

Table of Contents

Equivalences of Pushdown Systems Are Hard (Invited Contribution) ...	1
<i>Petr Jančar</i>	

Probabilistic Systems

Active Diagnosis for Probabilistic Systems	29
<i>Nathalie Bertrand, Éric Fabre, Stefan Haar, Serge Haddad, and Loïc Hélouët</i>	
Analysis of Probabilistic Basic Parallel Processes	43
<i>Rémi Bonnet, Stefan Kiefer, and Anthony Widjaja Lin</i>	
Limit Synchronization in Markov Decision Processes	58
<i>Laurent Doyen, Thierry Massart, and Mahsa Shirmohammadi</i>	
Maximal Cost-Bounded Reachability Probability on Continuous-Time Markov Decision Processes	73
<i>Hongfei Fu</i>	

Semantics of Programming Languages

Type Reconstruction for the Linear π -Calculus with Composite and Equi-Recursive Types	88
<i>Luca Padovani</i>	
A Semantical and Operational Account of Call-by-Value Solvability	103
<i>Alberto Carraro and Giulio Guerrieri</i>	

Networks

Network-Formation Games with Regular Objectives	119
<i>Guy Avni, Orna Kupferman, and Tami Tamir</i>	
Playing with Probabilities in Reconfigurable Broadcast Networks	134
<i>Nathalie Bertrand, Paulin Fournier, and Arnaud Sangnier</i>	

Program Analysis

Unsafe Order-2 Tree Languages Are Context-Sensitive	149
<i>Naoki Kobayashi, Kazuhiro Inaba, and Takeshi Tsukada</i>	

Game Semantics for Nominal Exceptions	164
<i>Andrzej S. Murawski and Nikos Tzevelekos</i>	
Complexity of Model-Checking Call-by-Value Programs	180
<i>Takeshi Tsukada and Naoki Kobayashi</i>	

Games and Synthesis

Resource Reachability Games on Pushdown Graphs	195
<i>Martin Lang</i>	
Perfect-Information Stochastic Mean-Payoff Parity Games	210
<i>Krishnendu Chatterjee, Laurent Doyen, Hugo Gimbert, and Youssef Oualhadj</i>	
Latticed-LTL Synthesis in the Presence of Noisy Inputs	226
<i>Shaull Almaor and Orna Kupferman</i>	
The Complexity of Partial-Observation Stochastic Parity Games with Finite-Memory Strategies	242
<i>Krishnendu Chatterjee, Laurent Doyen, Sumit Nain, and Moshe Y. Vardi</i>	

Compositional Reasoning

On Negotiation as Concurrency Primitive II: Deterministic Cyclic Negotiations	258
<i>Javier Esparza and Jörg Desel</i>	
On Asymmetric Unification and the Combination Problem in Disjoint Theories	274
<i>Serdar Erbatur, Deepak Kapur, Andrew M. Marshall, Catherine Meadows, Paliath Narendran, and Christophe Ringeissen</i>	

Bisimulation

Axiomatizing Bisimulation Equivalences and Metrics from Probabilistic SOS Rules	289
<i>Pedro R. D'Argenio, Daniel Gebler, and Matias David Lee</i>	
Generalized Synchronization Trees	304
<i>James Ferlez, Rance Cleaveland, and Steve Marcus</i>	
Bisimulations for Communicating Transactions (Extended Abstract)	320
<i>Vasileios Koutavas, Carlo Spaccasassi, and Matthew Hennessy</i>	
Upper-Expectation Bisimilarity and Łukasiewicz μ -Calculus	335
<i>Matteo Mio</i>	

Categorical and Algebraic Models

Interacting Bialgebras Are Frobenius	351
<i>Filippo Bonchi, Paweł Sobociński, and Fabio Zanasi</i>	
Generalized Eilenberg Theorem I: Local Varieties of Languages	366
<i>Jiří Adámek, Stefan Milius, Robert S.R. Myers, and Henning Urbat</i>	
Combining Bialgebraic Semantics and Equations	381
<i>Jurriaan Rot and Marcello Bonsangue</i>	
Models of a Non-associative Composition	396
<i>Guillaume Munch-Maccagnoni</i>	

Logics of Programming

Foundations for Decision Problems in Separation Logic with General Inductive Predicates	411
<i>Timos Antonopoulos, Nikos Gorogiannis, Christoph Haase, Max Kanovich, and Joël Ouaknine</i>	
A Coalgebraic Approach to Linear-Time Logics	426
<i>Corina Cîrstea</i>	
A Relatively Complete Calculus for Structured Heterogeneous Specifications	441
<i>Till Mossakowski and Andrzej Tarlecki</i>	
Author Index	457