

4th IFAC Conference on Analysis and Design of Hybrid Systems 2012

**Eindhoven, Netherlands
6-8 June 2012**

ISBN: 978-1-62276-223-1

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2012) by Elsevier Limited
All rights reserved.

Printed by Curran Associates, Inc. (2012)

For permission requests, please contact the publisher, Elsevier Limited
at the address below.

Elsevier Limited
The Boulevard, Langford Lane
Kidlington OX5 1GB, United Kingdom

Phone: +44 (0)1865 844640
Fax: +44 (0)1865 843912

Email: eurobkinfo@elsevier.com

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

Content List of 4th IFAC Conference on Analysis and Design of Hybrid Systems

Technical Program for Wednesday June 6, 2012

WeAT1	Van Trier Room (Traverse building)
Event-Triggered and Self-Triggered Control I (Regular Session)	
Chair: van Schuppen, Jan H.	CWI
Co-Chair: Lehmann, Daniel	KTH Royal Inst. of Tech.
10:40-11:05	WeAT1.1
<i>Event-Based Synchronisation of Multi-Agent Systems</i> , pp. 1-6.	
Demir, Ozan	Ruhr-Univ. Bochum
Lunze, Jan	Ruhr-Univ. Bochum
11:05-11:30	WeAT1.2
<i>Comparison between Sampled-Data Control, Deadband Control and Model-Based Event-Triggered Control</i> , pp. 7-12.	
Lehmann, Daniel	KTH Royal Inst. of Tech.
Lunze, Jan	Ruhr-Univ. Bochum
Johansson, Karl Henrik	Royal Inst. of Tech.
11:30-11:55	WeAT1.3
<i>A Linear-Quadratic Coordination Control Procedure with Event-Based Communication (I)</i> , pp. 13-18.	
Kempker, Pia L.	Vrije Univ. Amsterdam
Ran, André C.M.	Vrije Univ.
van Schuppen, Jan H.	CWI
11:55-12:20	WeAT1.4
<i>Local Stability of Bilinear Systems with Asynchronous Sampling</i> , pp. 19-24.	
Omran, Hassan	Lab. d'automatique, génie informatique etsignal(LAGIS), Ec.
Hetel, Laurentiu	Ec.
Richard, Jean-Pierre	Ec. Centrale de Lille
WeAT2	
Dorgelo Room (Traverse building)	
Optimal Control and MPC (Regular Session)	
Chair: Bourdais, Romain	SUPELEC/IETR
Co-Chair: Gueguen, Herve	SUPELEC
10:40-11:05	WeAT2.1
<i>Revisiting the Viability Algorithm for Hybrid Systems Using Optimal Control</i> , pp. 25-32.	
Margellos, Kostas	ETH Zurich
Lygeros, John	ETH Zurich
11:05-11:30	WeAT2.2
<i>The Exponential Gradient HMP Algorithm for the Optimization of Hybrid Systems on Lie Groups</i> , pp. 33-38.	
Taringoo, Farzin	McGill
Caines, Peter E.	McGill Univ.
11:30-11:55	WeAT2.3
<i>Optimization of Hybrid Systems with Known Paths</i> , pp. 39-45.	
Wigström, Oskar	Chalmers Univ. of Tech.
Sundström, Nina	Chalmers Univ. of Tech.
Lennartson, Bengt	Chalmers Univ. of Tech.
11:55-12:20	WeAT2.4
<i>Distributed Model Predictive Control for a Class of Hybrid System Based on Lagrangian Relaxation</i> , pp. 46-51.	
Bourdais, Romain	SUPELEC/IETR
Gueguen, Herve	SUPELEC
Belmiloudi, Aziz	INSA de Rennes

