

# Center for Quantum Science and Engineering (CQSE)

Weekly Seminar  
Apr. 8, 2011 (Friday)

TIME Apr.8, 14:30 ~ 15:30  
TITLE Single electron transport on a liquid He surface: from strongly correlated electron liquid to Wigner solid regime  
SPEAKER Dr. Kimitoshi Kono  
Low Temperature Physics Laboratory, RIKEN, Japan  
PLACE Rm716, CCMS & New Physics Building, NTU

## Abstract

Single electron transport is observed in surface state electrons on liquid He. A split-gate type device is designed to show a pinch-off threshold. Very near the threshold we observed single electron transport. Strong correlation between electrons results in interesting structure in I-V characteristics. The behavior is successfully interpreted in terms of an electrostatic simple model.

Comparison with a numerical simulation will be shown.

