

Abstract Submitted  
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**Does streaking measure time delays?** ULF SAALMANN, JAN M ROST, Max Planck Institute for the Physics of Complex Systems — It is rigorously shown under which condition the delay from a streaking spectrogram provides the (Wigner-Smith) time delay. As this is based exclusively on energy absorption, i. e. the interplay of the binding potential and the streaking laser, it follows immediately that the long-range Coulomb potential is not standing out as the introduction of the so-called “Coulomb-laser-coupling time” suggests. A suitable way of defining meaningful (finite) time delays in the case of (long-range) Coulomb potentials is proposed.

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