WeBT1		Van Trier Room (Traverse building)
Event-Triggered and Self-Triggered Control II (Invited Session)		
Chair: Mazo Jr, Manuel	Univ. of Groningen	
Co-Chair: Lunze, Jan	Ruhr-Univ. Bochum	
Organizer: Mazo Jr, Manuel	Univ. of Groningen	
14:00-14:25	WeBT1.1	
<i>Decentralized Event-Triggered Control with One Bit Communications (I)</i> , pp. 52-57.		
Mazo Jr, Manuel	Univ. of Groningen	
Cao, Ming	Univ. of Groningen	
14:25-14:50	WeBT1.2	
<i>Stability Analysis of Interconnected Event-Based Control Loops (I)</i> , pp. 58-63.		
Stoecker, Christian	Ruhr-Univ. Bochum	
Lunze, Jan	Ruhr-Univ. Bochum	
Vey, Daniel	Ruhr-Univ. Bochum	
14:50-15:15	WeBT1.3	
<i>An Iterative Algorithm for Optimal Event-Triggered Estimation (I)</i> , pp. 64-69.		
Molin, Adam	Tech. Univ. München	
Hirche, Sandra	Tech. Univ. Muenchen	
15:15-15:40	WeBT1.4	
<i>Stabilizing Bit-Rate of Disturbed Event Triggered Control Systems (I)</i> , pp. 70-75.		
Li, Lichun	Univ. of Notre Dame	
Wang, Xiaofeng	Univ. of Illinois at Urbana-Champaign	
Lemmon, Michael	Univ. of Notre Dame	
15:40-16:05	WeBT1.5	
<i>A Simple Self-Triggered Sampler for Nonlinear Systems (I)</i> , pp. 76-81.		
Tiberi, Ubaldo	Royal Inst. of Tech.	
Johansson, Karl Henrik	Royal Inst. of Tech.	
WeBT2		Dorgelo Room (Traverse building)
Formal Methods for Hybrid Systems (Invited Session)		
Chair: Girard, Antoine	Univ. Joseph Fourier	
Co-Chair: Abate, Alessandro	TU Delft - Delft Univ. of Tech.	
Organizer: Girard, Antoine	Univ. Joseph Fourier	
Organizer: Abate, Alessandro	TU Delft - Delft Univ. of Tech.	
14:00-14:25	WeBT2.1	
<i>Low-Complexity Switching Controllers for Safety Using Symbolic Models (I)</i> , pp. 82-87.		
Girard, Antoine	Univ. Joseph Fourier	
14:25-14:50	WeBT2.2	
<i>Formal Abstraction of Linear Systems Via Polyhedral Lyapunov Functions</i> , pp. 88-93.		
Ding, Xu Chu	United Tech. Res. Center	
Lazar, Mircea	Eindhoven Univ. of Tech.	
Belta, Calin	Boston Univ.	
14:50-15:15	WeBT2.3	
<i>Flowpipe-Guard Intersection for Reachability Computations with Support Functions (I)</i> , pp. 94-101.		
Frehse, Goran	VERIMAG	

Ray, Rajarshi	Verimag, Univ. Joseph Fourier
15:15-15:40	WeBT2.4
<i>Time-Constrained Temporal Logic Control of Multi-Affine Systems (I)</i> , pp. 102-107.	
Aydin Gol, Ebru	Boston Univ.
Belta, Calin	Boston Univ.
15:40-16:05	WeBT2.5
<i>Ensuring Safety of Nonlinear Sampled Data Systems through Reachability (I)</i> , pp. 108-114.	
Mitchell, Ian M.	Univ. of British Columbia
Chen, Mo	Univ. of California Berkeley
Oishi, Meeko	Univ. of British Columbia

WeCT1	Van Trier Room (Traverse building)
Networked Control Systems I (Regular Session)	
Chair: Azuma, Shun-ichi	Kyoto Univ.
Co-Chair: Camlibel, Kanat	Univ. of Groningen

16:35-17:00	WeCT1.1
<i>Bio-Inspired Synchronization of Non-Identical Pulse-Coupled Oscillators Subject to a Global Cue and Local Interactions</i> , pp. 115-120.	
Núñez, Felipe	Univ. of California, Santa Barbara
Wang, Yongqiang	Univ. of California, Santa Barbara
Teel, Andrew R.	Univ. of California at Santa Barbara
Doyle III, Francis Joseph	Univ. of California at Santa Barbara

17:00-17:25	WeCT1.2
<i>Partial Consensus for Heterogenous Multi-Agent Systems with Double Integrator Dynamics</i> , pp. 121-126.	
Camlibel, Kanat	Univ. of Groningen
Zhang, Shuo	Univ. of Groningen

17:25-17:50	WeCT1.3
<i>Robust Feedback Control and Scheduling of Networked Embedded Control Systems</i> , pp. 127-132.	
Al-Areqi, Sanad	Univ. of Kaiserslautern
Görges, Daniel	Univ. of Kaiserslautern
Liu, Steven	Univ. of Kaiserslautern

17:50-18:15	WeCT1.4
<i>Supervisory Control Design for Networked Systems with Time-Varying Communication Delays</i> , pp. 133-140.	
Demirel, Burak	The Royal Inst. of Tech. (KTH), School ofElectrical En
Briat, Corentin	ETH Zürich
Johansson, Mikael	Royal Inst. of Tech.

