Abstract Submitted for the DAMOP06 Meeting of The American Physical Society

Electron Momentum Distributions in Short-Pulse Double Ionization – Agreement with a Classical Model in  $3D^1$  STAN HAAN, LLIAN BREEN, ARMIN KARIM, Calvin College, J.H. EBERLY, University of Rochester — In this talk we will present results from fully classical, three-dimensional ensemble studies of double ionization of helium. We will look at how the time delay between recollision and final double ionization leads to ejection of electrons into opposite momentum hemispheres, and will examine individual trajectories as well as ensemble behavior. We will show that our results compare favorably with experiment.

 $^1 \rm Work$  supported by National Science Foundation Grant PHY-0355035 and DOE Grant DE-FG02-05ER15713

Stan Haan Calvin College

Date submitted: 27 Jan 2006

Electronic form version 1.4