VLSI SEMINAR SERIES

MTL hosts a series of talks each semester known as the MTL VLSI Seminar Series. Speakers for the Series are selected on the basis of their knowledge and competence in the areas of microelectronics research, manufacturing, or policy. The MTL VLSI Seminar Series is held on the MIT Campus on Tuesdays at 4:00 pm, and is open to the public. A listing of recent seminars is also provided at http://mtlweb.mit.edu. Streaming videos of the VLSI Seminar Series are available online exclusively to individuals whose companies are members of the Microsystems Industrial Group (MIG) at MTL. For information regarding the MTL VLSI Seminar Series, send e-mail to debb@mtl.mit.edu.

SPRING 2005

February 15, 2005
Yannis Tsividis, Department of Electrical Engineering, Columbia University
Continuous-Time Digital Filters and Other Mixed-Domain Processors

March 1, 2005
Bill Krenik, Texas Instruments
Wireless Handset Electronics -- Evolution to 3G and Beyond

March 8, 2005
Timothy Brunner, IBM
Lithography Technology for 45nm CMOS

March 15, 2005
Barbara Chappell, Intel Corporation
CMOS Digital Circuit Design Challenges in the Nanotechnology Era

April 5, 2005
Dr. Rama Divakaruni, IBM
Stressed Si for improved Microprocessor performance

April 12, 2005
Ahmed Busnaina, Northeastern University
Electronics Nanomanufacturing through Directed Assembly of Nanoelements

April 26, 2005
Sven Moller, Hewlett Packard
Nanotechnology Enabling Bio-Sensing Applications: Applications and Challenges

May 3, 2005
Michael G. Kane, Sarnoff Corporation
A High Performance Semiconductor Technology for Large-Area Flexible Substrates

FALL 2004

September 14, 2004
Dr. Simon M . Sze, National Nano Device Laboratories
Evolution of Nonvolatile Semiconductor Memory - from Invention to Nanocrystal Memory

September 28, 2004
Dr. Farrokh Ayazi, Georgia Tech
Bulk-Mode Micro and Nano Mechanical Resonators in RF and Biology

October 5, 2004
Dr. Norman Rohrer, IBM
PowerPC 970 and 970FX in 130nm and 90nm Technologies

October 12, 2004
Vivek Subramanian, University of California, Berkeley
Progress towards development of all-printed RFID tags and sensors: Materials, Devices, and Circuit Implications

October 19, 2004
Michael Perott, Massachusetts Institute of Technology
A Mixed-Signal Approach to Phase-Locked Loops

October 26, 2004
Ken Uchida, Toshiba
Experimental Study of Carrier Transport in Ultrathin-body SOI MOSFETs

November 2, 2004
Shekhar Borkar, Intel Corporation
Exponential Challenges, Exponential Rewards - The Future of Moore's Law

November 9, 2004
David Schut, Hewlett Packard
Hewlett-Packard: MEMs and Memory Technology Development - the Story of Atomic Resolution Storage

SPRING 2004

February 24, 2004
MeiKei Ieong, IBM
CMOS Devise Scaling Strategy

March 2, 2004
Chris Menkus, National Semiconductor Corp.
High Speed Self-Calibrating Folding ADC

March 9, 2004
Gerry Talbot, AMD
Chip to Chip Serial I/O Interconnects, Today and the Future

March 16, 2004
Kathryn W. Guarini, IBM
Templated Self Assembly for Semiconductor Device Fabrication

March 30, 2004
Bob Hewes, TI
Embedded DSP for Wireless Systems

April 6, 2004
Rudy Emrick, Motorola Labs
High Frequency Broadband Communications

April 13, 2004
Paul E. Baude, 3M company
Organic Semiconductor-based Thin Integrated Circuits for RFID Applications

April 27, 2004
Phil Kuekes, HP
Feasible Architectures for Molecular Electronics

May 4, 2004
Minh Le, Vitesse Semiconductor Corporation
Breaking the 150GHz barrier with InP HBTs

FALL 2003

October 14, 2003
Andre DeHon, California Institute of Technology
Sub-lithographic Semiconductor Computing Systems

October 21, 2003
Joerg Appenzeller, IBM
Electronic Transport in Semiconducting Carbon Nanotube Transistor Devices

October 28, 2003
Thomas Chen & Tim Denison, Analog Devices, Inc.
The Next Generation MEMS Design and Process Combining SOI and CMOS (SOIMEMS)

November 4, 2003
V. Srinivasa Somayazulu, Intel
Design Challenges for High Data Rate UWB Wireless Networks

November 18, 2003
Mark Rodder, TI
Metal Gate CMOS Issues and Challenges