WeCT2	Dorgelo Room (Traverse building)
Piecewise Affine Systems (Regular Session)	
Chair: Belta, Calin	Boston Univ.
Co-Chair: Riedinger, Pierre	CRAN

16:35-17:00	WeCT2.1
<i>A Numerical Framework for Optimal Control of Switched Affine Systems with State Constraint (I)</i> , pp. 141-146.	
Riedinger, Pierre	CRAN
Morarescu, Irinel Constantin	Inst. National Pol. de Lorraine

17:00-17:25	WeCT2.2
-------------	---------

<i>Sequences of Discrete Abstractions for Piecewise Affine Systems (I)</i> , pp. 147-152.	
Pola, Giordano	Univ. of L'Aquila
Di Benedetto, M. Domenica	Univ. of L'Aquila

17:25-17:50	WeCT2.3
<i>Symmetry Reductions in Timed Continuous Petri Nets under Infinite Server Semantics</i> , pp. 153-159.	
Meyer, Anna-Lena	Univ. of Paderborn
Silva, Manuel	Univ. De Zaragoza

17:50-18:15	WeCT2.4
<i>Optimal Piecewise Affine Approximations of Nonlinear Functions Obtained from Measurements</i> , pp. 160-165.	
Szucs, Alexander	Slovak Univ. of Tech. in Bratislava
Kvasnica, Michal	Slovak Univ. of Tech. in Bratislava
Fikar, Miroslav	Slovak Univ. of Tech. in Bratislava

Technical Program for Thursday June 7, 2012

ThAT1	Van Trier Room (Traverse building)
Networked Control Systems II (Invited Session)	
Chair: Di Benedetto, M. Domenica	Univ. of L'Aquila
Co-Chair: D'Innocenzo, Alessandro	Univ. degli Studi di L'Aquila
Organizer: Di Benedetto, M. Domenica	Univ. of L'Aquila
Organizer: D'Innocenzo, Alessandro	Univ. degli Studi di L'Aquila
10:15-10:40	ThAT1.1
<i>Hybrid Power Control on a Wireless Networked Control System (I)</i> , pp. 166-171.	
D'Innocenzo, Alessandro	Univ. degli Studi di L'Aquila
Rinaldi, Claudia	Univ. of L'Aquila
Di Benedetto, M. Domenica	Univ. of L'Aquila
Santucci, Fortunato	Univ. of L'Aquila
10:40-11:05	ThAT1.2
<i>Finite-Time Consensus Based Clock Synchronization by Discontinuous Control (I)</i> , pp. 172-177.	
Franceschelli, Mauro	Univ. of Cagliari
Pisano, Alessandro	Univ. di Cagliari
Giua, Alessandro	Univ. di Cagliari
Usai, Elio	Univ. degli Studi di Cagliari
11:05-11:30	ThAT1.3
<i>Distributed Event-Triggered Estimation in Networked Systems (I)</i> , pp. 178-185.	
Weimer, James	Royal Inst. of Tech. (KTH)
Araújo, José	Royal Inst. of Tech.
Johansson, Karl Henrik	Royal Inst. of Tech.
11:30-11:55	ThAT1.4
<i>Stability Analysis of Networked Control Systems with Periodic Protocols and Uniform Quantizers (I)</i> , pp. 186-191.	
van Loon, Bas	Eindhoven Univ. of Tech.
Donkers, Tijs	Eindhoven Univ. of Tech.
van de Wouw, Nathan	Eindhoven Univ. of Tech.
Heemels, Maurice	Tech. Univ. Eindhoven
11:55-12:20	ThAT1.5
<i>Impulsive Networked Control for Discrete-Time Delayed Systems</i> , pp. 192-197.	
Liu, Bin	The Australian National Univ.
Liu, Tao	The Australian National Univ.
Zheng, Wei Xing	Univ. of Western Sydney
ThAT2	Dorgelo Room (Traverse building)
Applications (Regular Session)	
Chair: Wardi, Yorai	Georgia Inst. of Tech.
Co-Chair: Lazar, Mircea	Eindhoven Univ. of Tech.
10:15-10:40	ThAT2.1
<i>Switching Control in DC-DC Converter Circuits: Optimizing Tracking-Energy Tradeoffs</i> , pp. 198-203.	
Kawashima, Hiroaki	Georgia Inst. of Tech.
Wardi, Yorai	Georgia Inst. of Tech.
Taylor, David G.	Georgia Inst. of Tech.
Egerstedt, Magnus	Georgia Inst. of Tech.
10:40-11:05	ThAT2.2

