



The Fourth IEEE Hong Kong AP/MTT/LEOS Postgraduate Conference

18th October 2003, City University of Hong Kong
83 Tat Chee Avenue, Kowloon Tong, Kowloon, Hong Kong

Advance Program

Registration (Full-Time Student – HKD\$200, Others – HKD\$300)

A.M. 09:00-09:20 [Rm Y5-206](#)

P.M. 13:00-13:30 [Rm Y5-206](#)

Opening Speech

09:20-09:30 [Rm Y5-206](#)

Session A Antennas and Propagation (AP): [Rm Y5-206](#) 09:30 – 12:00 a.m.

Chairman : [W. Y. Tam](#), *The Hong Kong Polytechnic University*

Judge: [Peter C. T. Song](#), *Hong Kong Applied Science and Technology Research Institute Company Limited*

09:30-09:45 **Design of Base Station Antenna Arrays for CDMA 800 and GSM 900 Systems**

K. Y. Hui and K. M. Luk, City University of Hong Kong

09:45-10:00 **Analysis on a Circularly Polarized Rectangular Dielectric Resonator Antenna with a Parasitic Patch**

B. Li and K. W. Leung, City University of Hong Kong

10:00-10:15 **Genetic Algorithm Approach for Stacked L-shaped Probe Fed Microstrip Antenna**

T. P. Wong and K. M. Luk, City University of Hong Kong

10:15-10:30 **A Wideband Monopolar Patch Antenna**

K. L. Lau, K. M. Luk and P. Li, City University of Hong Kong

10:30-10:45 **Zonal Slot Antenna Excited by a Monopole**

K. M. Chow and K. W. Leung, City University of Hong Kong

10:45-11:00 Break (15 min.)

11:00-11:15 **A Novel Wideband Patch Antenna**

Y. Li and K. M. Luk, City University of Hong Kong

11:15-11:30 **Study of Wideband L-probe Fed Cylindrical Patch Antenna**

P. Li, K. M. Luk and K. L. Lau, City University of Hong Kong

11:30-11:45 **Analysis of Loop Antenna with Dielectric Loaded**

H. Y. Lam and K. W. Leung, City University of Hong Kong

11:45-12:00 **A Wideband Patch Antenna Fed by a Meandering Shaped Probe**

H. W. Lai, H. Wong and K. M. Luk, City University of Hong Kong

12:00-13:30 Lunch (1.5 hr)

- Session B Microwave Theory and Techniques (MTT): 13:30 – 16:25 p.m.**
Rm Y5-206
Chairman : K. W. Leung, *City University of Hong Kong*
Judge : K. W. Tam, *University of Macau*
- 13:30-13:50 **A Novel Microstrip Low-Pass Filter**
C. Y. Chiu, K. M. Shum, Q. Xue and C. H. Chan
City University of Hong Kong
- 13:50-14:10 **0.35 μ m CMOS Image Reject Mixer Design for GSM 900 MHz Application**
C. F. Au-Yeung and K. K. M. Cheng
The Chinese University of Hong Kong
- 14:10-14:30 **A Low-Conversion Loss Ring Mixer using CMRC Circuitry**
L. Chiu, T. Y. Yum, Q. Xue and C. H. Chan
City University of Hong Kong
- 14:30-14:50 **Mismatch Improvement for High Image Rejection in Two Path Switched-Capacitor Sigma-Delta Modulators**
W. T. Cheng, K. P. Pun, C. S. Choy and C. F. Chan
The Chinese University of Hong Kong
- 14:50-15:05 Break (15 min.)
- 15:05-15:25 **Analysis of the Numerical Dispersion of the High-order 2-D ADI-FDTD Method**
M. K. Sun and W. Y. Tam
The Hong Kong Polytechnic University
- 15:25-15:45 **2 GHz CMOS Dual-Modulus Prescaler Design for Phase-Locked Loop Applications**
C. C. Ng and K. K. M. Cheng
The Chinese University of Hong Kong
- 15:45-16:05 **Amplifier Linearization using Compact Microstrip Resonant Cell (CMRC) Structure**
T. Y. Yum, Q. Xue and C. H. Chan
City University of Hong Kong
- 16:05-16:25 **A High Image Rejection Continuous-Time IF Sigma-Delta ADC with Time-Sharing of Input Resistors**
J. H. Shen, K. P. Pun, C. S. Choy and C. F. Chan
The Chinese University of Hong Kong

Session C Lasers and Electro-Optics (LEOS): 13:30 – 16:25 p.m.

