Call For Papers

2017 ACM/IEEE Workshop on Variability Modeling and Characterization (VMC)

Co-located with ACM/IEEE ICCAD, November 16, 2017, Irvine, CA, USA

http://www.cerc.utexas.edu/utda/vmc/

Background

Variability has emerged 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 via 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 the Technical Program Committee, and the author(s) of the accepted submissions are expected to present the results in the format of posters and few-minutes introductory presentations at the workshop. Proceedings of the workshop are limited to the attendees.

Topics

- 1. Fundamental physics of device variability
- 2. Compact variability modeling development and applications
- 3. Statistical extraction of variability
- 4. Variability test structure design and calibration
- 5. Design interface with manufacturing and solutions for variability
- 6. Variability issues in emerging semiconductor technology
- 7. Temporal variability issues
- 8. Reliability considerations that may be closely related to variability
- 9. Variability in computing and systems

Technical Program Committee

Co-chairs:

Abe Elfadel, Masdar Institute, Abu Dhabi Takashi Sato, Kyoto University, Japan Rasit O. Topaloglu, IBM, USA

Members:

Yu Cao, Arizona State University, USA Chris Kim, University of Minnesota, USA Colin McAndrew, Freescale, USA Subhashish Mitra, Stanford University, USA

Submission

Two page maximum in US Letter or A4 format. Submit your work here:

Submission:

September 15, 2017

Hidetoshi Onodera, Kyoto University, Japan David Pan, UT Texas, USA Vijay Reddy, Texas Instruments, USA

https://easychair.org/conferences/?conf=vmc17

Acceptance:

October 1, 2017