Observer Design for DC/DC Power Converters with Bilinear Averaged Model, pp. 204-209.

Spinu, Veaceslav	Eindhoven Univ. of Tech.
Dam, Maarten	TNO Tech. Sciences / Automotive
Lazar, Mircea	Eindhoven Univ. of Tech.
11:05-11:30	ThAT2.3
<i>Approach to Boolean Controller Design by Algebraic Relaxation for Heating Systems</i> , pp. 210-215.	
Pangalos, Georg	Hamburg Univ. of Tech. Germany
Lichtenberg, Gerwald	Hamburg Univ. of Tech.
11:30-11:55	ThAT2.4
<i>Distributed Collision Avoidance for Autonomous Vehicles: World Automata Representation</i> , pp. 216-221.	
Marinica, Nicolae Emanuel	Ghent Univ.
Capiluppi, Marta	Univ. di Verona
Rogge, Jonathan	Ghent Univ.
Segala, Roberto	Dipartimento di Informatica, Univ. di Verona
Boel, Rene K.	Univ. of Ghent
11:55-12:20	ThAT2.5
<i>Detection of Cardiovascular Anomalies: Hybrid Systems Approach</i> , pp. 222-227.	
Diaz Ledezma, Fernando	King Abdullah Univ. of Science and Tech. (KAUST)
Laleg, Taous-Meriem	King Abdullah Univ. of Science and Tech. (KAUST)

ThBT1	Van Trier Room (Traverse building)
Switched Linear Systems (Regular Session)	
Chair: Geromel, Jose C.	UNICAMP
Co-Chair: Daafouz, Jamal	CRAN -INPL
14:00-14:25	ThBT1.1
<i>H2 Performance Optimization of Singularly Perturbed Switched Linear Systems</i> , pp. 228-233.	
Deaecto, Grace S.	UNICAMP
Daafouz, Jamal	CRAN -INPL
Geromel, Jose C.	UNICAMP
14:25-14:50	ThBT1.2
<i>Min-Switching Stabilization for Discrete-Time Switching Systems with Nonlinear Modes</i> , pp. 234-239.	
Jungers, Marc	CNRS - Univ. de Lorraine
Cavichioli Gonzaga, Carlos Alberto	CRAN - Centre de Recherche en Automatique de Nancy
Daafouz, Jamal	CRAN -INPL
14:50-15:15	ThBT1.3
<i>Theoretical Analysis of Balanced Truncation for Linear Switched Systems</i> , pp. 240-247.	
Petreczky, Mihaly	Ec. des Mines de Douai
Wisniewski, Rafal	Aalborg Univ.
Leth, John	Aalborg Univ.
15:15-15:40	ThBT1.4
<i>Synthesis of Continuous-Time Dynamic Quantizers for Quantized Feedback Systems</i> , pp. 248-253.	
Sawada, Kenji	The Univ. of Electro-Communications
Shin, Seiichi	the Univ. of Electro-Communications

ThBT2	Dorgelo Room (Traverse building)
Variable Structure Methods for Hybrid Systems I (Invited Session)	

Chair: Fridman, Leonid M.	National Autonomous Univ. of Mexico
Co-Chair: Djemai, Mohamed	UVHC
Organizer: Fridman, Leonid M.	National Autonomous Univ. of Mexico
Organizer: Davila, Jorge	National Pol. Inst. (IPN, ESIME - UPT)

14:00-14:25	ThBT2.1
-------------	---------

Fixed-Time Stabilization Via Second Order Sliding Mode Control (I), pp. 254-258.

