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14th IEEE International On-Line Testing Symposium

Rhodes, Greece, July 7–9, 2008



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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 and process parameters variations 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
- ❖ 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
- ❖ Field diagnosis, maintainability and reconfiguration
- ❖ Dependable systems design
- ❖ Dependability evaluation
- ❖ 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 via the Symposium web site.

The *IEEE Transactions on Dependable and Secure Computing (TDSC)* is actively soliciting high quality papers in the areas of hardware dependability and security. IOLTS 2008 authors will be invited to submit archival versions of their papers for consideration for publication in IEEE TDSC.

Please observe the following key dates:

Submission deadline: **February 20 2008**

Notification of acceptance: **April 8 2008**

Camera-ready papers due: **April 25 2008**

Submission Information

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About Rhodes: Rhodes called from its local people the Rose of the Aegean and deserves its name because is one of the most beautiful Greek islands and one of the most popular holiday destinations in the Mediterranean. Rhodes has been famous since antiquity as the site of Colossus of Rhodes, one of the Seven Wonders of the World. The citadel of Rhodes, built by the Knights Hospitalliers, is one of the best preserved medieval towns in Europe. The ancient city of Lindos and the Valley of the Butterflies are other of the main attractions of the island.

About the Venue: IOLTS 2008 will be held in Rodos Palace, the Finest Deluxe Resort Complex on the island (<http://www.rodos-palace.gr/>).

For all updated information concerning IOLTS 2008, please visit the IOLTS web site:

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



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