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Kamgarpour, Maryam	ETH Zurich
Abate, Alessandro	TU Delft - Delft Univ. of Tech.
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Johansson, Mikael	Royal Inst. of Tech.
Schenato, Luca	Univ. of Padova
TuW3	HG D7.1
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Atay, Fatihcan	Max Planck Inst. for Mathematics in the Sciences
Breda, Dimitri	Univ. of Udine
Michiels, Wim	K.U. Leuven
Niculescu, Silviu-Iulian	UMR CNRS 8506, CNRS-SUPELEC
Ozbay, Hitay	Bilkent Univ.
Sipahi, Rifat	Northeastern Univ.
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Zhang, Youmin	Concordia Univ.
Chen, YangQuan	Univ. of California, Merced
Edwards, Christopher	Univ. of Exeter
Fulford, Cameron	Quanser Inc.
Goupil, Philippe	AIRBUS Operations S.A.S.
Hu, Qinglei	Harbin Inst. of Tech.
Liu, Hongtao	Univ. of Toronto
Marcos, Andres	Deimos Space S.L.
Noura, Hassan	United Arab Emirates Univ.
Puig, Vicenc	Univ. Pol. de Catalunya
Theilliol, Didier	Univ. of Lorraine
Tsourdos, Antonios	Cranfield Univ.

Technical Program for Wednesday July 17, 2013

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Chair: Morari, Manfred	ETH Zurich
08:30-09:30	WePT1.1
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Bertsimas, Dimitris	M.I.T.
WeA1	HG F1
Sparse and Low-Rank Representation Methods in Control, Estimation and System Identification (Tutorial Session)	
Chair: Wahlberg, Bo	KTH
Organizer: Wahlberg, Bo	KTH
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Vandenberghe, Lieven	Univ. of California, Los Angeles
10:30-11:10	WeA1.2
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Jovanovic, Mihailo	Univ. of Minnesota
11:10-11:50	WeA1.3
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Rojas, Cristian R.	KTH Royal Inst. of Tech.
Wahlberg, Bo	KTH Royal Inst. of Tech.
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Model Predictive Control I (Regular Session)	
Chair: Richards, Arthur	Univ. of Bristol
Co-Chair: Findeisen, Rolf	Univ. of Magdeburg
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Richards, Arthur	Univ. of Bristol
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Limon, Daniel	Univ. de Sevilla
Alamo, Teodoro	Univ. de Sevilla
Pereira Martin, Mario	Univ. de Sevilla
Ferramosca, Antonio	CONICET - UNL
González, Alejandro H.	CONICET
Odloak, Darci	Department of Chemical Engineering, Univ. of Sao Paulo
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Shah, Gaurang	Tech. Univ. Dortmund
Engell, Sebastian	TU Dortmund
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Feller, Christian	Univ. of Stuttgart
Ebenbauer, Christian	Univ. of Stuttgart
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Koegel, Markus	OVG Univ. Magdeburg
Findeisen, Rolf	Univ. of Magdeburg

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Jost, Michael	Ruhr-Univ. Bochum
Mönnigmann, Martin	Ruhr-Univ. Bochum
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Co-Chair: Witrant, Emmanuel	Univ. Joseph Fourier
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Reis, Timo	Univ. Hamburg
Wollner, Winnifried	Univ. Hamburg
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Mechhoud, Sarah	Univ. Grenoble 1
Witrant, Emmanuel	Univ. Joseph Fourier
Dugard, Luc	CNRS-INPG
Moreau, Didier	CEA
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Dubljevic, Stevan	Univ. of Alberta
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Hamalainen, Timo	Tampere Univ. of Tech.
Pohjolainen, Seppo	Tampere Univ. of Tech.
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Pham, Van Thang	Univ. of Grenoble - Gipsa-Lab.
Georges, Didier	Grenoble Inst. of Tech.
Besancon, Gildas	Ense3 - Grenoble INP
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Bonnans, Frederic	INRIA-Saclay and CMAP
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Co-Chair: Barmish, B. Ross	Univ. of Wisconsin
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Mishra, Anshuman	Univ. of Illinois at Urbana-Champaign
Langbort, Cedric	UIUC
Dullerud, Geir E.	Univ. of Illinois at Urbana-Champaign
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Dragan, Vasile	Romanian Acad.
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Mohajerin Esfahani, Peyman Miliadis, Andreas Chatterjee, Debasish	Automatic Control Lab. Swiss Federal Inst. of Technolo ETH Zurich Indian Inst. of Tech. Bombay
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Huang, Chun-Chia Bitmead, Robert	Univ. of California, San Diego Univ. of California San Diego
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Barbata, Asma Zasadzinski, Michel Souley Ali, Harouna Messaoud, Hassani	CRAN CRAN Cran Ec. Nationale d'Ingénieurs de Monastir
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Chair: Mahulea, Cristian Co-Chair: Basile, Francesco	Univ. of Zaragoza Univ. Degli Studi Di Salerno
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Yang, Jung-Min Park, Seong-Jin Kwak, Seong Woo	Catholic Univ. of Daegu Ajou Univ. Keimyung Univ.
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Delaval, Gwenaël De Palma, Noel Gueye, Soguy Mak karé Marchand, Herve Rutten, Eric	Univ. Grenoble UJF, LIG / INRIA Grenoble UJF, INRIA-Grenoble / LIG INRIA, centre Rennes Bretagne-Atlantique LIG / INRIA Grenoble
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Shang, Ying Hardouin, Laurent Lhommeau, Mehdi Maia, Carlos Andrey	Southern Illinois University Edwardsville Univ. of Angers Univ. d'Angers Univ. Federal de Minas Gerais
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Batis, Sonia Alla, Hassane	Gipsa-Lab. Grenoble INP Grenoble University
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Wang, Liewei Mahulea, Cristian Silva, Manuel	Univ. of Zaragoza Univ. of Zaragoza Univ. De Zaragoza
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Basile, Francesco Cordone, Roberto	Univ. Degli Studi Di Salerno Univ. degli Studi di Milano