Polyakov, Andrey	Inst. of Control Science, Russian Acad. of Science
------------------	--

14:25-14:50	ThBT2.2
-------------	---------

Hybrid Observer for the Multicellular Converter (I), pp. 259-264.

Van Gorp, Jeremy	LAMIH
Defoort, Michael	Univ. of Valenciennes
Djemai, Mohamed	UVHC
Manamanni, Noureddine	Univ. de Reims Champagne Ardenne

14:50-15:15	ThBT2.3
-------------	---------

Continuous and Discrete State Estimation in Linear Switched Systems by Sliding Mode Observers with Residuals' Projection (I), pp. 265-270.

Floquet, Thierry	CNRS
Mincarelli, Diego	INRIA Lille - Nord Europe
Pisano, Alessandro	Univ. di Cagliari
Usai, Elio	Univ. degli Studi di Cagliari

15:15-15:40	ThBT2.4
-------------	---------

State Estimation for Linear Switched Systems with Unknown Inputs (I), pp. 271-276.

Ríos, Héctor	National Autonomous Univ. of Mexico
Efimov, Denis	INRIA - LNE
Davila, Jorge	National Pol. Inst.
Raïssi, Tarek	Conservatoire National des Arts et Métiers
Fridman, Leonid M.	National Autonomous Univ. of Mexico
Zolghadri, Ali	Univ. Bordeaux I

ThCT1	Van Trier Room (Traverse building)
--------------	------------------------------------

Hybrid Automata (Regular Session)

Chair: Caines, Peter E.	McGill Univ.
Co-Chair: Collins, Pieter	Maastricht Univ.

16:10-16:35	ThCT1.1
-------------	---------

Hybrid Thermodynamic Control Systems with Phase Transitions, pp. 277-283.

Gromov, Dmitry	McGill Univ.
Caines, Peter E.	McGill Univ.

16:35-17:00	ThCT1.2
-------------	---------

Computing the Evolution of Hybrid Systems Using Rigorous Function Calculus, pp. 284-290.

Collins, Pieter	Maastricht Univ.
Bresolin, Davide	Univ. of Verona
Geretti, Luca	Univ. of Udine
Villa, Tiziano	Univ. di Verona

17:00-17:25	ThCT1.3
-------------	---------

From Control-Command Synchronous Programs to Hybrid Automata, pp. 291-298.

Bouissou, Olivier

CEA LIST

ThCT2	Dorgelo Room (Traverse building)
--------------	----------------------------------

Variable Structure Methods for Hybrid Systems II (Invited Session)

Chair: Fridman, Leonid M.	National Autonomous Univ. of Mexico
---------------------------	-------------------------------------

Co-Chair: Navarro Lopez, Eva Maria	Univ. of Manchester
------------------------------------	---------------------

Organizer: Fridman, Leonid M.	National Autonomous Univ. of Mexico
-------------------------------	-------------------------------------

Organizer: Davila, Jorge	National Pol. Inst. (IPN, ESIME - UPT)
--------------------------	--

16:10-16:35	ThCT2.1
-------------	---------

A Hybrid Automaton for a Class of Multi-Contact Rigid-Body Systems with Friction and Impacts (I), pp. 299-306.

O'Toole, Michael Daniel	Univ. of Manchester
-------------------------	---------------------

Navarro Lopez, Eva Maria	Univ. of Manchester
--------------------------	---------------------

16:35-17:00	ThCT2.2
-------------	---------

Approximability and Variational Description of the Zeno Behavior in Affine Switched Systems (I), pp. 307-312.

Azhmyakov, Vadim	CINVESTAV
------------------	-----------

Miranda Villatoro, Félix Alfredo	Cinvestav
----------------------------------	-----------

