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Double Photoionization of atoms using screening potential HARI

P. SAHA, University of Central Florida, Orlando — We will report the results of our investigation on double photoionization of atoms using our recently extended MCHF method [1]. As a test case, triple differential cross sections for double photoionization of helium atom will be calculated for 20 eV excess photon energy. The initial state will be calculated using the sophisticated multi-configuration Hartree-Fock method. The angle dependent screening potential approximation [2,3] which accounts for electron correlation between the two final state continuum electrons, will be used to calculate the final state wave function, The results will be compared with the experimental [4] and accurate theoretical calculations [5].

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