

Abstract Submitted
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Self-consistent method for extraction of attosecond photoabsorption streaking time delays¹ HONGCHENG NI, JING SU, AGNIESZKA JARON-BECKER, ANDREAS BECKER, Univ of Colorado - Boulder — We propose a self-consistent method to account for the Coulomb-laser coupling effect and obtain intrinsic photoabsorption time delays measured by the attosecond streak camera technique. We illustrate this method for a one dimensional numerical model of the hydrogen atom. In our method, starting from a first guessed time delay, we iteratively obtain a streaking trace, fit the trace to the vector potential of the streaking pulse, and obtain a new time delay. The iteration procedure is repeated until the time delay converges. We demonstrate the convergence and robustness of the method.

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