CALL FOR PAPERS
18th IEEE International On-Line Testing Symposium
Meliá Sitges Hotel, Sitges, Spain, June 27–29, 2012
http://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 the 2012 edition is organized by the Universitat Politècnica de Catalunya, the University of Athens, and the TIMA Laboratory.

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

- Reliability issues in nanometer technologies
- Radiation effects
- Design for reliability
- Design for variability
- On-line power monitoring and control
- On-line current, temperature, etc, monitoring
- Secure circuit design
- Fault-based attacks and counter measures
- Self-checking circuits and coding theory

- On-line testing of analog and mixed signal circuits
- On-line testing in automotive, railway, avionics, industry
- On-line testing in the continuous operation of large systems
- Field diagnosis, maintainability and reconfiguration
- Fault-tolerant and fail-safe systems
- Dependability evaluation
- Dependable systems design
- On-line and off-line built-in self-test
- Synthesis of on-line testable circuits

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, regular papers should be allowed six pages in the IEEE Proceedings of the Symposium.

Please observe the following key dates:

Submission deadline: **March 5, 2012** – Notification of acceptance: **April 21, 2012** – Camera-ready papers due: **May 14, 2012**

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About the location: IOLTS 2012 will be held in Sitges. Sitges is located on the coast south of Barcelona. It is famous for the quality of the sea and the beauty of its beaches. The locals and visitors enjoy the unique character of its architecture: beautiful facades, art nouveau houses and a magnificent church all together in an entanglement of narrow streets and passages.

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For all updated information concerning IOLTS 2012, please visit the IOLTS web site: http://tima.imag.fr/conferences/iolts

Φ IEEE Computer Society   **tttc Test Technology Technical Council**