

UNIVERSITY OF MACAU
FACULTY OF SCIENCE AND TECHNOLOGY

Distinguished Lectures on Microelectronics by World-Leading Expert
RF AND MILLIMETER-WAVE TRANSCEIVERS: PRESENT AND FUTURE

Date and Time: 19th June 2009 (Friday), 11:00 AM – 12:00 PM
Venue: Room HG03, Ho Yin Convention Centre,
University of Macau

Prof. Behzad Razavi
University of California, Los Angeles

Abstract: The evolution of RF circuits has crossed an inflection point defined by two important trends, namely, MOSFETs whose speed well exceeds that necessary for most applications, and integration levels that are no longer limited to a single transceiver. The maturity of RF CMOS design has also made it possible to extend communication to the millimeter-wave regime, especially the 60-GHz band.

This seminar looks at the the design issues facing future RF systems and proposes a number of techniques that ease the design of highly-integrated transceivers in scaled technologies. Millimeter-wave radios are also studied and architectures amenable to integration in CMOS technology are proposed.



Biography: Behzad Razavi is Professor of Electrical Engineering at UCLA, where he conducts research on wireless and wireline transceivers, phase-locking phenomena, and data converters.

Professor Razavi has received numerous awards for his research and teaching, including the Beatrice Winner Award for Editorial Excellence at the 1994 ISSCC, the best paper award at the 1994 European Solid-State Circuits Conference, the best panel award at the 1995 and 1997 ISSCC, the TRW Innovative Teaching Award in 1997, and the best paper award at the IEEE Custom Integrated Circuits Conference in 1998. He and his students received both the Jack Kilby Outstanding Student Paper Award and the Beatrice Winner Award for Editorial Excellence at the 2001 ISSCC. He was also recognized as one of the top 10 authors in the 50-year history of ISSCC and received the Lockheed Martin Excellence in Teaching Award in 2006 and the UCLA faculty Senate Teaching Award in 2007.

Professor Razavi is an IEEE Distinguished Lecturer, a Fellow of IEEE, and the author of Principles of Data Conversion System Design (IEEE Press, 1995), RF Microelectronics (Prentice Hall, 1998) (translated to Chinese and Japanese), Design of Analog CMOS Integrated Circuits (McGraw-Hill, 2001) (translated to Chinese and Japanese), Design of Integrated Circuits for Optical Communications (McGraw-Hill, 2003), and Fundamentals of Microelectronics (Wiley 2006) (translated to Korean), and the editor of Monolithic Phase-Locked Loops and Clock Recovery Circuits (IEEE Press, 1996), and Phase-Locking in High-Performance Systems (IEEE Press, 2003).

The lectures are open to the public

For enquiry:

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