



CALL FOR PAPERS

15th IEEE International On-Line Testing Symposium

Sesimbra-Lisbon, Portugal, June 24–27, 2009

<http://www-tima.imag.fr/conferences/iolts>



Issues related to on-line testing are increasingly important in modern electronic systems. In particular, the huge complexity of electronic systems has led to growth in reliability needs in several application domains as well as pressure for low cost products. There is a corresponding increasing demand for cost-effective on-line testing techniques. These needs have increased dramatically with the introduction of very deep submicron and nanometer technologies which adversely impact noise margins, process, voltage and temperature variations, aging and wearout and make integrating on-line testing and fault tolerance mandatory in many modern ICs. The International On-Line Testing Symposium (IOLTS) is an established forum for presenting novel ideas and experimental data on these areas. The symposium also emphasizes on-line testing in the continuous operation of large applications such as wired, cellular and satellite telecommunication, as well as in secure chips. The Symposium is sponsored by the IEEE Computer Society Test Technology Technical Council and organized by TIMA Laboratory, INESC-ID, and University of Piraeus.

The topics of interest include (but are not limited to) the following ones:

- ❖ Reliability issues in nanometer technologies
- ❖ Design for reliability
- ❖ Design for variability
- ❖ On-line testing of analog and mixed signal circuits
- ❖ On-line testing in the continuous operation of large systems
- ❖ On-line testing in automotive, railway, avionics, industry
- ❖ On-line current, temperature, etc, monitoring
- ❖ On-line and off-line built-in self-test
- ❖ Self-checking circuits and coding theory
- ❖ Dependability aware power and performance management
- ❖ Dependability evaluation
- ❖ Dependable systems design
- ❖ Field diagnosis, maintainability and reconfiguration
- ❖ Synthesis of on-line testable circuits
- ❖ Fault-tolerant and fail-safe systems
- ❖ On-line power monitoring and control
- ❖ Radiation effects
- ❖ Secure circuit design
- ❖ Fault-based attacks and counter measures

Submissions: The IOLTS Program Committee invites authors to submit papers in the above or related technical areas. Accepted papers will be included in formal Proceedings to be published by the IEEE. Papers must be submitted electronically following the instructions provided at the symposium web site. Papers should be in the standard IEEE conferences double-column format. If accepted, papers should be allowed six pages in the IEEE Proceedings of the Symposium.

Please observe the following key dates:

Submission deadline: **February 2 2009** – Notification of acceptance: **March 27 2009** – Camera-ready papers due: **April 15 2009**

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About the Venue: IOLTS 2009 will be held in Sesimbra Hotel & SPA, one of the Finest Resorts of the area (<http://www.sesimbrahotelspa.com>). The hotel is located in a long beach with warm and calm waters 30km south of Lisbon. Portugal's capital is famous for its monuments, museums and rich cultural life. Although it boasts a range of must-see sights, its biggest pleasures are its streetlife and setting, admired from a pavement cafe or simply by wandering around the atmospheric old quarters.

For all updated information concerning IOLTS 2009, please visit the IOLTS web site: <http://www-tima.imag.fr/conferences/iolts>

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