

# CQSE Weekly Seminar

2018  
Oct. 5, Friday

TIME Oct. 5, 2018, 14:30 ~ 15:30  
TITLE MEMS Resoswitches-Enabled Sensors  
SPEAKER Dr. Wei-Chang Li  
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PLACE Rm716, CCMS & New Physics Building, NTU

## Abstract

MEMS-based resonant switch (a.k.a. “resoswitch”) has been demonstrated to yield much less parasitic capacitance with improved reliability compared to conventional MEMS switches, positioning itself as a great candidate in reducing power consumption of RF front-ends towards ultra-low power radios such as set-and-forget, true autonomous wireless sensor modulus. In addition, resoswitches could also be used to gauge the surface forces by measuring the frequency responses, which might be embedded with inertial sensors for in situ anti-stiction coating condition monitoring. In this talk, I will present the recent work on CMOS-MEMS resoswitch development for zero quiescent-power filter-amplifiers and surface condition monitoring techniques.

