

Test Technology Newsletter

February 2023



The Newsletter of the Test Technology Technical
Community
of the IEEE Computer Society

Editor: Stefano Di Carlo

TTTC News

The TTTC website always lists the latest features and information for its visitors! To find out more, please visit the website at <http://www.ieee-ttcc.org/>

PAST EVENTS REPORTS

The IEEE International Test Conference (ITC) 2022

25-30 September 2022

Hybrid, Disneyland Anaheim, CA

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

ITC is the world's premier conference dedicated to electronics test. In its 2022 edition ITC continued with its mission to play a unique role as an information sharing forum, where the wide range of its offerings allows ITC participants to learn, network and conduct business. The 2022 program included a topnotch technical program, vibrant exhibitors, information-packed tutorials, interactive technical panels, two focused workshops, as well as the all-important networking that these events can provide.

The technical program has been designed to optimize personal interactions on all levels.

The 2022 program included papers from a pool of impressive submissions and solicited papers. Of these submissions, a large number focused on AI, automotive, memory, and hardware security. In complement to the paper presentations, there were special sessions on hardware security certification, chiplet integration, silicon lifecycle management, computing in memory, as well as design and test of high-power compound devices and quantum electronics.

ITC 2022 expanded the inclusion of the Industrial Practice papers sessions as ITC has a very strong focus on industry practice as well as industry and academia advances. The three keynotes encompassed the past, present and future of our industry. In addition, the program included a visionary talk on AI accelerators.

ITC 2022 featured a vibrant exhibition showcasing relevant companies. The exhibition served as a convenient one-stop-shop for all the elements of test technology. In the past 53 years, ITC has helped globalize our industry and wants to continue to do so in the future. In 2022 the return to a live event enabled us to embrace all the features of the conference we have missed such as personal interaction.

CLOSED EVENTS

24th IEEE Latin-American Test Symposium

21-24th March 2023

Veracruz, Mexico

<https://www-elec.inaoep.mx/~LATS2023/>

The IEEE Latin-American Test Symposium (LATS) is a recognized 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, and security. LATS is attended by professionals from all over the world, in particular from Latin-America.

In its 24th edition LATS is organized in Veracruz Mexico, and the best papers of this edition will be invited to re-submit to IEEE Design & Test, Journal of Electronic Testing: Theory and Applications (JETTA - Springer), and IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD).

The 19th IEEE Workshop on Silicon Errors in Logic – System Effects (SELSE) 2023

March 23–24, 2023

Virtual Event

<https://selse.org/>

The growing complexity and shrinking geometries of modern manufacturing technologies are making high-density,

low-voltage devices increasingly susceptible to the influences of electrical noise, process variation, transistor aging, and the effects of natural radiation. The system-level impact of these errors can be far-reaching, both in safety-critical aerospace and automotive applications and for high-performance applications. In the context of space and automotive applications, the rapid market evolution and the increase in complexity of electronic devices call for new methodologies to verify and increase the reliability of current and future COTS products.

SELSE provides a unique forum for discussion of current research and practice in system-level error management. SELSE presents papers that address the system-level effects of errors from a variety of perspectives: architectural, logical, circuit-level, and semiconductor processes. Case studies in real-world contexts are also welcome.

The best papers presented at SELSE are selected for inclusion in the “Best of SELSE” session at IEEE/IFIP International Conference on Dependable Systems and Networks (DSN), 2023.

Following the success of the previous edition SELSE has decided to remain a virtual event favoring the participation of a large audience from all over the world.

Design, Automation, and Test in Europe (DATE) Conference 2023

17-19 April 2023

Antwerp, BE

<https://www.date-conference.com/>

The DATE conference is the main European event bringing together designers and design automation users, researchers, and vendors as well as specialists in the hardware and software design, test and manufacturing of electronic circuits and systems. DATE puts a strong emphasis on both technology and systems, covering ICs/SoCs, reconfigurable hardware and embedded systems as well as embedded software. The three-day event consists of a conference with regular papers, late breaking results papers and extended abstracts, complemented by timely keynotes, special days, focus sessions, embedded tutorials, half-day workshops and multi-partner project sessions. The event will also host the Young People Programme and newly introduced unplugged sessions fostering the networking and the exchange of information on relevant issues, recent research outcomes and career opportunities. DATE 2023 is the 26th edition of an event that has always been the place for researchers, young professionals, and industrial partners to meet, present their research and discuss the current development and next trends, with high emphasis on social interaction.

For its 2023 edition, DATE presents itself in a renewed format: After three years of online editions due to COVID-19,

DATE 2023 focuses on interaction as well as reinforcing and rebuilding links in the community. Accordingly, we employ some substantial changes to the established format intending for significant added value for in-person participation: Rather than spreading the attendance throughout an entire week, we condense DATE to three days – and make them count! Furthermore, most regular papers will be presented in a renewed format of technical sessions focusing on live interactions (in addition to the common full-length presentations available before, during and after the conference by video). By this, we make sure that the community can do what conferences are for: meeting, discussing and exchanging.

The 40th IEEE VLSI Test Symposium (VTS) 2023

24-26 April 2023

San Diego, USA

<https://tttc-vts.org/>

The IEEE VLSI Test Symposium (VTS) explores emerging trends and novel concepts in testing, debugging and repair of microelectronic circuits and systems.

After several virtual edition VTS 2023 moves back to an in-person event. The symposium will take place on April 24-26, 2023, at the Hyatt Regency Mission Bay Spa & Marina, 1441 Quivira Road, San Diego, CA, USA.

VTS puts particular emphasis on enlarging its scope. Apart from the traditional test topics this year the VTS program puts particular emphasis on silent data corruption - reliability and security aspects of AI - machine learning systems - neuromorphic devices - and quantum computing.

UPCOMING EVENTS

The International Symposium on Design and Diagnostics of Electronic Circuits and Systems (DDECS) 2023

May 3-5, 2023

Tallinn, Estonia

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

28th IEEE European Test Symposium 2023 (ETS)

May 22-26

Venice, Italy | Hybrid conference

<https://cas.polito.it/ETS23/>

UPCOMING PAPER SUBMISSION DEADLINES

The 29th IEEE International Symposium on On-Line Testing and Robust System Design (IOLTS) 2023

<https://iolts.ttc-events.org/>

Submission deadline: 27th March 2023

IEEE International Test Conference India (ITC INDIA) 2023<https://itctestweekindia.org>

Submission deadline: April 3rd 2023

NEWSLETTER EDITOR'S INVITATION

I would appreciate input and suggestions about the newsletter from the test community. Please forward your ideas, contributions, and information on awards, conferences, and workshops to Stefano Di Carlo, Control and Computer Engineering Department, Politecnico di Torino, I-10129, Torino, Italy stefano.dicarlo@polito.it.

Stefano Di Carlo**Editor, TTTC Newsletter****BECOME A TTTC MEMBER**

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CONTRIBUTIONS TO THIS NEWSLETTER: Send contributions to

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