Table of Contents

Message from the Conference Chairs
Conference Organizers
Program Committee
Additional Reviewers
Invited Talks Abstracts

Session 1: Model Transformations
On Generating "-Sound Nets with Substitution
Jacek Sroka, Piotr Chrząstowski-Wachtel, and Jan Hidders

Parameterized Partial Orders for Modeling Embedded System Use Cases:
Formal Definition and Translation to Coloured Petri Nets
Nikola Trčka, Marc Voorhoeve, and Twan Basten

Checking Non-divergence, Channel-Bound and Global Cooperation Using
SAT-Solvers
Florent Avellaneda and Rémi Morin

Session 2: Concurrent System Verification
Bounds: From Parameterised to Finite-State Verification
Antti Siirtola

Compositional Analysis for Weak Stubborn Sets
Henri Hansen and Xu Wang

Building Tight Occurrence Nets from Reveals Relations
Sandie Balaguer, Thomas Chatain, and Stefan Haar
Session 3: Conformance and Run-Time Techniques

Cost-Based Fitness in Conformance Checking .................................................................57
A. Adriansyah, N. Sidorova, and B.F. van Dongen

Run-Time Concurrency Tuning for Peak Power Modulation in Energy Harvesting Systems .................................................................67
Yu Zhou, Terrence Mak, and Alex Yakovlev

Runtime Programming through Model-Preserving, Scalable Runtime Patches .................................................................77
Christoph M. Kirsch, Luis Lopes, Eduardo R.B. Marques, and Ana Sokolova

Session 4: Stochastic Systems

Bounded Fairness for Probabilistic Distributed Algorithms .................................................................89
Pepijn Crouzen, Ernst Moritz Hahn, Holger Hermanns, Abhishek Dhama, Oliver Theel, Ralf Wimmer, Bettina Braitling, and Bernd Becker

Luz Judith R. Esparza, Kebin Zeng, and Bo Friis Nielsen

Towards Supervisory Control of Interactive Markov Chains: Controllability .................................................................108
J. Markovski

New Results on Abstract Probabilistic Automata .................................................................118
Benoît Delahaye, Joost-Pieter Katoen, Kim G. Larsen, Axel Legay, Mikkel L. Pedersen, Falak Sher, and Andrzej Wasowski

Session 5: Asynchronous Circuits

Improved Parallel Composition of Labelled Petri Nets .................................................................131
Arseniy Alekseyev, Victor Khomenko, Andrey Mokhov, Dominic Wist, and Alex Yakovlev

STG Decomposition: Partitioning Heuristics .................................................................141
Dominic Wist, Walter Vogler, and Ralf Wollowski

Session 6: Synchronous and Heterogeneous Systems

Semantic Adaptation for Models of Computation .................................................................153
Frédéric Boulangier, Cécile Hardebolle, Christophe Jacquet, and Dominique Marcadet

Data-Flow Analysis of Extended Finite State Machines .................................................................163
Yu Bai, Jens Brandt, and Klaus Schneider

A GALS Language for Dynamic Distributed and Reactive Programs .................................................................173
Avinash Malik, Alain Girault, and Zoran Salcic
Session 7: Timed Systems
Modeling for Symbolic Analysis of Safety Instrumented Systems with Clocks ..............................................185
Roland Kindermann, Tommi Junttila, and Ilkka Niemelä

Timed Games for Computing WCET for Pipelined Processors with Caches ..................................................195
Franck Cassez

Author Index ......................................................................................................................................................205