Abstract Submitted
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Double Photoionization of Beryllium atoms using screening potential approximation HARI P. SAHA, University of Central Florida, Orlando — We plan to report the results of our investigation on double photoionization of Beryllium atoms. We will present the results of triple differential cross sections at excess energy of 20 eV using our recently extended MCHF method [1]. We will use multiconfiguration Hartree Fock method to calculate the wave functions for the initial state. The final state wave functions will be obtained in the angle depended screening potential approximation [2,3] which accounts for electron correlation between the two final state continuum electrons. We will discuss the effect of core correlation in the triple differential cross section. The results will be compared with the available accurate theoretical calculations and experimental findings.

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[2] M.R.H. Rudge, Rev. Mod. Phys. 40, 564 (1968).
[3] C.Pan and A.F Starace, Phys. Rev. Lett. 67, 185 (1991); Phys. Rev. A45, 4588 (1992).

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