[Rm Y5-306](#)

Chairman : (13:30-14:50) H. K. Tsang, *The Chinese University of Hong Kong*
(15:05-16:25) Chester C. T. Shu, *The Chinese University of Hong Kong*

Judge : W. O. Poon, *Hong Kong University of Science and Technology*

13:30-13:50 All Optical Modulation Format and Wavelength Conversion using an Injection-Locked Laser

C. W. Chow, P. S. Chan, C. S. Wong and H. K. Tsang
The Chinese University of Hong Kong

13:50-14:10 Optical Sub-millimeter Waves Generated from a Dual-Wavelength Laser Diode Injection Locked to a SOA Fiber Ring Laser

M. P. Fok, K. L. Lee and C. Shu
The Chinese University of Hong Kong

14:10-14:30 Long-Period Planar Waveguide Gratings Fabricated using Two Different Methodologies

H. Y. Tang, H. C. Tsoi, W. H. Wong and E. Y. B. Pun
City University of Hong Kong

14:30-14:50 Polymeric Reflective Variable Optical Attenuator

H. Liu¹, H. Tam¹, W. H. Wong², E. Y. B. Pun² and P. K. A. Wai¹
¹*The Hong Kong Polytechnic University*
²*City University of Hong Kong*

14:50-15:05 Break (15 min.)

15:05-15:25 All-Optical 2R Regeneration using an Injection-Locked Fabry-Perot Laser Diode

S. H. Lee, K. K. Chow and C. Shu
The Chinese University of Hong Kong

15:25-15:45 Waveguide Amplifier in Er³⁺ - Yb³⁺ Co-doped Phosphate Glasses Written with Focused Proton Beam

K. Liu and E. Y. B. Pun
City University of Hong Kong

15:45-16:05 Slanted Rib Waveguide for Polarization-Dependent-Wavelength Adjustment

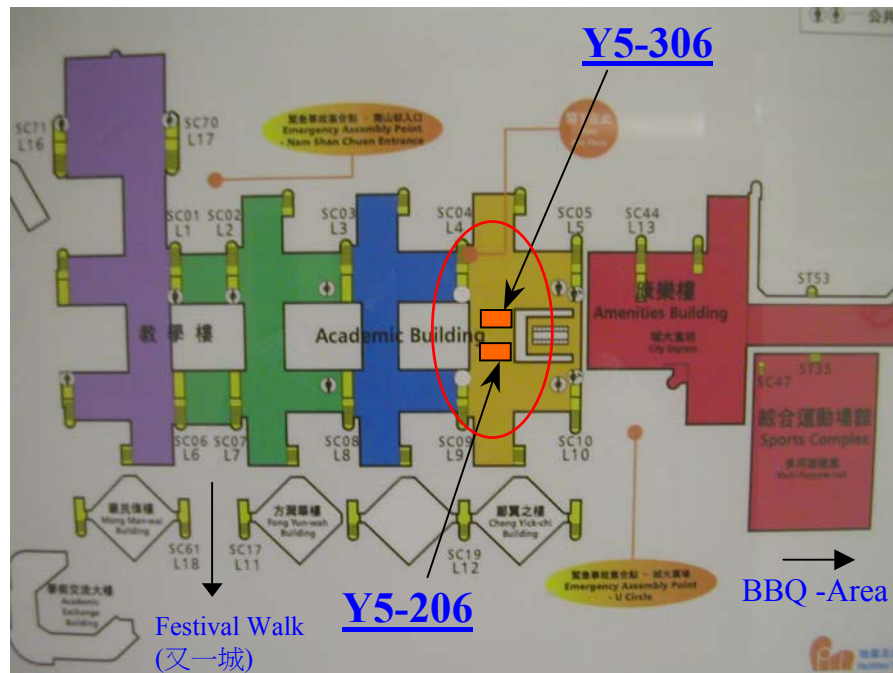
P. S. Chan and H. K. Tsang
The Chinese University of Hong Kong

