

Abstract Submitted
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Triply Differential Single Ionization of Argon by Positron and Electron Impact.¹ JARED GAVIN, OSCAR DE LUCIO, ROBERT DUBOIS, UMR — Triply differential cross sections for single ionization of argon by 200 and 500 eV positrons and electrons were measured using coincidences between the scattered projectile, ejected electrons and recoil ions. Time of flight spectra allow us to distinguish between different degrees of ionization and to discriminate against background contributions. Our experimental apparatus allows us to acquire data with energy losses < 30 eV and scattering angles between $\pm 3^\circ$ and to simultaneously measure the binary and recoil lobes of momenta transfer. Comparison between the positron and electron TDCS data will be presented and discussed with respect to projectile charge effects. We are now working towards removing the effects of an electric field, which is used to extract the recoil ions, on the ejected electron trajectories.

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