

Abstract Submitted  
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**Theoretical and Experimental Three-Dimensional Triple Differential Cross Sections for Electron Impact Ionization of Neon**<sup>1</sup> S.M. AMAMI, Missouri S and T, THOMAS PFLUEGER, Max-Planck-Institute for Nuclear Physics, DON MADISON, Missouri S and T, XUEGUANG REN, ARNE SENTLEBEN, ALEXANDER DORN, JOACHIM ULLRICH, Max-Planck-Institute for Nuclear Physics — Three-dimensional triple differential cross sections have been calculated and measured for 61 eV electron-impact ionization of the 2p state of neon. Three-dimensional distributions for the ejected electron will be presented for fixed incident projectile energy and scattering angle. Comparison between theoretical DWBA (distorted wave Born approximation), M3DW (molecular 3-body distorted wave), and experiment will be given for ejected electron energies ranging between 2 eV to 20 eV and scattered projectile angles ranging between 20 degrees and 70 degrees. Although the M3DW is in much better agreement with experiment than the DWBA, the experiment exhibits some structure not predicted by theory.

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