

Special Session at ICAP 2000
Issues in Deep Submicron Integrated Circuits and Systems

Date: September 14, 2000, Time: 8.30-noon, Place: B02, CSRL

Organized by
The Illinois Center for Integrated Microsystems (iCIMS)
(<http://www.icims.csl.uiuc.edu>)

- 8:30-8:50** *Simulation and optimization of the power distribution network in VLSI circuits* by G. Bai and I. Hajj
- 8:50-9:10** *Maximum power estimation in VLSI circuits* by S. Bobba, and I. Hajj
- 9:10-9:30** *Algorithms and implementation for low-energy digital filtering via soft-DSP* by R. Hegde and N. Shanbhag
- 9:30-9:50** *Low-power signal processing via error cancellation* by L. Wang and N. Shanbhag
- 9:50-10:20** **Break**
- 10:20-10:40** *The design of new current-mode sense amplifiers for high speed DRAM with copper interconnects* by S.-M. Yoo, C. Kim, S.-O. Jung, K. H. Baek and S.-M. Kang
- 10:40-11:00** *Noise-tolerant register file design* by G. Balamurugan, R. Krishnamurthy (Intel), and N. Shanbhag
- 11:00-11:20** *Modeling and simulation of integrated microstructures and systems* by J. Chen and S.-M. Kang
- 11:20-11:40** *ESD protection for deep submicron circuits* by S. Joshi, E. Rosenbaum and G. Katz (Motorola)
- 11:40** Lunch

About iCIMS

The iCIMS charter is to promote the physical aspect of information technology through collaborative research in the design of integrated microsystems, including integrated circuits, devices, systems, and structures, among the faculty of the Department of Electrical and Computer Engineering at the University of Illinois at Urbana-Champaign and researchers elsewhere. The Center also has the mission to support the growth of the semiconductor information technology industry within the State of Illinois, the nation and elsewhere.

The Center has approximately 13 ECE faculty and 40 graduate research assistants and associates conducting research in integrated circuits, signal processing, communications, MEMs, and electromagnetics. The Center facilities include the Reliability Testing Laboratory for wafer-level device characterization and stressing, the VLSI Information Processing Systems (ViPS) Laboratory has facilities for testing of integrated circuits, the iPOINT laboratory for the design and analysis of hardware and software components for high-speed ATM computer networks, powerful workstations and commercial CAD tools for IC design.