

WODES 2010, Berlin, Germany – Preliminary Programme

Sunday, August 29, 2010	
19:00 – 21:00	Welcome Reception & Registration at Café Campus
Monday, August 30, 2010	
8:00 – 9:00	Registration
9:00 – 9:15	Welcome
9:15 – 10:15	MoP: Plenary: Supervisory Control of Differential Equations (Paulo Tabuada)
10:15 – 10:45	Coffee break
10:45 – 12:45	MoM1: Petri Net-based Techniques
	Linear Programming Techniques for Analysis and Control of Batches Petri Nets (Isabel Demongodin and Alessandro Giua)
	Timing-Dependent Boundedness and Liveness in Continuous Petri Nets (Carlos Renato Vazquez and Manuel Silva)
	An Algorithm to Compute the Minimal Siphons in S^2PR Nets (Elia E. Cano, Carlos A. Rovetto and Jose-Manuel Colom)
	SimHPN: a MATLAB Toolbox for Continuous Petri Nets (Jorge Júlvez and Cristian Mahulea)
	Synthesis of Behavioral Controllers for DES: Increasing Efficiency (Kai Bollue, Michaela Slaats, Erika Abraham, Wolfgang Thomas and Dirk Abel)
10:45 – 12:45	MoM2: Invited Session: Hybrid Systems (Organisers: Magnus Egerstedt and Yorai Wardi)
	On the Geometry of Switching Manifolds for Autonomous Hybrid Systems (Farzin Taringoo and Peter Caines)
	Numerically Stable Approximations of Optimal Control Processes Associated with a Class of Switched Systems (Vadim Azhmyakov, Ruben Velazquez and Rosalba Galvan-Guerra)
	IPA for Continuous Petri Nets (Alessandro Giua, Carla Seatzu and Yorai Wardi)
	Initial Investigations of Hybrid Thermodynamic Control Systems with Phase Transitions (Dmitry Gromov and Peter E. Caines)
	Perturbation Analysis of Stochastic Hybrid Systems and Applications to Some Non-Cooperative Games (Chen Yao and Christos G. Cassandras)
12:45 – 14:30	Lunch break
14:30 – 15:50	MoA1: Invited Session: Diagnosis and Diagnosability of Discrete Event Systems (Organisers: Maria Paola Cabasino and Moamar Sayed Mouchaweh)
	Diagnosability of Labeled Petri Nets via Integer Linear Programming (Francesco Basile, Pasquale Chiacchio, and Gianmaria De Tommasi)
	Reduced-Complexity Verification for Initial-State Opacity in Modular Discrete Event Systems (Anooshiravan Saboori and Christoforos N. Hadjicostis)
	Robust Diagnosability of Discrete Event Systems subject to Intermittent Sensor Failures (Lilian Kawakami Carvalho, João Carlos Basilio and Marcos Vicente Moreira)
	Robust Diagnosis of Discrete-Event Systems subject to Permanent Sensor Failures (Saulo Telles Lima, João Carlos Basilio, Stéphane Lafortune and Marcos Vicente Moreira)
14:30 – 15:50	MoA2: Hierarchical Supervisory Control
	Hierarchical Multitasking Control of Discrete Event Systems: Computation of Projections and Maximal Permissiveness (Klaus Werner Schmidt, Max Herring de Queiroz and José Eduardo Ribeiro Cury)
	A Compositional Approach for Verifying Hierarchical Interface-Based Supervisory Control (Ryan Leduc and Robi Malik)
	Supremal Normal Sublanguages in Hierarchical Supervisory Control (Jan Komenda and Tomáš Masopust)
	Supervisory control based on multi-face modeling of discrete event systems (Gábor Kovács and Laurent Piétrac)
15:50 – 16:10	Coffee break
16:10 – 17:30/17:50	MoE1: Distributed Estimation and Fault Diagnosis
	A New Protocol for the Decentralized Diagnosis of Labeled Petri Nets (Maria Paola Cabasino, Alessandro Giua, Andrea Paoli and Carla Seatzu)
	Distributed State Estimation for Hybrid and Discrete Event Systems Using I-Complete Approximations (Jörg Raisch, Thomas Moor, Naim Bajcinca, Stephanie Geist and Vladislav Nenchev)
	An Unifying Decision-Making Framework in Discrete-Event Systems: Application to Centralized and Decentralized Control, Diagnosis and Prognosis (Ahmed Khoumsi)
	An Optimized Algorithm for Diagnosability of Component-based Systems (Lina Ye and Philippe Dague)
16:10 – 17:30/17:50	MoE2: Estimation and Control for Max-Plus and Min-Plus Systems
	On Proportional Controller in (Min, +) Algebra (Jean-Louis Boimond and Sébastien Lahaye)
	Trajectory Tracking Control of a Timed Event Graph with Specifications Defined by a P-time Event Graph: On-line and off-line aspects (Philippe Declerck)
	Max-plus Linear Observer: Application to Manufacturing Systems (Laurent Hardouin, Carlos Andrey Maia, Bertrand Cottenceau and Rafael Santos Mendes)
	Control of cyclically operated High-Throughput Screening Systems (Thomas Brunsch, Laurent Hardouin and Jörg Raisch)
	Max-Consensus in a Max-Plus Algebraic Setting: The Case of Switching Communication Topologies (Behrang Monajemi Nejad, Sid Ahmed Attia and Jörg Raisch)

