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3D classical ensemble modeling of non-sequential double ionization: the dependence of double-ionization yield on the nucleus<sup>1</sup> STANLEY HAAN, KATHERINE SHOMSKY, NATHAN DANKS, Calvin College — In 3D classical modeling of non-sequential double ionization, we find that plots of double ionization yield vs laser intensity show strong dependence on an adjustable nuclear softening parameter. We explore why, and uncover chaotic behavior and strong sensitivity to interaction with nucleus in recollision excitation with subsequent photoionization.

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