

Abstract Submitted  
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**Angular-momentum- and parity-projected Hartree-Fock in a shell-model basis**<sup>1</sup> JOSHUA STAKER, CALVIN JOHNSON, San Diego State University — We implement projected Hartree-Fock in a shell-model basis and compare against exact numerical results from full space diagonalization in the same single particle space. We consider the accuracy of projected Hartree-Fock for the excited state spectrum, the moment of inertia, and also odd-even staggering. In particular we consider intrinsic states with mixed parity and project out states with good parity.

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