

No. 2

Language: English

Date: May 13(Fri), 2011, 15:00 ~ 16:00

Location: Cooperation Center, 5F Meeting Room, W524 (研究交流棟5階会議室 W524)

Title: Laser-induced molecular dynamics with a classical model

Speaker:

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Classical models of laser-atom interaction has been widely used to understand the laserdriven electron dynamics, and as a computationally cheap alternative to solving the timedependent Schroedinger equation. However, it has not been known how to treat the interaction of molecules with intense laser light in a classical way. In this talk, I will demonstrate how to model a classical molecule with a suitably modified Hamiltonian. Application of the model to the D3+ molecule exposed to a few-cycle, intense laser pulse reproduces qualitatively experimentally measured spectra, and yields insight in the laserdriven intramolecular motion.