV KESHET, EDWARD SU, CHRISTIAN SAN-  
NER, JONATHON GILLEN, WOLFGANG KETTERLE, Massachusetts Institute  
of Technology — We are building a new  $^{23}\text{Na}$ - $^6\text{Li}$  machine for optical lattices ex-  
periments. Major experimental setups and upgrades will be described in details.  
We will also discuss how to reach the antiferromagnet regime and study quantum  
magnetism.

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