

Friday 29 May 2015

9:00 – 10:00	Plenary Talk Fault-Tolerant Supervisory Control <i>Thomas Moor - Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany.</i> Chair: Antonio Ramirez
10:00-10:30	Break
10:30 -12:30	Special Session: Dependable Discrete control for adaptive and reconfigurable computing systems. Organiser: Eric Rutten Chairs: E. Rutten, H. Marchand. <i>Towards Applying Logico-numerical Control to Dynamically Partially Reconfigurable Architectures</i> Berthier, Nicolas; An, Xin; Marchand, Herve <i>Distributed Execution of Modular Discrete Controllers for Data Center Management</i> Delaval, Gwenael; Gueye, Soguy Mak-Kare; Rutten, Eric <i>Modeling standby redundancies in repairable systems as guarded preemption mechanisms</i> Pirou, Pierre-Yves; Faure, Jean-Marc; Lesage, Jean-Jacques <i>CTL Model Repair for Bounded and Deadlock Free Petri Nets</i> Martinez-Araiza, Ulises; Lopez-Mellado, Ernesto
12:30-14:00	Lunch
14:00-16:00	Session: Supervisory Control Chair: J.-J. Lesage, O. Roux <i>Fault-Tolerant Control of Discrete-Event Systems with Lower-Bound Specifications</i> Moor, Thomas; Schmidt, Klaus Werner <i>On-line optimal compositional controller synthesis for AGV by unfolding</i> Girault, Johan; Loiseau, Jean Jacques; Roux, Olivier H. <i>Opacity of Discrete-Event Systems: models, validation and quantification</i> Jacob, Romain; Lesage, Jean-Jacques; Faure, Jean-Marc <i>Nadzoru: A software tool for supervisory control of Discrete Event Systems</i> Pinheiro, Lucas; Kaszubowski Lopes, Yuri; Leal, André B.; Ubertino Rosso Jr., Roberto Silvio
16:00 - 16:30	Closing session



DCDS 2015

5th IFAC International Workshop on Dependable Control of Discrete Systems

Hotel Krystal Cancun
Cancun, Mexico. May 27-29, 2015

Programme

Wednesday, 27 May 2015		Thursday, 28 May 2015		Friday 29 May 2015	
08:30	Registration	09:00	Plenary Talk	09:00	Plenary Talk
09:00	Opening Session	09:30	Spyros Reveliotis	09:30	Thomas Moor
09:30	Plenary Talk	10:00	Coffee break	10:00	Coffee break
10:00	Yiannis Papadopoulos	10:30	Special Session SS-4	10:30	Special Session SS-3
10:30	Coffee break	11:00	Diagnosis approaches:	11:00	Dependable Discrete control for adaptive and reconfigurable computing systems
11:10	Special Session SS-2	11:30	What news since over 20 years?	11:30	
11:50	Tool-supported Techniques for Model-based Dependability Analysis and Optimisation of DES	12:00		12:00	
12:30	Lunch	12:30	Lunch	12:30	Lunch
14:00	Special Session SS-2.2	14:00	Special Session SS-1.1	14:00	Session
14:40		14:30	Analysis and control of DES with Petri nets	14:30	Supervisory Control
15:20	Coffee break	15:00		15:00	
15:50	Special Session SS-2.3	15:30	Special Session SS-1.2	15:30	
16:30		17:30		17:30	
		19:00	Dinner		Closing session

