# Department of Electronic Engineering & IEEE AP/MTT Hong Kong Joint Chapter Jointly Present a Postgraduate Research Seminar on

# A Wideband Coupler with Wide Suppression Band Using Coupled

## Stub

#### By

# Mr. Yuk Shing Wong Supervisor: Dr. Wing Shing Chan

Date	:	22 December 2011, Thursday
Time	:	3:00pm – 3:30pm
Venue	:	G6315, 6/Floor, Green Zone, Academic Building, City University of Hong
Kong		

### Abstract

Planar microstrip branch line couplers are simple but have narrow bandwidth and are unable to reject out-of-band signals adequately. A new feeding network for branch line coupler is proposed, using this feeding network the bandwidth of the coupler has a five-fold increase together with bandpass characteristics. The flat response is obtained by impedance matching of the feed network, which also rejects the second harmonic. This is the result of the open-circuit termination used, while the third harmonic is rejected by the short-circuit termination due to the coupled stubs that are also used.

## **Brief Biography**

Mr. Wong received his Bachelor degree at City University of Hong Kong, is currently working toward the Ph.D degree at City University of Hong Kong. His research interest includes passive and active RF circuits.

#### \*\* All are welcome \*\*

This seminar will be chaired by Dr. W. S. Chan, Department of Electronic Engineering, City University of Hong Kong.