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Co-Chair: Spurgeon, Sarah K.	Univ. of Kent
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Röbenack, Klaus	TU Dresden
Paschke, Fabian	TU Dresden
Knoll, Carsten	TU Dresden
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Richard, Edouard	Nancy Univ.
Boutayeb, M.	Lorraine Univ.
Zasadzinski, Michel	CRAN
Zemouche, Ali	Nancy-Univ.
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Reyes, Alex	Univ. Pol. de Catalunya-BarcelonaTech
Agrawal, Sunil K.	Univ. of Delaware
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Franke, Matthias	Fraunhofer IIS
Röbenack, Klaus	TU Dresden
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Scherpen, Jacquelin M.A.	Univ. of Groningen
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Spurgeon, Sarah K.	Univ. of Kent
Zhu, Quanmin	Univ. of the West of England
Zhang, Qingling	Northeastern Univ.
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Co-Chair: Ober-Blöbaum, Sina	Univ. of Paderborn
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Goulart, Paul J.	ETH Zurich
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Kunz, Konstantin	ETH Zurich
Kariotoglou, Nikolaos	ETH Zurich
Kamgarpour, Maryam	ETH Zurich

Summers, Sean	ETH Zurich
Lygeros, John	ETH Zurich
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Cowan, Noah	Johns Hopkins Univ.
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Ober-Blöbaum, Sina	Univ. of Paderborn
Seifried, Albert	Univ. of Paderborn
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Aleksandrov, Vladimir	Moscow State Univ.
Budninskiy, Maxim	Moscow State Univ.
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Aronna, Maria Soledad	Imperial Coll. of London
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Chair: Dimarogonas, Dimos V.	Royal Inst. of Tech. (KTH)
Co-Chair: Kibangou, Alain Yuwa	GIPSA-Lab. Joseph Fourier/CNRS
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Malhame, Roland P.	Ec. Pol. de Montreal
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Kibangou, Alain Yuwa	GIPSA-Lab. Joseph Fourier/CNRS
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Raisch, Joerg	Tech. Univ. Berlin
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Meng, Ziyang	Royal Inst. of Tech.
Dimarogonas, Dimos V.	Royal Inst. of Tech. (KTH)
Johansson, Karl Henrik	Royal Inst. of Tech.
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Lyons, Daniel	Karlsruhe Inst. of Tech.
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Co-Chair: Widmer, Tobias	ETH Zurich

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Gryazina, Elena	Inst. for Control Sciences RAS
Cogni, Alberto	Dipartimento di Ingegneria dell'Informazione e Metodi Matematici
Spelta, Cristiano	Univ. degli Studi di Bergamo
Previdi, Fabio	Univ. degli Studi di Bergamo
Savaresi, Sergio M.	Pol. Di Milano
Pesenti, Ivan	R&D Business Unit Scaglia-Indeva
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Muehlebach, Michael	ETH Zurich
Widmer, Tobias	ETH Zurich
D'Andrea, Raffaello	ETH Zurich
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Wagner, John	Clemson Univ.
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Sawodny, Oliver	Univ. of Stuttgart
Tarin, Cristina	Univ. of Stuttgart
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Rocha, Paula	Univ. of Porto
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Kucera, Vladimir	Czech Tech. Univ. in Prague
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Ferrante, Augusto	Univ. di Padova

