

**Programme Workshop „Dependability and Fault Tolerance“
Tuesday, February 28, 2012**

9.15 Opening

9.30 Invited Talk

M.B. Tahoori (Karlsruhe)

Assessment and Mitigation of Runtime Failures: From Device to System

10.30 Coffee Break

11.00 Fault Diagnosis and Fault Correction in Hardware Systems

B. Fechner, A. Garbade, S. Weis, T. Ungerer (Augsburg)

Fault Localization in NoCs by Timed Heartbeat Messages

H. Schirmeier (Dortmund), M. Hoffmann (Erlangen), R. Kapitza (Braunschweig), D. Lohmann (Dortmund), O. Spinczyk (Dortmund)

Fail*: Towards a Versatile Fault Injection Experiment Framework

D. Neuhäuser, E. Zehendner (Jena)

Correction of Faulty Signal Transmission for Resilient Designs of Signed-Digit Arithmetic

12.30 Lunch Break

13.30 Dependable Autonomous Systems

R. Maas, E. Meahle (Lübeck)

Fault Tolerant and Adaptive Path Planning in Crowded Environments for Mobile Robots Based on Hazard Estimation via Health Signals

K.-E. Großpietsch (Sankt Augustin), T.A. Silayeva (Moscow)

ART Networks as Flexible Means to Implement Dependability Properties in Autonomous Systems

R. Lill, F. Saglietti (Erlangen)

Model-based Testing of Autonomous Systems Based on Colored Petri Nets

15.00 Coffee Break

15.30 Fault-Tolerant Hardware Systems

S. Müller, M. Schölzel, H.T. Vierhaus (Cottbus)

Hierarchical Self-Repair in Heterogeneous Multi-Core Systems by Means of a Software-Based Reconfiguration

H. Rauchfuss, T. Wild, A. Herkersdorf (München)

Enhanced Reliability in Tiled Manycore Architectures through Transparent Task Relocation

16.30 Dependable Software

D. Obermann, J. Börcsök (Kassel)

Two-Way-Compiler: Additional Data Saving for Generating the Original Source Code out of a Binary Program

F. Belli (Paderborn)

Verlässlichkeit bei Wiederverwendung von IT-Komponenten – Stand der Normaktivitäten