

# SEMINAR ANNOUNCEMENT

國立中山大學物理系111學年度第二學期專題演講

**Use time-resolved energy  
spectrum to study the light-  
induced molecular dynamics**

楊崇鑫 助理教授

**Dr. Chung-Hsin Yang**

**Assistant Professor, International Ph.D**

**Program for Science, NSYSU**

## Abstract:

Light-induced chemical reactions and/or physical transformation are ubiquitous in molecules, materials, and biological systems. Time-resolved spectroscopy is one of the most potent means of tackling the involved mechanisms. In this talk, I will introduce how we track the UV photodissociation mechanisms of small aldehyde molecules in the gas phase by time-resolved energy spectrum. The underlying techniques, including a picosecond pump-probe detection scheme, the molecule beam technique, and velocity-map ion imaging, will be introduced. The preliminary results of various reaction channels and possible pathways from the photodissociation of the molecules will also be discussed.

**TIME: Mar. 23, Thu.  
14:10**

**VENUE: PH2006**