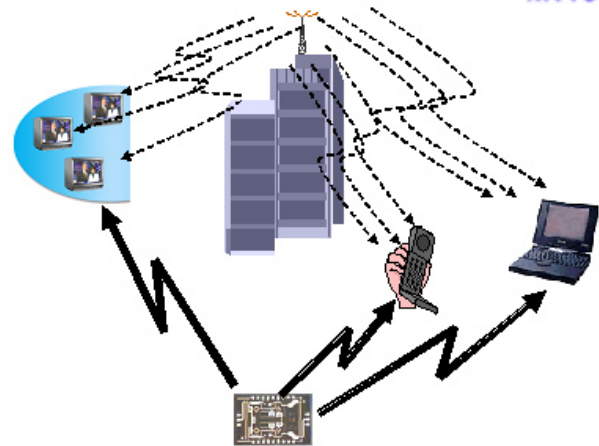


# Designs for the High-Speed, Broadband Information Age



- Wednesday, April 13, 2005
- Seminar: 8:30 AM – Noon
- Registration/Breakfast: 8 AM – 8:30 AM
- Santa Clara Convention Center
- In conjunction with IEEE WESCON'05
- Includes free admission to WESCON exhibits
- Plenty of free parking



As the need for higher data rates and faster user interfaces increases, demands are placed on both the technology used to transmit and receive this information and on its designs. Previously, the realm of high speed, high frequency, high bandwidth circuits was relegated to III-IV materials like GaAs or InP. Recently, advances in materials like Si and SiGe have forced designers to look at these technologies to keep the cost low and to be competitive. Additionally, innovations like those in newer materials like GaN have been sought to provide advantages for these types of circuits.

Therefore, the ability to understand how the requirement for higher speed and faster data rates drives microwave circuit designs and the ability to design circuits in these various technology choices is an important part of the contemporary engineer's job as well as his/her value to an organization. The main challenges for today's microwave circuit designer are to understand which technology to use for a given application and know the tradeoffs and limits when designing in these technologies.

This seminar will explore the advances that have been made in these various material technologies and their affect on IC designs. Speakers will cover:

- The applications and requirements for higher speed and faster data rates
- The advantages and disadvantages of these technologies for handling higher speed/data rate applications
- How the need for faster and increased quantity of information affects circuit designs
- Current examples of designs and the tradeoffs addressed

To register, send your contact information and the fee to: Benson Chan (MTT Treasurer)  
M/A-Com - 5300 Hellyer Ave  
San Jose, CA 95138  
Phone# 408-624-3359

## PROGRAM

### 100GHz CMOS Circuits and the High Speed Broadband Information Age

Dr. Luiz Franca-Neto, Technical Leader and Manager, Broadband Wireless Division (BWD) Intel Communications Group (ICG), Intel Corporation

### SiGe and RFCMOS Technology for the High Speed Information Age

Dr. Xiaojuen (Ben) Yuan, Ph.D, IEEE Senior Member, Vice Chair, SSC/AP/MTT IEEE San Diego Chapter, IBM West Coast Foundry Applications

### InP HBT Design for 100 to 200GHz IC's

Dr. Zachary Griffiths, Post Doc Researcher, UC Santa Barbara

### SiC and GaN Based Transistor and Circuit Advances

Mr Simon Wood Principal RF Design Engineer, Cree Microwave

## REGISTER TODAY!

Space is limited, so please mail in your registration before April 6. Registration fee includes breakfast and the course CD (proceedings).

Registration Fee:	<u>Pre-Reg'n by Apr 6</u>	<u>After Apr 6.</u>
IEEE Members	\$50	\$65
Nonmembers	\$75	\$90
Students	\$30	\$30
Unemployed *	\$30	\$30

\* Bring or send a photocopy of unemployment check receipt dated within 2 weeks of registration to qualify

For Workshop registration information, please visit the MTT Chapter website:

[www.mtt-scv.org](http://www.mtt-scv.org)