16:05-16:25 All-Optical Self-Oscillating Photonic Clock

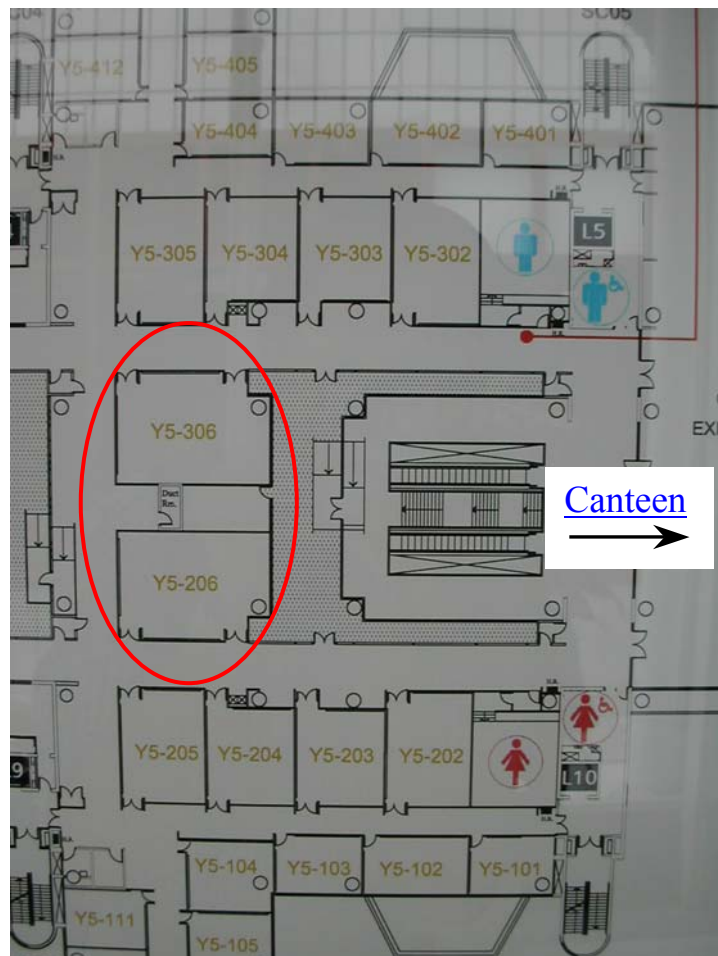
A. W. L. Chan, K. L. Lee and C. Shu
The Chinese University of Hong Kong

Conference Dinner (BBQ) and Presentation of Best Paper Awards

19:00-23:00 [Barbeque-Area, City University of Hong Kong](#)



Floor 5, City University of Hong Kong



Yellow Zone: Rm. Y5-206 and Y5-306



Location Plan of University BBQ Area 大學燒烤場之位置圖

- 1 Academic Building 教學樓
- 2 Cheng Yick-chi Building 鄭翼之樓
- 3 Fong Yun-wah Building 方潤華樓
- 4 Mong Man-wai Building 蒙民偉樓
- 5 Academic Exchange Building 學術交流大樓
- 6 To Yuen Building 桃源樓
- 7 Amenities Building 康樂樓
- 8 Swimming Pool 游泳池
- 9 Sports Complex 綜合運動場館
- 10 Tak Chee Yuen 德智苑



City University Barbeque (BBQ) Area