

Abstract Submitted  
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**Neutron-Impact Ionization of H and He<sup>1</sup>** T.-G. LEE, M.F. CIAP-  
PINA, Department of Physics, Auburn University, Auburn, Alabama 36849, USA,  
F. ROBICHEAUX, Department of Physics, Purdue University, West Lafayette, In-  
diana 47907, USA, M.S. PINDZOLA, Department of Physics, Auburn University,  
Auburn, Alabama 36849, USA — Perturbative distorted-wave and non-perturbative  
close-coupling methods are used to study neutron-impact ionization of H and He.  
For single ionization of H, we find excellent agreement between the distorted-wave  
and close-coupling results at all incident energies. For double ionization of He, we  
find poor agreement between the distorted-wave and close-coupling results, except  
at the highest incident energies. We present the ratio of double to single ionization  
for He as a guide to experimental checks of theory at low energies and experimental  
confirmation of the rapid rise of the ratio at high energies.

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Shahin Abdel-Naby  
Department of Physics, Auburn University, Auburn, Alabama 36849

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