Wednesday 27 May 2015

8:30 -9:00	Registration
9:00 - 9:30	Opening Session
9:30-10:30	Plenary Talk Intersections of Philosophy, Logic and Biology in Design <i>Yiannis Papadopoulos - University of Hull, United Kingdom</i> Chair: Jean-Marc Faure
10:30-11:10	Break
11:10-12:30	Special Session: Tool-supported Techniques for Model-based Dependability Analysis and Optimisation of DES. Organisers: Y. Papadopoulos, F. Ortmeier, Chairs: Y. Papadopoulos, M. Bouissou. • <i>Automating Allocation of Development Assurance Levels: an extension to HiP-HOPS</i> Sorokos, Ioannis; Papadopoulos, Yiannis; Azevedo, Luis Silva; Parker, David J.; Walker, Martin • <i>Slice or Unfold - Experiments on Checking Synchronous Models with Backwards Slicing</i> Gonschorek, Tim; Ortmeier, Frank
12:30 - 14:00	Lunch
14:00 - 15:20	Special Session: Tool-supported Techniques for Model-based Dependability Analysis and Optimisation of DES (cont.) • <i>iSaFe: An integrated Safety Engineering Tool</i> Antonino, P.; Velasco Moncada, S.; Schneider, D.; Trapp, M.; Reich, J. • <i>A Virtual Environment for the Management and Development of Cyber-Physical Manufacturing Systems</i> Chen, DeJiu; Maffei, Antonio; Ferreirar, João; Akillioglu, Hakan; Khabbazi, Mahmood R.; Zhang, Xinhai
15:20 - 15:50	Break
15:50 - 17:10	Special Session: Tool-supported Techniques for Model-based Dependability Analysis and Optimisation of DES (cont.) • <i>From Modelica models to dependability analysis</i> Bouissou, Marc; de Bossoreille, Xavier • <i>Executable Specifications of Safety-Critical Systems with S#</i> Habermaier, Axel; Leupolz, Johannes; Reif, W.



Thursday 28 May 2015

9:00-10:00	Plenary Talk Real-Time Management of Complex Resource Allocation Systems: Necessity, Achievements and Further Challenges <i>Spyros Reveliotis - Georgia Institute of Technology, USA.</i> Chair: Dimitri Lefebvre
10:00-10:30	Break
10:30-12:30	Special Session: Diagnosis approaches: What news since over 20 years? Organiser: Alexandre Philippot Chair: A. Philippot • <i>Enforcing Diagnosability in Interpreted Petri Nets</i> Hernández-Rueda, K.; Meda-Campaña, M.; Arámburo-Lizárraga, J. • <i>On-the-fly Diagnosability Analysis of Labeled Petri Nets Using T-invariants</i> Delaval, Gwenael; Gueye, Soguy Mak-Kare; Rutten, Eric • <i>Diagnosability Analysis of Input/Output Discrete-Event Systems Using Model-Checking</i> Boussif, Abderraouf; Ghazel, Mohamed • <i>Automatic Error Cause Localization of Faulty PLC Programs</i> Biallas, Sebastian; Friedrich, Nico; Simon, Hendrik; Kowalewski, Stefan
12:30 - 14:00	Lunch
14:00 - 15:30	Special Session: Analysis and control of DES with Petri nets Organisers: Francesco Basile, Dimitri Lefebvre Chairs: F. Basile, D. Lefebvre • <i>Model repair of Time Petri Nets with temporal anomalies</i> Basile, Francesco; Chiacchio, Pasquale; Coppola, Jolanda • <i>Model Predictive Control for Timed Petri Nets</i> Lefebvre, Dimitri • <i>Initial study for observers application to Fault Detection and Isolation with continuous timed Petri nets</i> Lefebvre, Dimitri; Aguayo-Lara, Enrique
15:30 - 16:00	Break
16:00 - 18:00	Special Session: Analysis and control of DES with Petri nets (cont.) • <i>Fault Detection and Recovery by Hybrid Petri Nets for Automated Drug Preparation Systems</i> Fanti, Maria Pia; Mangini, Agostino Marcello; Pedroncelli, Giovanni; Roccotelli, Michele; Ukovich, Walter • <i>Sliding Mode Diagnoser for Leakage Faults on Timed Continuous Petri Nets</i> Fraustro Valdez, Jaime Alberto; Desirena, Gaddiel; Ramirez-Trevino, Antonio; Ruiz-Leon, Javier • <i>Structural Fault Detection in Join Free Timed Continuous Petri Nets</i> Navarro, Manuel; Ramirez-Trevino, Antonio; Gomez, David; Ruiz-Leon, Javier
19:00	Dinner