



The 2021 edition of the International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design (SMACD) was originally planned in Erfurt, Germany, but will be held virtually, as a forum devoted to modeling, simulation and synthesis for Analog, Mixed-signal, RF (AMS/RF) and multi-domain (nanoelectronics, biological, MEMS, optoelectronics, etc.) integrated circuits and systems. Experiences with modeling, simulation and synthesis techniques including machine-learning and artificial intelligence 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. **Conference proceedings** will be submitted for IEEE Xplore.

AREAS OF INTEREST

Modeling

- Compact modeling
- Performance and behavioral modeling
- Power and thermal modeling
- Reliability and variability modeling
- Multi-domain modeling (fluidic, bio, chemical, optical, mechanical)
- EMC & analog signal integrity
- RF/microwave/mm-wave modeling
- Linear and non-linear model order reduction
- Circuit & system theory and application
- Automated model generation

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, faults,...)
- High-frequency simulation techniques
- Multilevel simulation techniques
- Multi-domain simulation
- Functional safety
- ESD

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Synthesis

- Multilevel design methodologies
- Synthesis methods of multi-domain circuit and systems
- Physical synthesis
- High-frequency circuit and system design
- Low-power and energy-aware design techniques
- Parasitic-aware synthesis
- Variability-aware & reliability-aware design
- Performance monitors & self-healing techniques
- Test and design-for-test methods
- Optimization methods applied to circuit and system design
- Procedural design automation

Applications of Modeling, Simulation and Synthesis in

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

IMPORTANT DATES

~~7th March 2021 Paper Submission Deadline~~

20th March 2021 Extended Paper Submission Deadline

18th April 2021 Author Notification

15th May 2021 Camera Ready Paper Submission

15th May 2021 Early Registration Deadline

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