Ntogramatzidis, Lorenzo	Curtin Univ.
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Vettori, Paolo	Univ. of Aveiro
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Middleton, Rick	The Univ. of Newcastle
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Co-Chair: Kyriakopoulos, Kostas J.	National Tech. Univ. of Athens
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Filipe, Nuno	Georgia Inst. of Tech.
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Burlion, Laurent	ONERA
Ahmed-Ali, Tarek	ENSIETA
Lamnabhi-Lagarrigue, Françoise	CNRS-ECCI
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Dritsas, Leonidas	Univ. of Patras
Kyriakopoulos, Kostas J.	National Tech. Univ. of Athens
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Chaudenson, Julien	SUPELEC Sciences des Systemes (E3S)
Beauvois, Dominique	Ec. Superieure D'Electricite
Bennani, Samir	ESA/ESTEC (TEC-Ec.
Ganet-Schoeller, Martine	ASTRIUM Space Transportation
Sandou, Guillaume	Ec. Superieure d Electricite
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Demourant, Fabrice	ONERA-CERT
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Co-Chair: Fabri, Simon G.	Univ. of Malta
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Gibson, Travis	Massachusetts Inst. of Tech.
Annaswamy, Anuradha	Massachusetts Inst. of Tech.
Lavretsky, Eugene	The Boeing Co.
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Miller, Boris		Monash Univ. Clayton Campus
Nazin, Alexander V.		Inst. of Control Sciences, RAS
10:30-10:50		WeA12.3
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Jacobsen, Elling W.		Royal Inst. of Tech. - KTH
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Fagiano, Lorenzo		ETH Zurich
Smith, Roy S.		ETH Zurich
Goulart, Paul J.		ETH Zurich
Morari, Manfred		ETH Zurich
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Bugeja, Marvin K.		Univ. of Malta
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Co-Chair: Puig, Vicenc		Univ. Pol. de Catalunya
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Namerikawa, Toru		Keio Univ.
Uchida, Kenko		Waseda Univ.
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Garza-Castañón, Luis		Tecnológico de Monterrey, Campus Monterrey
Puig, Vicenc		Univ. Pol. de Catalunya
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Puig, Vicenc		Univ. Pol. de Catalunya
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Xie, Lei		National Key Lab. of Industrial Control Tech.
Kruger, Uwe		Queens Univ. of Belfast
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Polycarpou, Marios M.		Univ. of Cyprus
Parisini, Thomas		Imperial Coll. & Univ. of Trieste
11:30-11:50		WeA13.6

Contribution Plots for Statistical Process Control: Analysis of the Smearing-Out Effect, pp. 428-433.

Van den Kerkhof, Pieter
Vanlaer, Jef
Gins, Geert
Van Impe, Jan F.M.

KU Leuven
Chemical & Biochemical Process Tech. & Control (BioTeC), De
Chemical & Biochemical Process Tech. & Control (BioTeC), De
Katholieke Univ. Leuven

WeA14	HG D7.1
Automotive Control (Regular Session)	
Chair: Brun, Xavier	Insa de Lyon
Co-Chair: Glielmo, Luigi	Univ. of Sannio
09:50-10:10	WeA14.1
<i>Torque Control of a Diesel Engine by an Eigenpressure Based Approach</i> , pp. 434-439.	
Moser, Dominik	Johannes Kepler Univ. Linz
Hahn, Sebastian	Johannes Kepler Univ. Linz
Waschl, Harald	Johannes Kepler Univ. Linz
Del Re, Luigi	Johannes Kepler Univ. Linz
10:10-10:30	WeA14.2
<i>Robust Vehicle Stability Control with an Uncertain Driver Model</i> , pp. 440-445.	
Carvalho, Ashwin	Univ. of California, Berkeley
Palmieri, Giovanni	Univ. del Sannio
Tseng, Hongtei Eric	FORD
Glielmo, Luigi	Univ. of Sannio
Borrelli, Francesco	Univ. of California, Berkeley
10:30-10:50	WeA14.3
<i>Comparison of Feedback Linearization and Flatness Control for Anti-Slip Regulation (ASR) of an Hybrid Vehicle : From Theory to Experimental Results</i> , pp. 446-451.	
Chapuis, Cédric	Sagem DS
Bideaux, Eric	INSA Lyon, Lab. Ampere
Brun, Xavier	Insa de Lyon
Minoiu Enache, Nicoleta	Renault SAS
10:50-11:10	WeA14.4
<i>Optimal Energy Management for a Mechanical-Hybrid Vehicle with Cold Start Conditions</i> , pp. 452-457.	
van Berkel, Koos	Tech. Univ. Eindhoven
Klemm, Wouter	Tech. Univ. Eindhoven
Hofman, Theo	TU/e
Vroemen, Bas	Drivetrain Innovations
Steinbuch, Maarten	Eindhoven Univ. of Tech.
11:10-11:30	WeA14.5
<i>Model Predictive Parking Control for Nonholonomic Vehicles Using Time-State Control Form</i> , pp. 458-465.	
Oyama, Kentaro	Tokyo City Univ.
Nonaka, Kenichiro	Tokyo City Univ.
WeA15	HG D7.2
Wind Turbines (Regular Session)	
Chair: Alexandridis, Antonios	Univ. of Patras
Co-Chair: Martinez, John-Jairo	Gipsa-Lab. INP-Grenoble
09:50-10:10	WeA15.1
<i>Optimal Flux Magnitude Tracking with Application to Fault-Tolerant Control of Wind Turbine Generators</i> , pp. 466-471.	
Lesic, Vinko	Univ. of Zagreb, Faculty of Electrical Engineering and Comp
Vašak, Mario	Univ. of Zagreb
Perić, Nedjeljko	Univ. of Zagreb
Joksimović, Gojko	Univ. of Montenegro, Faculty of Electrical Engineering
Wolbank, Thomas	Vienna Univ. of Tech. Faculty of Electrical Engineeri

