



SEMINAR

Center for Advanced Research in Photonics Department of Electronic Engineering The Chinese University of Hong Kong

Date: Monday 27 September 2004

Time: 4.00pm - 5.00 pm

Venue: Room 833 Ho Sin Hang Engineering Building, The Chinese University of Hong Kong

Silicon Photonics Research : Applications Recent Results and Integration Challenges with CMOS processing for High Volume Manufacturing

Dr Mario Paniccia
Director Photonics Technology Lab
Intel Corporation

Abstract:

Silicon photonics especially that based upon silicon on insulator (SOI) has recently attracted a great deal of attention since it offers an opportunity for low cost opto-electronic solutions for applications ranging from telecommunications down to chip-to-chip interconnects. The presentation will give an overview of research being done at Intel in the area of Silicon Photonics including the recent modulator breakthrough of scaling silicon modulation to over >1GHz. In addition the presentation will discuss some of the practical issues and challenges with processing silicon photonic devices in a high volume CMOS manufacturing environment.

Dr. Mario Paniccia is currently the Director of Photonic Technology Lab at Intel Corporation. Mario currently directs a research group with activities in the area of Silicon Photonics. The team is focused on developing silicon-based photonic building blocks using standard CMOS processing for future use in enterprise and data center communications. Mario has worked in many areas of optical technologies during his career including optical testing for leading edge microprocessors, optical communications and optical interconnects. Mario earned a B.S. degree in Physics in 1988 from the State University of New York at Binghamton and a Ph.D. degree in Solid State Physics from Purdue University in 1994.

***** All are welcome to attend *****

For further information please contact Professor H.K.Tsang (Tel. 26098254) email hktsang@ee.cuhk.edu.hk