



TTTC News

The TTTC website always lists the latest features and information. For more details, visit the website at <http://www.ieee-tttc.org/>.

PAST TTTC EVENTS

The 25th IEEE European Test Symposium (ETS'21)

May 24–28, 2021

Belgium—Virtual Live Event

<http://ets2021.eu/>

The IEEE European Test Symposium (ETS) is Europe's premier forum dedicated to presenting and discussing scientific results, emerging ideas, applications, hot topics, and new trends in the area of electronic-based circuits and system testing, reliability, security, and validation.

In 2021, ETS will be organized virtually online. The symposium is organized by KU Leuven and imec that cosponsor the event jointly with the IEEE Council on Electronic Design Automation (CEDA).

The program includes excellent keynotes, scientific papers, and highlights from the industry. In addition to regular paper submissions, ETS offers a track for informal contributions dedicated to early hot ideas and relevant case studies as well as a PhD forum. A Test Spring School and Fringe Workshops will be organized in conjunction with ETS'21.

The 27th International Symposium on On-Line Testing and Robust System Design (IOLTS'21)

June 28–30, 2021

Virtual Live Event

<https://orion.polito.it/iolts/>

The International Symposium on On-Line Testing and Robust System Design (IOLTS) is an established forum for presenting novel ideas and experimental data

Digital Object Identifier 10.1109/MDAT.2021.3094416

Date of current version: 28 September 2021.

on these areas. The symposium is sponsored by the IEEE Council on Electronic Design Automation (CEDA) and by the IEEE Computer Society Test Technology Technical Council (TTTC). The 2021 edition is organized by the Politecnico di Torino, the University of Athens, the TIMA Laboratory, and iRoC Technologies.

Issues related to online testing techniques, and, more generally, to design for robustness 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 design for robustness techniques. These needs have increased dramatically with the introduction of nanometer technologies, which impact adversely noise margins; process, voltage, and temperature variations; aging and wear-out; soft errors and EMI sensitivity; power density and heating; and make mandatory the use of design for robustness techniques for extending, yield, reliability, and lifetime of modern SoCs. Design for reliability also becomes mandatory for reducing power dissipation, as voltage reduction, often used to reduce power, strongly affects reliability by reducing noise margins and thus the sensitivity to soft errors and EMI and by increasing circuit delays and thus the severity of timing faults. There is also a strong relation between design for reliability and design for security, as security attacks are often fault-based.

UPCOMING TTTC EVENTS

The 34th IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems (DFT'21)

October 6–8, 2021

Virtual Event, Athens, Greece

<http://www.dfts.org/>

DFT is an annual symposium providing an open forum for presentations in the field of defect and fault tolerance in VLSI and nanotechnology systems inclusive of emerging technologies. One

of the unique features of this symposium is to combine new academic research with state-of-the-art industrial data, necessary ingredients for significant advances in this field. All aspects of design, manufacturing, test, reliability, and availability that are affected by defects during manufacturing and by faults during system operation are of interest. Topics include, but not limited to, the following: yield analysis and modeling; testing techniques; design for testability in IC design; error detection, correction, and recovery; dependability analysis and validation; repair, restructuring, and reconfiguration; defect and fault tolerance; radiation effects; aging and lifetime reliability; dependable applications and case studies; emerging technologies; design for security.

The IEEE International Test Conference (ITC 2021)

October 10–15, 2021

Virtual Conference

<http://www.itctestweek.org/>

International Test Conference is the world's premier venue dedicated to the electronic test of devices, boards, and systems—covering the complete cycle from design verification, design for test, design for manufacturing, silicon debug, manufacturing test, system test, diagnosis, reliability and failure analysis, and back to process and design improvement. At ITC, design, test, and yield professionals can confront challenges faced by the industry and learn how these challenges are being addressed by the combined efforts of academia,

design tool and equipment suppliers, designers, and test engineers. ITC, the cornerstone of the test week event, offers a wide variety of technical activities targeted at test and design theoreticians and practitioners, including formal paper sessions, tutorials, panel sessions, case studies, invited lectures, commercial exhibits and presentations, and a host of ancillary professional meetings.

NEWSLETTER EDITOR'S INVITATION

I would appreciate input and suggestions about the newsletter from the test community. Forward your ideas, contributions, and information on awards, conferences, and workshops to Theocharis (Theo) Theocharides, Department of Electrical and Computer Engineering, University of Cyprus, 75 Kallipoleos Avenue, PO Box 20537, Nicosia 1678, Cyprus; ttheocharides@ucy.ac.cy.

Theo Theocharides
Editor, TTTC Newsletter

BECOME A TTTC MEMBER

For more details and free membership, visit the TTTC web page <http://tab.computer.org/tttc>.

CONTRIBUTIONS TO THIS NEWSLETTER: Send contributions to Theocharis (Theo) Theocharides, Department of Electrical and Computer Engineering, University of Cyprus, 75 Kallipoleos Avenue, PO Box 20537, Nicosia, 1678, Cyprus; ttheocharides@ucy.ac.cy. For more information, visit the TTTC web page <http://tab.computer.org/tttc>.