10:10-10:30	WeA15.2
<i>Experimental Validation of Wind Turbine Higher Harmonic Control Using Shaft Loads Measurements</i> , pp. 472-477.	
Petrović, Vlaho	Univ. of Zagreb
Campagnolo, Filippo	Pol. di Milano
10:30-10:50	WeA15.3
<i>Observer-Based Maximum Power Tracking in Wind Turbines with Only Generator Speed Measurement</i> , pp. 478-483.	
Sandoval-Moreno, John	GIPSA Lab. Grenoble-INP
Besancon, Gildas	Ense3 - Grenoble INP
Martinez, John-Jairo	Gipsa-Lab. INP-Grenoble
10:50-11:10	WeA15.4
<i>Nonlinear Stability Analysis of DFIG Wind Generators in Voltage Oriented Control Operation</i> , pp. 484-489.	
Bourdoulis, Michael	Univ. of Patras
Alexandridis, Antonios	Univ. of Patras
11:10-11:30	WeA15.5
<i>An MPC Approach to Individual Pitch Control of Wind Turbines Using Uncertain LIDAR Measurements</i> , pp. 490-495.	
Mirzaei, Mahmood	Tech. Univ. of Denmark
Soltani, Mohsen	Aalborg Univ.
Poulsen, Niels Kjølstad	Tech. Univ. of Denmark
Niemann, Henrik	Tech. Univ. of Denmark
11:30-11:50	WeA15.6
<i>A Novel Online Controller Redesign Approach to Fault Accommodation in Wind Turbine Systems</i> , pp. 496-501.	
Jain, Tushar	Aalto Univ.
Yamé, Joseph-Julien	Univ. Henri Poincaré
Sauter, Dominique	Lorraine Univ.
Aberkane, Samir	UHP, NANCY 1
WeST1	HG F1, F3
Semi-Plenary 1: Power Grid Stability Despite Renewable Instability (Semi-Plenary Session)	
Chair: Kowalewski, Stefan	RWTH Aachen Univ.
12:00-12:45	WeST1.1
<i>Power Grid Stability Despite Renewable Instability*</i> .	
Hermanns, Holger	Saarland Univ.
WeST2	HG F7, F5
Semi-Plenary 2: The Scenario Approach to Stochastic Optimization (Semi-Plenary Session)	
Chair: Goulart, Paul J.	ETH Zurich
12:00-12:45	WeST2.1
<i>The Scenario Approach to Stochastic Optimization*</i> .	
Campi, M. C.	Univ. di Brescia
WeB1	HG F1
Theory and Practice of Explicit MPC (Tutorial Session)	
Chair: Jones, Colin N	EPFL, Lausanne
Co-Chair: Kvasnica, Michal	Slovak Univ. of Tech. in Bratislava
Organizer: Jones, Colin N	EPFL, Lausanne
Organizer: Kvasnica, Michal	Slovak Univ. of Tech. in Bratislava
Organizer: Herceg, Martin	Swiss Federal Inst. of Tech. - ETH Zurich
14:00-14:20	WeB1.1
<i>Explicit Model Predictive Control: Basics, Fast Implementations, Advantages and Limitations (I)*</i> .	
Bemporad, Alberto	IMT Inst. for Advanced Studies Lucca
14:20-14:40	WeB1.2
<i>General Purpose Computational Tool for Explicit MPC: MPT3.0 (I)</i> , pp. 502-510.	

Herceg, Martin	Swiss Federal Inst. of Tech. - ETH Zurich
Kvasnica, Michal	Slovak Univ. of Tech. in Bratislava
Jones, Colin N	EPFL, Lausanne
Morari, Manfred	ETH Zurich
14:40-15:00	WeB1.3
<i>Complexity Reduction in Explicit MPC: From Theory to Implementation (I)*.</i>	
Kvasnica, Michal	Slovak Univ. of Tech. in Bratislava
Holaza, Juraj	Slovak Univ. of Tech. in Bratislava
Takács, Bálint	Slovak Univ. of Tech. in Bratislava
15:00-15:20	WeB1.4
<i>Approximate Nonlinear Explicit MPC Based on Reachability Analysis (I)*.</i>	
Raimondo, Davide Martino	Univ. of Pavia
Schulze Darup, Moritz	Ruhr-Univ. Bochum
Mönnigmann, Martin	Ruhr-Univ. Bochum
15:20-15:40	WeB1.5
<i>High-Speed High-Performance Model Predictive Control of Power Electronics Systems (I)*.</i>	
Mariethoz, Sebastien	ETH Zurich
15:40-16:00	WeB1.6
<i>Explicit MPC Applications in the Mechatronics Industry: Technology Transfer Potential and Current Limitations (I)*.</i>	
Di Cairano, Stefano	Mitsubishi Electric Res. Lab.
WeB2	HG F3
Model Predictive Control II (Regular Session)	
Chair: Maciejowski, Jan M.	Univ. of Cambridge
Co-Chair: Falugi, Paola	Imperial Coll.
14:00-14:20	WeB2.1
<i>Stabilizing Linear Model Predictive Control: On the Enlargement of the Terminal Set, pp. 511-517.</i>	
Brunner, Florian David	Univ. of Stuttgart
Lazar, Mircea	Eindhoven Univ. of Tech.
Allgower, Frank	Univ. of Stuttgart
14:20-14:40	WeB2.2
<i>Model Predictive Control for Tracking Random References, pp. 518-523.</i>	
Falugi, Paola	Imperial Coll.
Mayne, David Q.	Imperial Coll. London
14:40-15:00	WeB2.3
<i>Stabilising Terminal Cost and Terminal Controller for ℓ_1-MPC: Enhanced Optimality and Region of Attraction, pp. 524-529.</i>	
Gallieri, Marco	Univ. of Cambridge
Maciejowski, Jan M.	Univ. of Cambridge
15:00-15:20	WeB2.4
<i>Evaluation of Constrained Multivariable EPSAC Predictive Control Methodologies, pp. 530-535.</i>	
Medina Sanchez, Robinson	Univ. de Ibague
Hernandez, Andres	Ghent Univ.
Ionescu, Clara	Ghent Univ.
De Keyser, Robin M.C.	Univ. of Gent
15:20-15:40	WeB2.5
<i>Explicit MPC of Higher-Order Linear Processes Via Combinatorial Multi-Parametric Quadratic Programming, pp. 536-541.</i>	
Feller, Christian	Univ. of Stuttgart
Johansen, Tor Arne	Norwegian Univ. of Sci. & Tech.
15:40-16:00	WeB2.6
<i>Robust Model Predictive Control of Uncertain Linear Systems with Persistent Disturbances and Input Constraints, pp. 542-547.</i>	
Yang, Weilin	City Univ. of Hong Kong

