

PHYSICS DEPARTMENT COLLOQUIUM

“Ultrafast Physics in One Dimension”

BY

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Low dimensional materials, and in particular, quasi-one-dimensional systems have attracted considerable interest owing to their unusual electronic properties. In many of these systems, strong electron-phonon couplings can lead to the formation of nonlinear excitations such as self-trapped excitons, in which an electronic excitation is localized as a result of lattice distortions that occur in response to the excitation. I will present the results of femtosecond time-resolved experiments in which we have studied the electronic and vibrational dynamics associated with the formation and evolution of the self-trapped exciton in quasi-one-dimensional mixed-valence molecular solids.

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4:00 PM IN 102 JFB
REFRESHMENTS AT 3:30 PM IN 219 JFB