Call-For-Abstract: 2012 IEEE/ACM Workshop on Variability Modeling and Characterization (VMC)

Collocated with IEEE/ACM ICCAD, November 8th, 2012, San Jose, CA, U.S.A. <u>http://nimo.asu.edu/vmc</u>

Background

Variability is emerging as a fundamental challenge to IC design in scaled CMOS technology; and it has profound impact on nearly all aspects of circuit performance. While some of the negative effects of variability can be handled with improvements in the manufacturing process, comprehensive methods are necessary to assess and manage the negative effects of variability, which in turn requires accurate and tractable variability models. The goal of the VMC workshop is to provide a forum for theoreticians and practitioners to freely exchange opinions on current practices as well as future research needs in variability modeling and characterization.

The workshop organizers strongly encourage the submission of early results in the related topics. The submissions will be evaluated by a Technical Program Committee and the author(s) of the accepted submissions are expected to present the results in the format of posters at the workshop.

Topics

- 1. Fundamental physics of device variability
- 2. Compact variability modeling development and application
- 3. Statistical extraction of variability
- 4. Variability test structure design and calibration
- 5. Design interface and solutions for variability
- 6. Variability issues in emerging semiconductor technology
- 7. Temporal variability issues
- 8. Other relevant topics

Technical Program Committee

Co-chairs: Hidetoshi Onodera, Kyoto University; Yu Cao, Arizona State University

Asen Asenov, University of Glasgow Chris Kim, University of Minnesota Colin McAndrew, Freescale Semiconductor Vijay Reddy, Texas Instruments Takashi Sato, Kyoto University

Format

Two page maximum in US Letter or A4 format. **One page is strongly encouraged**. Once accepted, the authors are required to give a short oral introduction as well as poster presentation

Timeline

Submission Deadline: September 14th, 2012 Notification of Acceptance: September 28th, 2012 Workshop Date: November 8th, 2012

Submission

Please send the abstract in PDF format to yu.cao@asu.edu, with subject "VMC2012 submission"

Contact

Professor Yu Cao, ECE Department, Arizona State University, yu.cao@asu.edu