

Abstract Submitted  
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**Differential Measurements for Positron Impact Ionization of Argon**<sup>1</sup> D.W. MUELLER<sup>2</sup>, University of North Texas, R. BOADLE<sup>3</sup>, The Australian National University, S. ARMITAGE, None, A. DORN, Max Planck Institute-Heidelberg, S.J. BUCKMAN<sup>4</sup>, J.P. SULLIVAN<sup>5</sup>, The Australian National University — Differential triple coincidence measurements for positron impact ionization can provide in-depth insight into antimatter interactions with matter. We present the results of our recent measurements for 190eV positrons incident on Argon, leading to ionization. We present our early results which are differential for both the ejected electron and scattered positron in energy and angle. In addition to the large angle electron scattering, a smaller peak in the forward direction at 1/2 the scattered positron velocity is apparent. This peak suggests that these electrons are traveling on the Wannier ridge.

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<sup>2</sup>Physics Department

<sup>3</sup>Research School of Physics and Engineering, Atomic and Molecular Physics Laboratories

<sup>4</sup>Research School of Physics and Engineering, Atomic and Molecular Physics Laboratories

<sup>5</sup>Research School of Physics and Engineering, Atomic and Molecular Physics Laboratories

Dennis Mueller  
University of North Texas

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