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Double photoionization of atomic ions in high frequency radiation fields[1] M.S. PINDZOLA, F. ROBICHEAUX, Auburn University, J. COLGAN, LANL — In support of planned experiments involving the photoionization of atomic ions at LCLS/SLAC and FLASH/DESY using EBITs, we have derived time-dependent close-coupling equations for both the Schrodinger and Dirac equations which track the correlated three body breakup of a two-electron atomic ion in the presence of an attosecond high frequency radiation field. For the double photoionization of Ne+8 and U+90, we calculate the strengths of electric dipole and quadrupole radiation field effects on the energy and angular correlated motion of the two photoelectrons.

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