

Abstract Submitted
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Classical Ensemble Studies of Strong-Field Double Ionization of Atoms¹ ZACH SMITH, S.L. HAAN, Calvin College — Non-Sequential Double Ionization of atoms by strong laser fields is very complicated, but is amenable to classical description. We will review our three-dimensional classical-ensemble studies of double ionization, and show the semi-quantitative agreement with experimental results. We find that the double ionization typically proceeds through a sequence of events—single ionization followed by recollision excitation, with over-the-barrier ionization occurring a portion of a laser cycle later. We consider laser wavelengths 780 nm and 390 nm.

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