



CALL FOR PAPERS

16th IEEE International On-Line Testing Symposium

Dassia Chandris Hotel, Corfu, Greece, July 5–7, 2010

<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 organized by TIMA Laboratory, University of Athens, and University of Piraeus.

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

Please observe the following key dates:

Submission deadline: **February 19, 2010** – Notification of acceptance: **April 14, 2010** – Camera-ready papers due: **May 14, 2010**

Submission Information

Dimitris Gizopoulos
University of Piraeus
Department of Informatics
Piraeus, Greece
Tel: +30 210 414 2372
dgizop@unipi.gr

Abhijit Chatterjee
Georgia Tech
School of ECE
Atlanta, Georgia, USA
Tel: +1 404.894.1880
chat@ece.gatech.edu

General Information

Michael Nicolaidis
TIMA Laboratory
Grenoble, France
Tel: +33 (0) 4 76 57 46 96
Michael.Nicolaidis@imag.fr

Antonis Paschalis
University of Athens
Dept. of Informatics & Telecomm.
Athens, Greece
Tel: +30 210 727 5231
paschali@di.uoa.gr

About the location: IOLTS 2010 will be held in Corfu island which was not named the “Emerald Island” without reason. Corfu's natural beauty hides itself beneath a cloak of emerald green trees, with a mountainous skyline plunging into the bluest of blue waters. Elegant architecture, sun drenched beaches, enchanting night life, and fine cuisine all play their part in attracting visitors from all over the world.

For all updated information concerning IOLTS 2010, please visit the IOLTS web site: <http://tima.imag.fr/conferences/iolts>

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