## Nonadiabatic Transitions and Resonances in Chemical Reaction Dynamics Hiroki Nakamura

abstract:Nonadiabatic transitions and various types of resonances in simple chemical reactions will be discussed. In addition to the conventional types of resonances, there are some peculiar ones such as those assisted by vibrationally nonadiabatic transitions and the resonane tunneling. The interesting phenomenon of complete refelction in one-dimensional system will also be briefly touched upon.