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Attosecond pulse train modulation of non-sequential ionization B. ZIMMERMANN, K.J. SCHAFER, Louisiana State University — We examine the sub-cycle dynamics of non-sequential double ionization (NSDI) in a model helium atom using the combination of a strong infrared (IR) laser and an attosecond pulse train (APT). In the regime where the APT is the dominant source of single ionization we find a significant modulation of the NSDI signal versus APT-IR delay. In addition to controlling the time of ionization we also examine the effect of changing the ionized electron's initial energy by varying the harmonics used to synthesize the APT.

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