WeB3		HG F5
Distributed Parameter Systems II (Regular Session)		
Chair: Aschemann, Harald		Univ. of Rostock
Co-Chair: Schöberl, Markus		Johannes Kepler Univ. Linz
14:00-14:20		WeB3.1
<i>Analysis and Comparison of Port-Hamiltonian Formulations for Field Theories - Demonstrated by Means of the Mindlin Plate</i> , pp. 548-553.		
Schöberl, Markus		Johannes Kepler Univ. Linz
Siuka, Andreas		Johannes Kepler Univ. Linz
14:20-14:40		WeB3.2
<i>Stability Analysis for Structured Feedback Interconnections of Distributed-Parameter Systems and Time-Varying Uncertainties</i> , pp. 554-559.		
Kao, Chung-Yao		National Sun Yat-Sen Univ.
Cantoni, Michael		Univ. of Melbourne
14:40-15:00		WeB3.3
<i>Solvability of the Output Regulation Problem with a Feedforward Controller</i> , pp. 560-565.		
Laakkonen, Petteri		Tampere Univ. of Tech.
Pohjolainen, Seppo		Tampere Univ. of Tech.
15:00-15:20		WeB3.4
<i>Boundary Port Hamiltonian Control of a Class of Nanotweezers</i> , pp. 566-571.		
Ramirez, Hector		Ec. Nationale Supérieure de Mécanique et de Microtechniques (E
Le Gorrec, Yann		FEMTO-ST
15:20-15:40		WeB3.5
<i>The Method of Integro-Differential Relations for Control of Spatially Two-Dimensional Heat Transfer Processes</i> , pp. 572-577.		
Rauh, Andreas		Univ. of Rostock
Dittrich, Christina		Univ. of Rostock
Aschemann, Harald		Univ. of Rostock
15:40-16:00		WeB3.6
<i>Robustness Properties of Controllers with Reduced Order Internal Models</i> , pp. 578-583.		
Paunonen, Lassi		Tampere Univ. of Tech.
Pohjolainen, Seppo		Tampere Univ. of Tech.
WeB4		HG F7
Stochastic Systems II (Regular Session)		
Chair: Olshevsky, Alexander		Univ. of Illinois at Urbana-Champaign
Co-Chair: Balakrishnan, Hamsa		Massachusetts Inst. of Tech.
14:00-14:20		WeB4.1
<i>Approximate Dynamic Programming for Stochastic Reachability</i> , pp. 584-589.		
Kariotoglou, Nikolaos		ETH Zurich
Summers, Sean		ETH Zurich
Summers, Tyler H.		ETH Zurich
Kamgarpour, Maryam		ETH Zurich
Lygeros, John		ETH Zurich
14:20-14:40		WeB4.2
<i>Optimal H2 Mode-Independent Filter for Generalized Bernoulli Jump Systems</i> , pp. 590-595.		
Gonçalves, Alim P. C.		UNICAMP
Fioravanti, Andre Ricardo		INRIA Roquencourt
Geromel, Jose C.		UNICAMP
14:40-15:00		WeB4.3
<i>Combinatorial Bounds and Scaling Laws for Noise Amplification in Networks</i> , pp. 596-601.		

