2011 EDAA / ACM SIGDA PhD Forum at DATE in Grenoble

The EDAA / ACM PhD forum is part of the DATE Conference and hosted by ACM SIGDA and the European Design Automation Association (EDAA). It offers the opportunity for PhD students to present their thesis work to a broad audience in the design, automation and test community from academia and industry. During the presentation at the DATE Conference, it helps students to establish contacts. Also, representatives from industry and academia get a glance of state-of-the-art research in design, automation and test. The review process resulted in the selection of the PhD students listed below. We thank the EDAA, ACM SIGDA and DATE for making this Forum possible.

Peter Marwedel (Chair, 2011 EDAA / ACM PhD Forum at DATE)

PhD Forum Committee

- P. Marwedel (Chair), TU Dortmund, Germany
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- S. Stuijk, TU Eindhoven, Netherlands
- T. Vierhaus, TU Cottbus, Germany
- N. Wehn, TU Kaiserslautern, Germany

Admitted Presentations

- 1. **Abel, Nobert** (University of Heidelberg): Design and Implementation of an Object-Oriented Framework for Dynamic Partial Reconfiguration
- Akesson, Benny (TU Eindhoven): Predictable and Composable System-on-Chip Memory Controllers
- 3. **Akkouche, Nourredine** (TIMA, Grenoble): Optimization of production test of analog and RF circuits using statistical modelling techniques
- 4. **Anwar, Al-Khateeb** (Politecnico di Torino): Model-Based Design of Low-Energy Wireless Sensor Networks
- 5. **Bako, Laszlo** (Sapientia Hungarian University of Transylvania): Hardware Implementations of Artificial Neuromorphic Neural Network Systems using Reconfigurable Digital Devices
- 6. **Bartolini, Andrea** (University of Bologna): Thermal and Energy Management for High-Performance Multicores
- 7. **Bhasin, Shivam** (Telecom-Paristech): Logic Level-Countermeasures to Secure FPGA-based Designs
- 8. **Calimera, Andrea** (Politecnico di Torino): Design Techniques and EDA Tools for Reliable and Aging-Free, Low-Power Digital Systems
- 9. **Tsertov, Anton** (Tallinn University of Technology): Modeling Framework for Beyond the SoCs Test Automation
- Daneshtalab, Masoud (University of Turku): Efficient Multicast Routing Protocols for Networks-on-Chip
- 11. **Dubois, Matthieu** (TIMA, Grenoble): Test metrics estimation of complex analog and mixed-signal circuits at the design stage
- 12. **Ebrahimi, Masoumeh** (University of Turku): Unicast and Multicast Communication Protocols in Networks on Chip
- 13. **Elm, Melanie** (University of Stuttgart): Built-In Self-Diagnosis for Ultra-Large Scale Integrated-Circuits
- 14. **Facchini, Marco** (IMEC, Leuven): Configurable low-latency 3D-memory dies, integrated using through silicon VIAs

- Fazeli, Mahdi (Sharif University, Tehran): Soft Error Rate Estimation and Mitigation in Digital Circuits
- 16. **Foroutan, Sahar** (TIMA, Grenoble): An Analytical Method for the Performance Evaluation of Networks-on-Chip
- Gaillardon, Pierre-Emmanuel (CEA, LETI, Minatec Campus, Grenoble): Resistive-memorybased architectures for configurable logic circuits
- Gaspar, Lubos (Université de Lyon): Cryptographic NIOS II extension with secure key management
- Gentile, Guiseppe (European Space Research and Technology Centre, Noordwijk): Study and design of decoder architectures of Low-Density Parity-Check and Turbo Codes for highrate flexible communication systems
- 20. **Ghavami, Behnam** (Amirkabir University, Tehran), High Yield Design of Carbon Nanotube-based Digital Circuits in the Presence of Large Variation
- 21. Di Guglielmo, Luigi (University of Verona): Discrete Code Generation from Hybrid Automata
- 22. Hanumaiah, Vinay (ASU, Tempe): Different aspects of dynamic thermal management (DTM)
- 23. **Hartmann, Philipp** A. (OFFIS, Oldenburg): Application-driven Design for Efficient Simulation of Complex Hardware/Software Systems
- 24. **Huang**, **Huang** (Florida International University): Leakage Conscious Power and Thermal Aware Scheduling Techniques for Real-Time Computing Systems
- Jose, Bijoy (Fermat Lab, Blacksburg): Formal model driven software synthesis for embedded systems
- 26. **Kakoee, Mohammad** (University of Bologna): Automatic Synthesis of Near-Threshold Circuits with Fine-Grained Performance Tunability
- 27. **Kostin, Sergei** (Tallinn University of Technology): Macro Level Defect-Oriented Diagnosability of Digital Circuits
- 28. Langer, Jan (TU Chemnitz): High-Level Synthesis Using Operation Properties
- 29. **Lin, Lang** (University of Massachusetts): Cryptographic Circuit Design in Nanometer CMOS Technologies
- 30. **Ludovici, Daniele** (University of Ferrera): Technology Aware Network-on-Chip Connectivity and Synchronization Design
- 31. **Ma, Kun** (University of Illinois at Chicago): Concurrent Error Detection Techniques: Countermeasures for Fault Attacks on Cryptosystems
- 32. **Obien, Marie Engelene** (NAIST, Nara): Studies on F-Scan: A Design for Testability Method for Functional RTL Circuits
- 33. **Ost, Luciano** (University of York): Abstract Models of NOC-Based MPSoCs for Design Space Exploration
- 34. **Paolieri, Marco** (University of Catalunya): A multicore architecture for safety critical real-time embedded systems
- 35. **Paterna, Francesco** (University of Bologna): Variability-tolerant High-reliability Multicore Platforms
- 36. Rahman, Mohammad (University of Texas): Power and Leakage Minimization for Digital ICs
- Salimi Khaligh, Rauf (University of Stuttgart): Transaction Level Modeling and High Performance Simulation of Embedded Systems
- 38. **Schröder**, **Christian** (TU Braunschweig): Configuration Interoperability of Hardware-Software-Models in SystemC
- 39. **Shafique, Muhammad** (Karlsruhe Institute of Technology): Architectures for Adaptive Low-Power Embedded Multimedia Systems
- 40. **Sotiriou–Xanthopoulos**, **Efstathios** (University of Athens): A Bottom-Up Methodology for Run-Time Reconfigurable RTL Components
- 41. **Spies, Christopher** (TU Darmstadt): Model-Based Feasibility Analysis for Digital Beam Phase Control in a Heavy-Ion Synchrotron
- 42. **Suelflow, Andre** (University of Bremen): WoLFram A Word Level Framework for Formal Verification and its Application
- 43. **Trouve, Antoine** (Kyushu University): A Fast, Flexible and Portable Design Space Exploration Tool for DR-ASIP
- 44. **Wang, Zhonglei** (TU München): Software Performance Estimation Methods for System-Level Design of Embedded Systems
- Xue, Bing (Fermat Lab, Blacksburg): Formal Approach for Latency Insensitive Design Optimization
- 46. Zaourar, Lilia (Laboratoire G-SCOP INP, Grenoble): Optimizing Design For Test Techniques