

Call for Papers

15th IEEE International Conference on Design & Technology of Integrated Systems in Nanoscale Era



General Chair:
Hassen Aziza
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- IM2NP, France

Program Chair:
Luigi Dilillo
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Steering Committee:
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Key Dates:
Full Paper Submission:
~~January 23, 2020~~
January 31, 2020

Notification:
February 22, 2019

Camera Ready:
March 15, 2019

www.lirmm.fr/dtis2020/

The aim of the conference is to cope with technology scaling limits and the emergence of novel paradigms. The areas of interest include design, technology, test and dependability of electronic products. The proposed work must introduce new concepts concerning methodologies, tools and theoretical approaches for design, verification and validation. Topics of the conference include, but are not limited to:

Integrated Systems Design:

- SOC, SIP design
- Multiprocessor systems
- Embedded systems
- Wireless systems
- Network on Chip
- Neuromorphic computation
- Analog, Mixed Signal and RF systems
- MEMS and MOEMS
- Low Voltage and Low Power systems
- Synthesis (physical, logic)
- Simulation, Validation and Verification
- Hardware Security

Integrated Systems Technology:

- Emerging resistive memories
- Nanoelectronics
- Device Modeling
- Material Characterization
- Failure Analysis
- New Components
- Packaging
- Process Technology
- Reliability Issues
- Innovative technologies

Integrated Systems Testing and Reliability:

- Test and Security Issues
- Defect and Fault Modeling
- Analog and Mixed Signal Testing
- MEMS/MOEMS Testing
- SOC and SIP Testing
- Delay Testing
- Memory Testing
- Single event effect on electronics
- Hardness insurance
- Fault Simulation, ATPG
- DFT, BIST, BISR
- On-line Testing
- Fault Tolerant Systems
- Approximate computing
- Quantum computing
- Alternative Test Strategies

Paper Submission Guidelines: Authors are invited to submit original, unpublished research contributions to DTIS'20. Paper submissions should be complete manuscripts (between four and six pages). The paper must clearly indicate the research area, main results and contributions. The manuscript must follow the instructions included in the author's kit on the conference website. Submitted articles should be in PDF format and uploaded on the on-line submission system. Submissions will be considered as evidence that, upon acceptance, the corresponding author assumes responsibility of preparing the final version in due time and the commitment of registration and presentation of the paper at the conference. Accepted papers will be included in the conference proceedings and in the IEEE Xplore digital library.

Proposals for Special Sessions: Proposals for original, high-quality Special Sessions addressing innovative research, highlighting significant topics and emerging issues, related to the conference theme, are welcome. Special session proposals should not exceed two pages, should describe the topic and intended audience, and a short bio of organizer(s). All special session proposals should be sent to the program chair within the standard paper submission deadline (January 23, 2020).

Journal Special Issue: An extended version or developments of the accepted papers appearing in the conference proceedings are invited to participate to a special issue of the Microelectronics Reliability Journal by Elsevier editor.

Questions about the conference can be addressed to:

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