Jadbabaie, Ali Olshevsky, Alexander	Univ. of Pennsylvania Univ. of Illinois at Urbana-Champaign
15:00-15:20	WeB4.4
<i>Stochastic Localization of Sources with Convergence Guarantees</i> , pp. 602-607.	
Huck, Stephan Marc	ETH Zurich
Lygeros, John	ETH Zurich
15:20-15:40	WeB4.5
<i>Optimal Control of Airport Operations with Gate Capacity Constraints</i> , pp. 608-613.	
Khadiikar, Harshad	Massachusetts Inst. of Tech.
Balakrishnan, Hamsa	Massachusetts Inst. of Tech.
15:40-16:00	WeB4.6
<i>Stability of Dynamic Traveling Repairman Problem under Polling-Sequencing Policies</i> , pp. 614-619.	
Huang, Jiangchuan	Univ. of California, Berkeley
Sengupta, Raja	Univ. of California at Berkeley
WeB5	HG E1.1
Event Based Detection and Control (Regular Session)	
Chair: Dormido, Sebastián	UNED
Co-Chair: Leva, Alberto	Pol. di Milano
14:00-14:20	WeB5.1
<i>Feedback-Based Memory Management with Active Swap-In</i> , pp. 620-625.	
Terraneo, Federico	Pol. di Milano
Leva, Alberto	Pol. di Milano
14:20-14:40	WeB5.2
<i>Experimental Study of Two Event-Based PI Controllers in a Solar Distributed Collector Field</i> , pp. 626-631.	
Chacón Sombria, Jesús	UNED
Sánchez Moreno, José	UNED
Yebra, Luis José	CIEMAT-Plataforma Solar de Almería
Visioli, Antonio	Univ. of Brescia
Dormido, Sebastián	UNED
14:40-15:00	WeB5.3
<i>Non-Parametric Analysis of Eye-Tracking Data by Anomaly Detection</i> , pp. 632-637.	
Jansson, Daniel	Uppsala Univ.
Rosén, Olov	Uppsala Univ.
Medvedev, Alexander V.	Uppsala Univ.
15:00-15:20	WeB5.4
<i>Self-Triggered Model Predictive Control for Nonholonomic Systems</i> , pp. 638-643.	
Eqtami, Alina	National Tech. Univ. of Athens
Heshmati-alamdari, Shahab	National Tech. Univ. of Athens
Dimarogonas, Dimos V.	Royal Inst. of Tech. (KTH)
Kyriakopoulos, Kostas J.	National Tech. Univ. of Athens
15:20-15:40	WeB5.5
<i>A Stopping Rule for Simultaneous Perturbation Stochastic Approximation</i> , pp. 644-649.	
Wada, Takayuki	OsakaUniversity
Fujisaki, Yasumasa	Osaka Univ.
15:40-16:00	WeB5.6
<i>An Integrated Systems Engineering Framework for Supervisor Synthesis, Verification, and Performance Evaluation</i> , pp. 650-657.	
Markovski, Jasen	Eindhoven Univ. of Tech.
WeB6	HG E1.2
Nonlinear System Theory II (Regular Session)	
Chair: Henrion, Didier	Czech Tech. Univ. in Prague

Co-Chair: Kablar, Natasa A.	Louisiana State Univ.
14:00-14:20	WeB6.1
<i>Control Polynomial Dynamical Systems on Rectangles</i> , pp. 658-663.	
Ben Sassi, Mohamed Amin	Lab. Jean Kuntzmann, Univ. de Grenoble
Girard, Antoine	Univ. Joseph Fourier
14:20-14:40	WeB6.2
<i>A New Approach to the Solution of Free Rigid Body Motion for Attitude Maneuvers</i> , pp. 664-669.	
Pagnozzi, Daniele	Strathclyde Univ.
Macleay, Craig	Strathclyde Univ.
Biggs, James Douglas	Univ. of Strathclyde
14:40-15:00	WeB6.3
<i>On the Analysis of the Bifurcation Sets of Equilibrium Points in Parameter Space</i> , pp. 670-675.	
Chesi, Graziano	Univ. of Hong Kong
Tanaka, Gouhei	The Univ. of Tokyo
Hirata, Yoshito	The Univ. of Tokyo
Aihara, Kazuyuki	The Univ. of Tokyo
15:00-15:20	WeB6.4
<i>Convex Computation of the Region of Attraction of Polynomial Control Systems</i> , pp. 676-681.	
Henrion, Didier	Czech Tech. Univ. in Prague
Korda, Milan	École Pol. Fédérale de Lausanne (EPFL)
15:20-15:40	WeB6.5
<i>Embedding the Generalized Acrobot into the N-Link with an Unactuated Cyclic Variable and Its Application to Walking Design</i> , pp. 682-689.	
Celikovsky, Sergej	Acad. of Sci. of Czech Republic
Anderle, Milan	Czech Tech. Univ. in Prague
Moog, Claude	CNRS
15:40-16:00	WeB6.6
<i>Robust Control of Singular Systems with Time Delay. Part I: Continuous Time Case</i> , pp. 690-695.	
Kablar, Natasa A.	Louisiana State Univ.
Kvrgic, Vladimir	Lola Inst.
Debeljkovic, Dragutin	Univ. of Belgrade, School of mechanical Engineering
WeB7	HG E3
Game Theoretic Methods (Regular Session)	
Chair: De Schutter, Bart	Delft Univ. of Tech.
Co-Chair: Dragan, Vasile	Romanian Acad.
14:00-14:20	WeB7.1
<i>Optimal Leader Functions for the Reverse Stackelberg Game: Splines and Basis Functions</i> , pp. 696-701.	
Groot, Noortje	Delft Univ. of Tech.
De Schutter, Bart	Delft Univ. of Tech.
Hellendoorn, Hans	Delft Univ. of Tech.
14:20-14:40	WeB7.2
<i>Games of Network Disruption and Idempotent Algorithms</i> , pp. 702-709.	
McEneaney, William	Univ. of California, San Diego
Desir, Antoine	Columbia Univ.
14:40-15:00	WeB7.3
<i>Approximate Solutions to a Class of Nonlinear Differential Games Using a Shared Dynamic Extension</i> , pp. 710-715.	
Mylvaganam, Thulasi	Imperial Coll. London
Sassano, Mario	Univ. of Rome, Tor Vergata
Astolfi, Alessandro	Imperial Coll. London
15:00-15:20	WeB7.4
<i>Game-Based Inner Approximation of Maximal Output Admissible Sets under References Unknown in Advance</i> , pp. 716-723.	
Kogiso, Kiminao	Nara Inst. of Sci and Tech.

