Orientation Effects in Excitation-Ionization of Helium\(^1\) A.L. HAR-RIS, T.P. ESPOSITO, Illinois State University — We present fully differential cross sections (FDCS) for electron-impact excitation-ionization of helium when the ionized electron is found outside of the scattering plane. When the final state He\(^+\) ion is left in a non-spherically symmetric state, such as a p-state, an orientation for the ion can be defined. Using our 4-Body Distorted Wave and First Born Approximation models, we examine FDCS in search of effects due to the orientation of the final state He\(^+\) ion.

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