

Abstract Submitted
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Electron Impact Ionization of Helium Atom HARI P. SAHA, University of Central Florida, Orlando — We plan to report the results of our calculation on electron impact ionization of helium atom for symmetric and asymmetric configuration using the Multiconfiguration Hartree-Fock (MCHF) method for electron impact ionization of atoms [1,2]. Our main emphasis will be focused on the calculation of final state wave function more accurately at low excess energies. We will present results of our calculation for triple differential cross sections at few low excess energies. The calculated results will be compared with other available theoretical and experimental data. Finally we will discuss on the quality of the final state wave function accounting for electron correlation between the two final state continuum electrons.

[1] Hari P. Saha, Phys. Rev. A 77, 062705 (2008)

[2] Hari P. Saha, Phys. Rev. A 82, 042703 (2010)

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