Condensed Matter Physics Seminar

Department of Physics, National Taiwan University

## Spatially and Temporally Coherent Superposition and Ray-wave Duality in DiodePumped Lasers

Date Monday, Oct 21th , 2013

Time 1 4:20-16:20

**R833** 

**Location**Dept. of Physics / Center for Condensed Matter
National Taiwan University

All Are Welcome!

## Dr. Yung-Fu Chen Professor, Electrophysics, National Chiao-Tung University

The quantum level rearrangement manipulated by an external parameter plays a significant role in various experimental phenomena in mesoscopic and macroscopic wave systems. Existence of the fractional degeneracy has a far-reaching relation with the emergence of quantum states with particle-wave duality. More recently, it has been evidenced that the rearrangement of energy levels under the variation of some control parameters is a generic phenomenon. Therefore, experimental manifestation induced by the redistribution of energy levels is an interesting topic to explore the topological invariants in quantum spectra. In this talk, I introduce various experimental systems and theoretical formula to acquire the spatial and temporal features of resonant states with fractional degeneracy.









