

Abstract Submitted
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Optimizing laser pulses to control photoinduced electronic states of matter BIN HWANG, PHILLIP DUXBURY, Michigan State Univ — Time-resolved angle-resolved photoemission (tr-ARPES) is a challenging experimental method that can provide remarkable insight into the time dependence of electronic states during and after the application of femtosecond laser pulse. We present optimal control theory for photoemission from these light induced states, focusing on phenomena that are well described by tight-binding models. Our optimal control theory will be outlined and used to study a variety of photo-induced states; including negative temperature states, Floquet spectra and topological states.

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