

# Center for Quantum Science and Engineering (CQSE)

Weekly Seminar  
Dec. 17, 2010 (Friday)

TIME Dec. 17, 14:30 ~ 15:30  
TITLE Microwave Measurements on 2D Carrier Systems in  
Semiconductors and in Graphene  
SPEAKER Dr. Pei-hsun Jiang 江佩勳博士  
Department of Physics, NTNU  
PLACE Rm716, CCMS & New Physics Building, NTU

## Abstract

Microwave measurements at low temperatures and high magnetic fields provide a significant tool to study dynamical responses from 2D electron systems away from the DC static regime. In this talk, the speaker will present the results of their recent microwave experiments on the 2D systems in GaAs quantum wells and in graphene. In GaAs, resonances of certain oscillation modes of crystalline phases were observed in the 2D electron systems. In graphene, quantum oscillations were successfully detected with the low-temperature microwave measurement technique.

