

S2-level calculations

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I. S2-LEVEL RESULTS USING TWO-BODY POTENTIALS

At this level the equations can be solved exactly. There are no approximations - the only uncertainty is whether the truncated Hilbert space is still large enough.

Convergence tests

Binding energy in MeV			
n, ℓ	^{16}O	^{12}C	^4He
$n=25, \ell = 12$	-50.482	-22.769	-16.102
$n=25, \ell = 14$	-54.972	-25.137	
$n=25, \ell = 16$	-57.241	-26.391	-16.381
$n=25, \ell = 18$	-57.285	-26.588	-16.392