



Monday June 12th, 2017

12.00 – 13.15 Lunch

13.15 – 13.30 Opening

Henk Corporaal

13.30 – 14.30 Keynote 1: Dynamically adaptive cross-layer fault-tolerant system design

Akash Kumar

14.30 – 15.00 Coffee Break

15.00 – 16.00 Session 1

15.00 TETRiS: a Multi-Application Run-Time System for Predictable Execution of Static Mappings (full paper)
Andrés Goens, Robert Khasanov, Marcus Hähnel, Till Smejkal, Hermann Härtig and Jeronimo Castrillon

15.30 Robust Mapping of Process Networks to Many-Core Systems using Bio-Inspired Design Centering (full paper)

Gerald Hempel, Andrés Goens, Josefine Asmus, Jeronimo Castrillon and Ivo F. Sbalzarini

16.00 – 16.30 Coffee Break

16.30 – 18.00 Session 2

16.30 Self-Adaptive FPGA-Based Image Processing Filters Using Approximate Arithmetics
Jutta Pirkel, Andreas Becher, Jorge Echavarría, Jürgen Teich and Stefan Wildermann

17.00 Automatic Conversion of Simulink Models to SystemC Actor Networks

Martin Letras, Joachim Falk, Stefan Wildermann and Jürgen Teich

17.30 Exploiting Predictability in Dynamic Network Communication for Power-Efficient Data Transmission in LTE Radio Systems

Peter Brand, Jonathan Ah Sue, Johannes Brendel, Joachim Falk, Ralph Hasholzner, Jürgen Teich and Stefan Wildermann

SCOPES 2017: Program

Tuesday June 13th, 2017

8.30 – 10.30 Session 3

- 8.30 Automatic Tuning with Ordinal Regression
Biagio Cosenza, Juan Durillo, Stefano Ermon and Ben Juurlink
- 9.00 Numerical Accuracy Improvement by Interprocedural Program Transformation (full paper)
Nasrine Damouche, Matthieu Martel and Alexandre Chapoutot
- 9.30 Constructing HPSSA over SSA (full paper)
Smriti Jaiswal, Praveen Hegde and Subhajit Roy
- 10.00 Software Prefetching for Indirect Memory Accesses
Sam Ainsworth, Timothy Jones

10.30 – 11.00 Coffee Break

11.00 – 12.00 Session 4

- 11.00 Hybrid Latency Minimization Approach using Model Checking and Dataflow Analysis (full paper)
Guus Kuiper, Marco Bekooij and Philip Kurtin
- 11.30 Efficient FPGA Design for ICP Using the Functional Approach of C_{la}SH
Hendrik Folmer, Robin Appel, Arjan Boeijink, Rinse Wester, Jan Kuper, and Jan Broenink

12.00 – 13.00 Lunch

13.00 – 14.00 Session 5

- 13.00 Data Dependent Energy Modeling for Worst Case Energy Consumption Analysis (full paper)
James Pallister, Steve Kerrison, Jeremy Morse and Kerstin Eder
- 13.30 On the accuracy of near-optimal GPU-based path planning for UAVs
Daniele Palossi, Andrea Marongiu and Luca Benini

14.00 – 15.00 Session 6

- 14.00 Combining dataflow applications and real-time task sets on multi-core platforms
Hazem Ismail Ali, Benny Akesson and Luís Miguel Pinho
- 14.30 Application Mapping and Scheduling through ASPmT with Partial Assignment Evaluation
Kai Neubauer, Christian Haubelt, Philipp Wanko and Torsten Schaub

15.00 – 15.30 Coffee break

15.30 – 16.30 Session 7

15.30 Enabling zero-copy OpenMP offloading on the PULP many-core accelerator

Alessandro Capotondi and Andrea Marongiu

16.00 The LPGPU2 Project - Low-Power Parallel Computing on GPUs

Ben Juurlink, Martyn Bliss, Georgios Keramides and Jan Lucas

16.30 – 17.00 Best presentation award ceremony / Closing remarks