Technical Program for Friday June 8, 2012

FrAT1	Van Trier Room (Traverse building)
Robotic and Vehicular Networks (Regular Session)	
Chair: Egerstedt, Magnus	Georgia Inst. of Tech.
Co-Chair: Seatzu, Carla	Univ. of Cagliari
08:45-09:10	FrAT1.1
<i>Self-Reconfiguration Using Graph Grammars for Modular Robotics</i> , pp. 313-318.	
Pickem, Daniel	Georgia Inst. of Tech.
Egerstedt, Magnus	Georgia Inst. of Tech.
09:10-09:35	FrAT1.2
<i>Multi-Robot Routing for Servicing Spatio-Temporal Requests: A Musically Inspired Problem</i> , pp. 319-324.	
Chopra, Smriti	Georgia Inst. of Tech.
Egerstedt, Magnus	Georgia Inst. of Tech.
09:35-10:00	FrAT1.3
<i>A Gossip Algorithm for Heterogeneous Multi-Vehicle Routing Problems</i> , pp. 325-332.	
Franceschelli, Mauro	Univ. of Cagliari
Rosa, Daniele	Univ. of Cagliari, Italy
Seatzu, Carla	Univ. of Cagliari
Bullo, Francesco	Univ. of California, Santa Barbara
10:00-10:25	FrAT1.4
<i>Safety Verification of a Controlled Cooperative Platoon under Loss of Communication Using Zonotopes</i> , pp. 333-338.	
Ben Makhlof, Ibtissem	Embedded Software Lab. RWTH Aachen
Diab, Hilal	RWTH Aachen Univ.
Kowalewski, Stefan	RWTH Aachen Univ.
10:25-10:50	FrAT1.5
<i>Robotic Mass Games by Distributed Hybrid Controllers</i> , pp. 339-343.	
Izumi, Shinsaku	Kyoto Univ.
Azuma, Shun-ichi	Kyoto Univ.
Sugie, Toshiharu	Kyoto Univ.
FrAT2	Dorgelo Room (Traverse building)
Hybrid Techniques for Traffic Systems Modeling and Control (Invited Session)	
Chair: Sacone, Simona	Univ. of Genova
Co-Chair: Dotoli, Mariagrazia	Pol. di Bari
Organizer: Sacone, Simona	Univ. of Genova
Organizer: Siri, Silvia	Univ. of Genova
08:45-09:10	FrAT2.1
<i>A Hybrid Automaton for Multi-Class Ramp Metering in Freeway Systems (I)</i> , pp. 344-349.	
Sacone, Simona	Univ. of Genova
Siri, Silvia	Univ. of Genova
Torriani, Filippo	Univ. of Genova, Department of Communication, Computer and
09:10-09:35	FrAT2.2
<i>Freeway Traffic Control Via Route Guidance: An Approach Based on a First Order Hybrid Petri Nets Model (I)</i> , pp. 350-355.	
Dotoli, Mariagrazia	Pol. di Bari
09:35-10:00	FrAT2.3
<i>Hybrid Driver-Vehicle Dynamics in Microscopic Modeling of Traffic</i>	

Networks (I), pp. 356-363.

Falconi, Riccardo	Univ. of Bologna
Longhin, Chiara	CASY-DEIS Univ. of Bologna
Paoli, Andrea	Univ. of Bologna
Bonivento, Claudio	Univ. of Bologna

10:00-10:25 FrAT2.4

An Improved Freeway Traffic Model in a First Order Hybrid Petri Net Framework (I), pp. 364-369.

Fanti, Maria Pia	Pol. di Bari
Iacobellis, Giorgio	Pol. di Bari
Mangini, Agostino Marcello	Pol. di Bari
Ukovich, Walter	Univ. of Trieste

10:25-10:50 FrAT2.5

Safety Criticality Analysis of Complex Air Traffic Management Systems Via Compositional Bisimulation, pp. 370-375.

Petriccone, Alessandro	Univ. of L'Aquila
Pola, Giordano	Univ. of L'Aquila
Di Benedetto, M. Domenica	Univ. of L'Aquila
De Santis, Elena	Univ. of L'Aquila

FrBT1 Van Trier Room (Traverse building)

Stability of Hybrid Systems I (Regular Session)

Chair: Teel, Andrew R.	Univ. of California at Santa Barbara
Co-Chair: Prieur, Christophe	CNRS

11:20-11:45 FrBT1.1

Global Tracking and State Estimation with Nonsmooth Impacts for a Mass Confined to an N-Dimensional Half-Space, pp. 376-381.

Forni, Fulvio	Univ. of Liège
Teel, Andrew R.	Univ. of California at Santa Barbara
Zaccarian, Luca	Univ. di Roma, Tor Vergata

11:45-12:10 FrBT1.2

Lyapunov Functions for Switched Linear Hyperbolic Systems, pp. 382-387.

