**REES 2017 Program**

Back to [main page](#) [1]

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:45</td>
<td>WELCOME Address</td>
</tr>
</tbody>
</table>
| 09:00 | KEYNOTE Address: **Multi-Layer-Resilience: The Need for Discipline** [2]  
*Speaker: Wolfgang Ecker (Infineon Technology, Germany)* |
| 09:30 | Session I: Resilient Systems Designs I |
| 09:30 | I.1 Introducing Fault Tolerance to the Regularity-Based Resource Partition Model  
*Darrell Knape, Albert M. K. Cheng, Yu Li (University of Houston, USA)* |
| 09:30 | I.2 Architecting Resilient IoT Systems  
*Kemal A. Delic, David M. Penkler (Hewlett Packard Enterprise, France)* |
| 09:30 | I.3 Utilization of Memristor Variability Towards Brain-Inspired Resilient Computing  
*Rawan Naous (King Abdullah University of Science and Technology, Saudi Arabia), Khaled Nabil Salama (The Neuroscience Research Institute, The Ohio State University, USA)* |
| 09:30 | I.4 flexMEDiC: flexible Memory Error Detection by Combined Data Encoding and Duplication  
*Norman A. Rink, Jeronimo Castrillo (Technische Universität Dresden, Germany)* |
| 10:15 | Poster Discussions (Session I) & Refreshments |
| 10:45 | Session II: Invited Industrial Talks - Resilient Systems in Practise |
| 10:45 | II.1 Novel ISO26262 Compliant Architecture for Advanced Driver Assistance Systems [2]  
*Speaker: Luc van Dijk (NXP Semiconductors, The Netherlands)* |
| 10:45 | II.2 Design-for-Resiliency in Dynamically Power Managed Systems [2]  
*Speaker: Liangzehn Lai (ARM Ltd., UK)* |
| 11:45 | Session III: Resilient Systems Design II |
| 11:45 | III.1 Correction of Transient Faults by Rollback with Low Overhead for Microcontrollers  
*Felix Mühlbauer (Universität Potsdam, Germany), Mario Schölzel (IHP Frankfurt Oder, Universität Potsdam, Germany)* |
III.2 Prototyping Resilient Processing Cores in Workcraft

Georgy Lukyanov (Southern Federal University, Rostov-on-Don, Russia), Alessandro de Gennaro, Andrey Mokhov, Paulius Stankaitis, (Newcastle University, UK) Maxim Rykunov (IMEC, Belgium)

III.3 Increasing the Robustness of Digital Circuits with Ring Oscillator Clocks

Lucas Machado, Jordi Cortadella, Antoni Roca (UPC, Spain)

12:15 Lunch

13:15 Session IV: Invited Industrial Talks - Resilient Design Tools and Methods

IV.1 Simultaneous Measurement of Defect Coverage and Tolerance in AMS ICs for ISO26262

Speaker: Stephen Sunter (Mentor Graphics, Canada)

IV.2 Error Effect Simulation for Automotive using SystemC Virtual Prototypes

Speaker: Andreas Mauderer (Robert Bosch GmbH, Germany)

14:15 Session V: Fault Injection Automation

V.1 An Automatic Injection Framework for Safety Assessments of Embedded Software Binaries

Peer Adelt (C-LAB, Germany), Bastian Koppelmann (Heinz Nixdorf Institute, Germany), Bernd Kleinjohann (C-LAB, Germany), Christoph Scheytt (Heinz Nixdorf Institute, Germany)

V.2 Revisiting Symbolic Software-implemented Fault Injection

Hoang M. Le, Vladimir Herdt (University of Bremen, Germany), Daniel Große, Rolf Drechsler (University of Bremen, Cyber-Physical Systems, DFKI GmbH, Germany)

V.3 Constraining Graph-based Test Case Generation by Fitness Landscaping

Stefan Müller, Jo Laufenberg (University of Tuebingen, Germany), Joachim Gerlach (Hochschule Albstadt-Sigmaringen, Germany), Thomas Kropf, Oliver Bringmann (University of Tuebingen, Germany)

V.4 Closing the Gap Between FMEDA, FTA and Simulation Based Fault Injection at System Level

Adam Himmelsbach, Sebastian Reiter, Alexander Viehl (FZI, Germany), Oliver Bringmann, Wolfgang Rosenstiel (University of Tuebingen, Germany)

15:00 Poster Discussions (Session III+V) & Refreshments

15:30 Session VI: Resilient Circuit Analysis

VI.1 Fault Injection Campaigns in Multi-Domain Virtual Prototypes

Raghavendra Koppak, Oliver Bringmann (University of Tuebingen, Germany), Andreas von Schwerin (Siemens AG, Germany)

VI.2 Workload Dependent Aged Circuit Reliability Analysis

Ajith Sivadasan, Armelle Notin, Vincent Huard, Etienne Maurin, Florian Cacho (ST Microelectronics), Lorena Anghel (TIMA)

VI.3 SPICE-Level Fault Injection with Likelihood Weighted Random Sampling - A Case Study
VI.4 Resilient Large-Scale Physical Design

Roman Bazylevych (Lviv Polytechnic National University, Ukraine), Lubov Bazylevych (Institute of Applied Problems of Mechanics and Mathematics NASU, Ukraine)

16:15 Poster Discussions (Session VI)

16:45 CLOSING

17:00 End

Back to main page [1]

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Links: [1] https://www.edacentrum.de/rees