

Abstract Submitted  
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**Numerical Study of Iron-Based Superconductors and Nematic Order** HARRISON RUIZ, MARTIN CLAASSEN, YAO WANG, CHUNJING JIA, BRIAN MORITZ, THOMAS DEVEREAUX, SIMES, SLAC National Accelerator Laboratory/Stanford University — We perform an exact diagonalization study of the multi-orbital Hubbard model including coupling to lattice degrees of freedom. The single-particle spectral function, dynamical spin, charge, and Raman response are studied to examine a spin nematic phase due to a biquadratic exchange coupling.

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