Kita, Koji Sugimoto, Kenji	mixi, Inc. Nara Inst. of Science and Tech.
15:20-15:40	WeB7.5
<i>Nash Equilibria in Normal Games Via Optimization Methods</i> , pp. 724-729.	
Buttler, Jens Akchurina, Natalia	Company: DB Systel Control Theory and Robotics, TU Darmstadt
15:40-16:00	WeB7.6
<i>Stackelberg Strategies for Singularly Perturbed Stochastic Systems</i> , pp. 730-735.	
Mukaidani, Hiroaki Unno, Masaru Yamamoto, Toru Xu, Hua Dragan, Vasile	Hiroshima Univ. NTT FINANCE Corp. Hiroshima Univ. Univ. of Tsukuba Romanian Acad.
WeB8	HG E5
Consensus Control II (Regular Session)	
Chair: De Persis, Claudio Co-Chair: Hadjicostis, Christoforos	Univ. of Groningen Univ. of Cyprus
14:00-14:20	WeB8.1
<i>Distributed Map Merging with Consensus on Common Information</i> , pp. 736-741.	
Aragues, Rosario Cortes, Jorge Sagues, Carlos	Clermont Univ. Univ. of California, San Diego Univ. de zaragoza
14:20-14:40	WeB8.2
<i>Novel Results on Slow Coherency in Consensus and Power Networks</i> , pp. 742-747.	
Romeres, Diego Dorfler, Florian Bullo, Francesco	Univ. of Padova Univ. of California at Santa Barbara Univ. of California, Santa Barbara
14:40-15:00	WeB8.3
<i>Balancing Time-Varying Demand-Supply in Distribution Networks: An Internal Model Approach</i> , pp. 748-753.	
De Persis, Claudio	Univ. of Groningen
15:00-15:20	WeB8.4
<i>Asynchronous Distributed Calibration of Camera Networks</i> , pp. 754-759.	
Borra, Domenica Fagnani, Fabio	Pol. di Torino Pol. Di Torino
15:20-15:40	WeB8.5
<i>Privacy-Preserving Asymptotic Average Consensus</i> , pp. 760-765.	
Manitara, Nicolaos Hadjicostis, Christoforos	Univ. of Cyprus Univ. of Cyprus
15:40-16:00	WeB8.6
<i>A Decentralized Algorithm for the Preferred Assignment Problem in Multi-Agent Systems</i> , pp. 766-771.	
Khan, Usman A. Kar, Soumya	Tufts Univ. Carnegie Mellon Univ.
WeB9	HG E7
Mechatronic Systems II (Regular Session)	
Chair: Alleyne, Andrew G. Co-Chair: Nikolakopoulos, George	Univ. of Illinois at Urbana-Champaign Luleå Univ. of Tech. Sweden
14:00-14:20	WeB9.1
<i>Adaptive Internal Model Control Scheme for a Pneumatic Artificial Muscle</i> , pp. 772-777.	
Andrikopoulos, George Nikolakopoulos, George	Univ. of Patras, Greece Luleå Univ. of Tech. Sweden

Manesis, Stamatis	Univ. of Patras
14:20-14:40	WeB9.2
<i>Soft Sensor Based Dynamic Flow Rate Estimation in Low Speed Radial Pumps</i> , pp. 778-783.	
Leonow, Sebastian	Ruhr-Univ. Bochum
Mönnigmann, Martin	Ruhr-Univ. Bochum
14:40-15:00	WeB9.3
<i>Motion Control for Magnetic Micro-Scale Manipulation</i> , pp. 784-790.	
Alleyne, Andrew G.	Univ. of Illinois at Urbana-Champaign
Schuerle, Simone	ETH Zurich
Meo, Alessandro	Univ. of Pisa
Nelson, Bradley	ETH Zurich
15:00-15:20	WeB9.4
<i>Design of a Bench Hardware-In-The-Loop System for the Study of Chatter in Turning</i> , pp. 791-796.	
Mancisidor, Iker	Dynamics and Control department, Ik4-Ideko
Barcena, Rafael	Univ. of the Basque Country UPV/EHU
Munoa, Jokin	Dynamics and Control department, Ik4-Ideko
Etxebarria, Ainhoa	Univ. of the Basque Country UPV/EHU
15:20-15:40	WeB9.5
<i>Energy Saving Control in Five-Axis Machine Tools Using Contouring Control</i> , pp. 797-802.	
Uchiyama, Naoki	Toyohashi Univ. of Tech.
Ogawa, Yuki	Toyohashi Univ. of Tech.
M., A. El Khalick	Toyohashi Univ. of Tech.
Sano, Shigenori	Toyohashi Univ. of Tech.
Yamazaki, Kazuo	Univ. of California, Davis
15:40-16:00	WeB9.6
<i>Stable Region of Gravity Position of Object Grasped by Virtual Springs</i> , pp. 803-808.	
Nakashima, Akira	Nagoya Univ.
Hayakawa, Yoshikazu	Nagoya Univ.
WeB10	HG D1.1
Linear Systems II (Regular Session)	
Chair: Panteley, Elena V.	CNRS
Co-Chair: Deutscher, Joachim	Univ. Erlangen-Nürnberg
14:00-14:20	WeB10.1
<i>Spectral Conditions for Symmetric Positive Real and Negative Imaginary Systems</i> , pp. 809-814.	
Bajcinca, Naim	Max Planck Insitute
Voigt, Matthias	Max Planck Inst. for Dynamics of Complex Tech. Systems
14:20-14:40	WeB10.2
<i>Optimal Cost Actuator/Sensor Placement for Large Scale Linear Time-Invariant Systems: A Structured Systems Approach</i> , pp. 815-820.	
Pequito, Sergio	Carnegie Mellon Univ.
Aguiar, A. Pedro	Faculty of Engineering, Univ. of Porto (FEUP)
Kar, Soumya	Carnegie Mellon Univ.
14:40-15:00	WeB10.3
<i>On Asymptotic Equivalence of the All-To-All Kuramoto Model and Certain Linear System: Stability Analysis of Phase Locked Solutions</i> , pp. 821-826.	
Contevelle, Laurie	Univ. paris 11, LSS
Panteley, Elena V.	CNRS
15:00-15:20	WeB10.4
<i>Krylov Subspace Methods for Block Patterned Linear Systems</i> , pp. 827-832.	
Deutscher, Joachim	Univ. Erlangen-Nürnberg
15:20-15:40	WeB10.5
<i>An LMI Approach to Structured Sparse Feedback Design in Linear Control Systems</i> , pp. 833-838.	

