

Abstract Submitted  
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**Comparing the Random  
Phase Approximation to Full Configuration-Interaction Calculations of  
Atomic Structure** MICAH SCHUSTER, CALVIN JOHNSON, San Diego State  
University — We compute the binding energies for helium through neon, comparing  
the random phase approximation (RPA) against full configuration-interaction diag-  
onalization. RPA gives a reasonable approximation for the full numerical answer  
and might be useful for efficient determination of basis set parameters.

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