Tuesday, August 31, 2010

9:00 – 10:00	TuP: Plenary: Coordination of Traffic Networks (René Boel)	
10:00 – 10:30	Coffee break	
10:30 – 12:30	TuM1: Diagnosis, Identification and Testing	TuM2: Probabilistic Discrete Event Systems
	An Identification Technique for Timed Event Systems (Donald E. Jarvis)	Use of a Metric in Supervisory Control of Probabilistic Discrete Event Systems (Vera Pantelic and Mark Lawford)
	On-line Detection and Sensor Activation for Discrete Event Systems (Shaolong Shu, Zhiqiang Huang and Feng Lin)	On Almost-Sure Properties of Probabilistic Discrete Event Systems (Hsu-Chun Yen)
	SIC-Testability of Sequential Logic Controllers (Julien Provost, Jean-Marc Roussel and Jean-Marc Faure)	On the Construction of Probabilistic Diagnosers (Eric Fabre and Loig Jezequel)
	Computation of Projections for the Abstraction-based Diagnosability Verification (Klaus Werner Schmidt)	A Geometric Approach for the Homothetic Approximation of Stochastic Petri Nets (Dimitri Lefebvre, Edouard Leclercq, Nabil El Akchioui, Eduardo Souza de Cursi, and Leila Khalij)
	Robust Failure Diagnosis of Partially Observed Discrete Event Systems (Shigemasa Takai)	Gradient Estimation for Quantiles of Stationary Waiting Times (Bernd Heidergott, Warren Volk-Makarewicz and Felisa Vázquez-Abad)
	What Topology Tells us about Diagnosability in Partial Order Semantics (Stefan Haar)	A Rollout Method for Finite-Stage Event-Based Decision Processes (Qing-Shan Jia)
12:30 – 14:30	Lunch break	
14:30 – 15:50	TuA1: Invited Session (Part I): Towards Application of Supervisory Control - from Modeling, through Synthesis, to Implementation (Organisers: Rong Su and Walter Murray Wonham)	TuA2: Modelling and Analysis of Max-Plus Systems
	Applied Supervisory Control for a Flexible Manufacturing System (Thomas Moor, Klaus Schmidt and Sebastian Perk)	# 60: Linear Time-Varying (Max,+) Representation of Conflicting Timed Event Graphs (Boussad Addad, Said Amari, and Jean-Jacques Lesage)
	Supervisory Control of Software Execution for Failure Avoidance: Experience from the Gadara Project (Yin Wang, Hyoun Kyu Cho, Hongwei Liao, Ahmed Nazeem, Terence P. Kelly, Stéphane Lafortune, Scott Mahlke and Spyros A. Reveliotis)	# 92: Comparison of different classes of service curves in Network Calculus (Anne Bouillard, Laurent Jouhet and Eric Thierry)
	Optimal Deadlock Avoidance for Complex Resource Allocation Systems through Classification Theory (Ahmed Nazeem, Spyros Reveliotis, Yin Wang and Stéphane Lafortune)	# 31: Modeling of interval P-time Petri nets using dioid algebra (Pavel Spacek and Jan Komenda)
	Supervisor Computation and Representation: A Case Study (Sajed Miremadi, Knut Åkesson, Bengt Lennartson and Martin Fabian)	#43: Synchronous composition of interval weighted automata (Jan Komenda, Sebastien Lahaye and Jean-Louis Boimond)
15:50 – 16:10	Coffee break	
16:10 – 17:10	TuE1: Invited Session (Part II): Towards Application of Supervisory Control - from Modeling, through Synthesis, to Implementation (Organisers: Rong Su and Walter Murray Wonham)	TuE2: Applications I
	Automated Controllability and Synthesis with Hierarchical Set Decision Diagrams (Yan Zhang, Beatrice Bérard, Fabrice Kordon, and Yann Thierry-Mieg)	Rotary Wings UAV Mission Planning Aided by Supervisory Control (José Cerdeira Gonzalez, Roberto Ortiz Garrido and Antonio Eduardo Carrilho da Cunha)
	Coordination of Resources using Generalized State-Based Requirements (Jasen Markovski, Koen Jacobs, Bert van Beek, Lou Somers and J. E. Rooda)	Augmenting Petri Nets to Model Health-Care Protocols (Sarah-Jane Whittaker, Karen Rudie, James McLellan and Stefan Haar)
	Application of Supervisory Control Theory to Theme Park Vehicles (S. T.J. Forschelen, J. M. van de Mortel-Fronczak, R. Su and J. E. Rooda)	Fail-Safe Signalization Design for a Railway Yard: A Level Crossing Case (Mustafa Seçkin Durmus, Uğur Yildirim, Aysegül Kurşun and Mehmet Turan Söylemez)
20:30	Conference Dinner at Clärchens Ballhaus	

