



CALL FOR PAPERS

21st IEEE International On-Line Testing Symposium

Athena Pallas Village, Elia, Halkidiki, Greece, July 6-8, 2015

<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 wear-out 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 Council on Electronic Design Automation (CEDA) and the 2015 edition is organized by the IEEE Computer Society Test Technology Technical Council, 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 industry, automotive, railway, avionics, space
- 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 Committee invites authors to submit papers in the above or related technical areas. Accepted papers and posters 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 IOLTS.

Please observe the following key dates:

Submission deadline: **March 23, 2015** – Notification of acceptance: **May 4, 2015** – Camera-ready papers due: **May 28, 2015**

Submission Information

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About the location: IOLTS 2015 will be held at Elia in the middle leg of Halkidiki peninsula, where lush green forests reach right down to turquoise waters. Halkidiki offers unique sightseeing like the ancient city of Olynthus, the Petralona cave, important for its natural beauty and size as well as anthropological and paleontological interest, and Mount Athos, the world's only monastic state, untouched by the passing of time and a living monument to Byzantine culture.

For all updated information concerning IOLTS 2015, please visit the IOLTS web site: <http://tima.imag.fr/conferences/iolts>



University of Athens

