

Abstract Submitted
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Positron Scattering from Argon¹ DENNIS MUELLER, SIMON ARMITAGE, University of North Texas, ROISIN BOADLE, Australian National University, ALEXANDER DORN, Max-Planck-Institut für Kernphysik, STEPHEN BUCKMAN, JAMES SULLIVAN, Australian National University — Positron scattering from atomic and molecular targets differs significantly from electron scattering. While the induced target polarization is similar for the two projectiles, the repulsive nature of the positron interaction with the nuclei significantly modifies the potential experienced by this positively charged projectile. In addition, for ionizing interactions the post collision interaction between the positron and ejected electron differs significantly from electron impact ionization. The experiments described here probe these differences with the goal of measuring the final state momentum of each particle, scattered positron, ejected electron and resulting ion. The current status of these experiments will be presented.

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