



14th International Conference on Synthesis,
Modeling, Analysis and Simulation Methods
and Applications to Circuit Design

12th - 15th of June 2017, Giardini Naxos - Taormina, Italy.

Special Session on “Circuit Design and Analysis Techniques for Emerging Computing Systems”

Call for Papers

The realization of emerging computing paradigms face a wide range of critical challenges. New proposals are being set forth for designing nanoelectronic circuits and computing paradigms as well as novel ways to assess their performance projections.

This Special Session focuses on recent theoretical, computational and experimental approaches on designing and analysing emerging computing circuits. Both conventional and alternative post-CMOS computing paradigms as well as new approaches for their analysis will be discussed in this session. Prominent solutions proposed to overcome the challenges facing the post-CMOS technologies are also included.

Topics include, but are not limited to:

- Circuit design and fault tolerance techniques for new computing paradigms including neuromorphic, reversible, stochastic, and approximate computing
- Circuit design and fault tolerance techniques for post-CMOS technologies covering multiple-gate field-effect transistors, carbon nanotube based transistors, nano-crossbar arrays.
- New logic and memory concepts using unconventional nanodevices with unique capabilities
- Energy and/or power efficient computing systems
- Design tools and methodologies for nanocomputing circuits
- Towards-zero energy computing systems
- Physical-information-theoretic analysis of emerging electronics
- Fundamental performance limitations of nanocomputing proposals
- Energy and entropy analyses in emerging circuits

Important dates

- | | |
|----------------------|-------------------------------|
| • 17th February 2017 | Paper Submission Deadline |
| • 1st April 2017 | Author Notification |
| • 15th April 2017 | Camera Ready Paper Submission |
| • 15th April 2017 | Early Registration Deadline |



14th International Conference on Synthesis,
Modeling, Analysis and Simulation Methods
and Applications to Circuit Design

12th - 15th of June 2017, Giardini Naxos - Taormina, Italy.

Submission and paper specifications

- all prospective Authors are invited to electronically submit regular papers of their work (paper length up to 4 proceedings pages) through the website of [SMACD 2017](#) (submissions opening: mid December);
- all prospective Authors should prepare the manuscript according to the IEEE double-column conference paper template [style](#): the working language for the conference will be English, which will be used for all presentations and printed material;
- the papers submission will follow the same calendar of regular papers and will be reviewed as the others: Authors should only indicate the SS when submitting their own paper on our submission system (EasyChair).

Organizers

- **İlke Ercan** E-mail: ilke.ercan@boun.edu.tr
Boğaziçi University – İstanbul, Turkey
- **Mustafa Altun** Email: altunmus@itu.edu.tr
İstanbul Technical University – İstanbul, Turkey

Technical Sponsors

SMACD 2017 is Technically Cosponsored by IEEE, IEEE CEDA and IEEE CAS.