Prieur, Christophe	CNRS
Girard, Antoine	Univ. Joseph Fourier
Witrant, Emmanuel	Univ. Joseph Fourier

12:10-12:35 FrBT1.3

On Hybrid State-Feedback Loops Based on a Dwell-Time Logic, pp. 388-393.

Fichera, Francesco	UPS, INSA, INP, ISAE, UT1, UTM, LAAS
Prieur, Christophe	CNRS
Tarbouriech, Sophie	LAAS-CNRS
Zaccarian, Luca	Univ. di Roma, Tor Vergata

FrBT2 Dorgelo Room (Traverse building)

Stochastic Hybrid Systems I (Regular Session)

Chair: Cassandras, Christos G.	Boston Univ.
Co-Chair: Prandini, Maria	Pol. di Milano

11:20-11:45 FrBT2.1

A General Framework for Modeling and Online Optimization of Stochastic Hybrid Systems, pp. 394-399.

Kebarighotbi, Ali	Boston Univ.
Cassandras, Christos G.	Boston Univ.

11:45-12:10 FrBT2.2

Remarks on P-Stabilizability of Stochastic Linear Hybrid Systems, pp. 400-405.

Seroka, Ewelina Cardinal Stefan Wyszyński Univ.
Socha, Lesław Cardinal Stefan Wyszyński Univ.
in Warsaw NIP: 5250012946

12:10-12:35 FrBT2.3

A Simulation-Based Approach to the Approximation of Stochastic Hybrid Systems, pp. 406-411.

Garatti, Simone Pol. di Milano
Prandini, Maria Pol. di Milano

FrCT1 Van Trier Room (Traverse building)

Stability of Hybrid Systems II (Regular Session)

Chair: Zaytoon, Janan Univ. of Reims
Co-Chair: Seuret, Alexandre CNRS - INPG

15:30-15:55 FrCT1.1

Robust Stability of Impulsive Systems: A Functional-Based Approach, pp. 412-417.

Briat, Corentin ETH Zürich
Seuret, Alexandre CNRS - INPG

15:55-16:20 FrCT1.2

On Finite Gain L_p Stability for Hybrid Systems, pp. 418-423.

Nesic, Dragan Univ. of Melbourne
Teel, Andrew R. Univ. of California at Santa Barbara
Valmórbida, Giórgio Univ. degli Studi di Roma - Tor Vergata
Zaccarian, Luca Univ. di Roma, Tor Vergata

16:20-16:45 FrCT1.3

Decentralized Stabilization of Interconnected Switched Descriptors Via a Multiple Switched Lyapunov Functional, pp. 424-429.

Jabri, Dalel CReSTIC - URCA
Guelton, Kevin Univ. de Reims Champagne-Ardenne
Manamanni, Nouredine Univ. de Reims Champagne-Ardenne

FrCT2 Dorgelo Room (Traverse building)

Stochastic Hybrid Systems II (Regular Session)

Chair: Bemporad, Alberto IMT Inst. for Advanced Studies Lucca
Co-Chair: Bujorianu, Manuela Univ. of Manchester

15:30-15:55 FrCT2.1

Hybrid Modelling and Reachability on Autonomous RC-Cars, pp. 430-435.

Wood, Tony Alan ETH Zurich
Mohajerin Esfahani, Peyman ETH Zurich
Lygeros, John ETH Zurich

15:55-16:20 FrCT2.2

Control of Uncertain Hybrid Nonlinear Systems Using Particle Filters, pp. 436-441.

Asselborn, Leo Univ. of Kassel
Jilg, Martin Univ. of Kassel
Stursberg, Olaf Univ. of Kassel

16:20-16:45 FrCT2.3

Contingent Hybrid Systems, pp. 442-447.

Bujorianu, Manuela Univ. of Manchester
Bujorianu, Marius Constantin Univ. of Manchester

16:45-17:10 FrCT2.4

Performance Analysis of Descriptor Jump Linear Systems, pp. 448-452.

Chavez Fuentes, Jorge R. Pontificia Univ. Católica del Perú/ SaoPauloUniversity
Costa, Eduardo F. Univ. de São Paulo
Terra, Marco Henrique Univ. of Sao Paulo