

# South European Test Seminar 2020

## Technical Program

**Tuesday, March 3, 2020**

### Session 1 Test and Diagnosis of Hidden Defects

**Session Chair:** Hans-Joachim Wunderlich, University of Stuttgart

Stefan Holst, Kyutech, Fukuoka

**Diagnosing Hidden Delay Defects from Faster-Than-At-Speed Test Responses**

Somayeh Sadeghi-Kohan, University of Paderborn

**Hidden Interconnect Defects: Test and Analysis**

### Session 2 Self-Test and System-level Test

**Session Chair:** Melanie Schillinsky, NXP

Mohammad Urf Maaz, University of Paderborn

**Optimizing Space Compaction for High X-Rates**

Nourhan Elhamawy, University of Stuttgart

**Systematic Analysis of System-level Test Fails**

Alexander Sprenger, University of Paderborn

**Gate-Level Interconnect Test**

**Wednesday, March 4, 2020**

### Session 3 Security and Dependability

**Session Chair:** Sybille Hellebrand, University of Paderborn

Natalia Lylina, University of Stuttgart

**On Security Compliance of Reconfigurable Scan Networks**

Nikolaos (Nick) I. Deligiannis, Politecnico Di Torino

**Error Detection Capabilities of Code Encryption Mechanisms**

Pascal Raiola, University of Freiburg

**Minimal Witnesses for Security Weaknesses in Reconfigurable Scan Networks**

## Session 4 Verification and Characterization

**Session Chair:** Ilia Polian, University of Stuttgart

Tobias Paxian, University of Freiburg

**Optimizing MaxSAT towards Application Usage**

Muhammad Hassan, DFKI Bremen

**Coverage-Directed Stimuli Generation for Characterization of RF Amplifiers**

Ahmed Atteya, University of Stuttgart

**Validation of Reconfigurable Scan Networks with Multi-level simulation**

**Thursday, March 5, 2020**

## Session 5 Probabilistic Approaches to Design and Test

**Session Chair:** Lorena Anghel, TIMA

Paria Najafi Haghi, University of Stuttgart

**Variation-Aware Marginal Defect Characterization at Cell Level**

Florian Neugebauer, University of Stuttgart

**Challenges in Stochastic Compting**

Jan Dennis Reimer, University of Paderborn

**PaderSAT - Modelling and Analysis of Delay Faults with Variable Size**

## Session 6 Emerging Technologies

**Session Chair:** Bernd Becker, University of Freiburg

Roshwin Sengupta, University of Stuttgart

**Stochastic Neural Networks**

Saman Froehlich, University of Bremen

**Multiply-Accumulate Enhanced BDD-based Logic Synthesis on RRAM Crossbars**

Sebastian Brandhofer, University of Stuttgart

**Failure Analysis of Noisy Intermediate-Scale Quantum (NISQ) Algorithms**

**Friday, March 6, 2020**

**Closing Session**