
1	Invited Talks	2
1.1	Software Services: Scientific Challenge or Industrial Hype? <i>José Luiz Fiadeiro</i>	3
1.2	Integrating Variants of DC <i>He Jifeng</i>	4
1.3	A Predicate Spatial Logic and Model Checking for Mobile Processes <i>Huimin Lin</i>	26
1.4	Challenges in increasing tool support for programming <i>K. Rustan M. Leino</i>	27
2	Session 1A: Automata Theory and Logics	28
2.1	Reasoning about co-Büchi Tree Automata <i>Salvatore La Torre and Aniello Murano</i>	29
2.2	Switched Probabilistic I/O Automata <i>Ling Cheung, Nancy Lynch, Roberto Segala and Frits Vaandrager</i>	44
2.3	Foundations for the Run-time Monitoring of Reactive Systems - Fundamentals of the MaC Language <i>Mahesh Viswanathan and Moonzoo Kim</i>	61
2.4	Duration calculus : A real-time semantic for B <i>Samuel Colin, Georges Mariano and Vincent Poirriez</i>	75
3	Session 1B: Real-Time and Co-Design	92
3.1	An algebraic approach for Codesign <i>Marc Aiguier, Stefan Béro and Pierre-Yves Schobbens</i>	93
3.2	A Framework For Specification and Validation of Real-Time Systems Using Circus Actions <i>Adnan Sherif, He Jifeng, na Cavalcanti and Augusto Sampaio</i>	107
3.3	A Calculus for Shapes in Time and Space <i>Andreas Schäfer</i>	122
3.4	An Algebra of Petri Nets with Arc-based Time Restrictions <i>Apostolos Niaouris</i>	137

4	Session 2A: System Modelling	152
4.1	Atomic Components <i>Steve Reeves and David Streader</i>	153
4.2	A proof of weak termination providing the right way to terminate <i>Olivier Fissore, Isabelle Gnaedig, Hélène Kirchner</i>	172
4.3	A Logical Characterization of Efficiency Preorders <i>Neelesh Korade and S. Arun-Kumar</i>	187
4.4	Specifying software connectors <i>Marco Antonio Barbosa and Luis Soares Barbosa</i>	202
5	Session 2B: Distributed Systems	218
5.1	A Static Analysis for Security Properties in PKI-based Protocols <i>Benjamin Aziz, David Gray and Geoff Hamilton</i>	219
5.2	Decomposing Controllers Into Non-Conflicting Distributed Controllers <i>Padmanabhan Krishnan</i>	234
5.3	Towards an Optimization-Based Method for Consolidating Domain Variabilities in Domain-Specific Web Services Composition <i>Jun-feng ZHAO, Lu ZHANG, Ya-sha WANG, Ying JIANG, Bing XIE</i>	249
5.4	Replicative - Distribution Rules in P Systems with Active Membranes <i>Tseren-Onolt ISHDORJ and Mihai IONESCU</i>	263
6	Session 3A: Automated Proof and Model Checking	279
6.1	Idempotent Relations in Isabelle/HOL <i>Florian Kammüller and J. W. Sanders</i>	278
6.2	Symbolic and Parametric Model Checking of Discrete-Time Markov Chains <i>Conrado Daws</i>	293
6.3	Verifying Linear Duration Constraints of Timed Automata <i>Pham Hong Thai and Dang Van Hung</i>	308
6.4	Verification Using Automatic Generation of Invariants <i>Enric Rodríguez-Carbonell and Deepak Kapur</i>	323

7	Session 3B: Model Integration and Theory Unification	338
7.1	A Formal Framework for Ontology Integration Based on A Default Extension to DDL <i>Yinglong Ma, Jun Wei, Beihong Jin, Shaohua Liu</i>	339
7.2	A Predicative Semantics for Integrating UML Models <i>Jing Yang, Quan Long and Xiaoshan Li</i>	354
7.3	Automatic Mapping from Statecharts to Verilog <i>Viet-Anh Vu Tran, Shengchao Qin and Wei Ngan Chin</i>	372
7.4	Reverse Observation Equivalence Between Labelled State Transition Systems <i>Yanjun Wen, Ji Wang and Zhichang Qi</i>	389
8	Session 4A: Program Testing and Reasoning	404
8.1	An Approach to Integration Testing Based on Data Flow Specifications <i>Yuting CHEN and Shaoying LIU, and Fumiko NAGOYA</i>	405
8.2	Combining Algebraic and Model-based Test Case Generation <i>Li Dan and Bernhard K. Aichernig</i>	420
8.3	Minimal Spanning Set for Coverage Testing of Interactive Systems <i>Fevzi Belli and Christof J. Budnik</i>	435
8.4	Verifying OWL and ORL Ontologies in PVS <i>Jin Song Dong, Yuzhang Feng and Yuan Fang Li</i>	449
9	Session 4B: Theories of Programming and Languages	464
9.1	Random Generators for Dependent Types <i>Peter Dybjer, Qiao Haiyan and Makoto Takeyama</i>	465
9.2	Real Time Reactive Programming in Lucid Enriched With Contexts <i>Kaiyu Wan and Vasu Alagar and Joey Paquet</i>	480
9.3	A New Correctness Proof for Positive Equality <i>Miroslav N. Velev</i>	495
9.4	Revision Programs with Explicit Negation <i>Yisong Wang and Mingyi Zhang</i>	513

10 Session 5: Concurrency and Modularity	525
10.1 Inherent Causal Orderings of Partial Order Scenarios <i>Bill Mitchell</i>	526
10.2 A Generalisation of a Relational Structures Model of Concurrency <i>Ryszard Janicki</i>	541
10.3 Nelson-Oppen, Shostak and the Extended Canonizer: A Family Picture with a Newborn <i>Silvio Ranise, Christophe Ringeissen and Duc-Khanh Tran</i>	557
10.4 Object Connectivity and Full Abstraction for a Concurrent Calculus of Classes <i>Erika Ábrahám, Marcello M. Bonsangue, Frank S. de Boer and Martin Steffen</i> .	572
