

Abstract Submitted
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Projected Hartree-Fock in a shell-model basis¹ JOSHUA STAKER²,
CALVIN JOHNSON³, San Diego State University — We implement projected
Hartree-Fock in a shell model basis and compare against exact numerical results
from full space diagonalization. We consider the accuracy of projected Hartree-Fock
for the excited state spectrum in the cases of the $s - d$ and $p - f$ fixed parity shells
as well as cases of mixed parity in the $p - sd$ shell. The accuracy of valence proton-
neutron number configurations are also considered including even-even, odd-odd,
and odd-A.

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