Wednesday, September 01, 2010

9:00 – 10:00	WeP: Plenary: Interfaces for Control Components (Rajeev Alur)	
10:00 – 10:30	Coffee break	
10:30 – 12:10	WeM1: Extensions of Supervisory Control I	WeM2: Invited Session: Max-Plus Algebra and Max-Plus-Linear Systems (Organisers: Laurent Hardouin and Jean-Louis Boimond)
	Sampled-Data Supervisory Control (Ryan J. Leduc and Yu Wang)	An Approximation Approach for Model Predictive Control of Stochastic Max-Plus Linear Systems (Samira Farahani, Ton van den Boom, Hans van der Weide and Bart De Schutter)
	Fault-Tolerant Control of Nondeterministic Input/Output Automata subject to Actuator Faults (Yannick Nke and Jan Lunze)	Modeling and Control of Legged Locomotion via Switching Max-Plus Systems (Gabriel A.D. Lopes, Ton J.J. van den Boom, Bart De Schutter and Robert Babuška)
	Multicriteria Optimal Reconfiguration for Fault-tolerant Real-time Tasks (Emil Dumitrescu, Alain Girault, Hervé Marchand and Eric Rutten)	Asymptotic Throughput of Stochastic Max-Plus Linear Systems (Glenn Merlet)
	Compositional Nonblocking Verification Using Annotated Automata (Simon Ware and Robi Markov)	A Frequency-Domain Approach for Max-Plus Linear Systems (Ying Shang)
	Techniques for the Parametrization of Discrete-Event System Templates (Lenko Grigorov and Karen Rudie)	Control of Uncertain (max,+)-Linear Systems in order to Decrease Uncertainty (Euriell Le Corronc, Bertrand Cottenceau and Laurent Hardouin)
12:10 – 13:40	Lunch break	
13:40 – 14:40/15:00	WeA1: Extensions of Supervisory Control II	WeA2: Applications II
	Efficient Computation of Observer Projections using OP-Verifiers (Patricia Nascimento Pena, José Eduardo Ribeiro Cury, Robi Malik and Stéphane Lafortune)	Solution of a Multi-Agent Transport Problem by Hybrid Optimization (Herbert Mangesius, Marion Sobotka and Olaf Stursberg)
	Modular Specification of Forbidden States for Supervisory Control (Patrik Magnusson, Martin Fabian and Knut Åkesson)	Timed Petri Nets Perspective on Weaving Processes (Miryam Barad and Arkady Cherkassky)
	Supervisory Control for Modal Specifications of Services (Philippe Darondeau, Jérémy Dubreil and Hervé Marchand)	Optimal Vendor-Managed Inventory Policies in Distribution Systems with Discrete-Event Processes (Simona Sacone and Silvia Siri)
	Synthesis of Safe Sublanguages satisfying Global Specification using Coordination Scheme for Discrete-Event Systems (Jan Komenda, Tomáš Masopust and Jan H. van Schuppen)	
15:00 – 15:30	Closing Remarks	
15:30 – 16:00	Coffee break	