

Preliminary Call for Papers

SMACD2018

2-5 July 2018
Prague
CZECH REPUBLIC

The **15th International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design** (SMACD) will be held in **Prague, Czech Republic**, as a forum devoted to modeling, simulation and synthesis for Analog, Mixed-signal, RF (AMS/RF) and multi-domain (MEMS, nanoelectronic, optoelectronic, biological, etc.) integrated circuits and systems. Experiences with modeling, simulation and synthesis techniques in diverse application areas are also welcomed. Objective technologies include CMOS, beyond CMOS, and More-than-Moore such as MEMS, power devices, sensors, passives, etc. Topics of interest include, but are not limited to:

Modeling

- Compact modeling
- Performance and behavioral modeling
- Power and thermal modeling
- Reliability and variability modeling
- Multi-domain modeling
- RF/microwave/mm-wave modeling
- Modeling languages and applications
- Linear and non-linear model order reduction
- Circuit and system theory and applications
- Fault modeling

Simulation, verification and test

- Behavioral simulation
- Numerical and symbolic simulation methods
- Simulation and estimation methods of variability and yield
- Analysis of reliability effects (aging, electro-migration, stress...)
- High-frequency simulation techniques
- Multilevel simulation techniques
- Multi-domain simulation
- Formal and functional verification
- Fault simulation and diagnosis

Synthesis

- Multilevel design methodologies
- Synthesis methods of multi-domain circuits and systems
- Physical synthesis
- High-frequency circuit and system design
- Low-power design techniques
- Parasitic-aware synthesis
- Variability-aware and reliability-aware design methodologies
- Performance monitors and self-healing techniques
- Test and design-for-test methods
- Fault tolerance
- Language-based synthesis techniques
- Optimization methods applied to circuit and system design

Applications of modeling, simulation and synthesis in

- Automotive
- Bio-electronics
- Security
- Internet-of-Things
- Communications
- Renewable systems
- Energy management
- Engineering education

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SMACD 2018 IS CO-LOCATED WITH PRIME 2018



Conference Venue

Faculty of Nuclear Sciences and Physical Engineering
Czech Technical University in Prague
Brehova 7, Prague 1
Czech Republic



Important Dates

Paper Submission Deadline 2nd March 2018
Author Notification 15th April 2018
Camera Ready Submission 30th April 2018
Early Registration 30th April 2018

Contacts

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