Polyak, Boris T. Khlebnikov, Mikhail Shcherbakov, Pavel	Moscow Inst. of Control Sciences Inst. for Control Science, RAS Moscow Inst. for Control Sciences, RAS
15:40-16:00	WeB10.6
<i>P-SPR-D Control Design Via LMI for Linear MIMO Systems and Its Extension to Adaptive Control</i> , pp. 839-845. Shimizu, Kiyotaka	Keio Univ.
WeB11	HG D1.2
Control in Aerospace II (Regular Session)	
Chair: Fassois, Spiliotis D. Co-Chair: Magnis, Lionel	Univ. of Patras MINES ParisTech
14:00-14:20	WeB11.1
<i>Gravity Gradiometer Integrated Inertial Navigation</i> , pp. 846-851. Welker, Troy Pachter, Meir Huffman, Richard	OUUSD(AT&L) AFIT/ENG AFIT/ENY
14:20-14:40	WeB11.2
<i>Rotation Estimation for a Satellite from Sun Sensors</i> , pp. 852-859. Magnis, Lionel Petit, Nicolas	MINES ParisTech MINES ParisTech
14:40-15:00	WeB11.3
<i>Self-Reconfigurable Control for Dual-Quaternion/Dual-Vector Systems</i> , pp. 860-865. Drakunov, Sergey V. Mackunis, Will Price, William Ton, Chau	Embry-Riddle Aeronautical Univ. Univ. of Florida Embry-Riddle Aeronautical Univ. Embry-Riddle Aeronautical Univ.
15:00-15:20	WeB11.4
<i>Weighted Clustering Coefficient Maximization for Air Transportation Networks</i> , pp. 866-871. Ponton, Julien Wei, Peng Sun, Dengfeng	Ec. Pol. Purdue Univ. Purdue Univ.
15:20-15:40	WeB11.5
<i>An Adaptive Time Series Framework for Aircraft 4D Trajectory Conformance Monitoring</i> , pp. 872-877. Kopsaftopoulos, Fotis Fassois, Spiliotis D.	Univ. of Patras Univ. of Patras
15:40-16:00	WeB11.6
<i>Improving Classification Performance through Kinematic Decisions</i> , pp. 878-883. Zhang, Weijia Hyun, Baro Kabamba, Pierre T. Girard, Anouck	Univ. of Michigan Univ. of Michigan Univ. of Michigan Univ. of Michigan at Ann Arbor
WeB12	HG D3.2
Adaptive Control II (Regular Session)	
Chair: Plestan, Franck Co-Chair: Simandl, Miroslav	Ec. Centrale De Nantes-CNRS Univ. West Bohemia
14:00-14:20	WeB12.1
<i>Adaptive Mobile Robots Formation Control Using Neural Networks</i> , pp. 884-889. Raimúndez, José Cesáreo Paz, Enrique	Univ. de Vigo Univ. of Vigo
14:20-14:40	WeB12.2
<i>High Order Integral Sliding Mode Control with Gain Adaptation</i> , pp. 890-895.	

Taleb, Mohammed Plestan, Franck Bououlid, Badr	LUNAM Univ. Ec. Centrale de Nantes - IRCCyN Ec. Centrale De Nantes-CNRS Moulay Ismail Univ. Meknes
14:40-15:00	WeB12.3
<i>Implicit Dual Controller Based on Stochastic Integration Rule</i> , pp. 896-901.	
Flidr, Miroslav Simandl, Miroslav	Univ. of West Bohemia Univ. West Bohemia
15:00-15:20	WeB12.4
<i>Design of Performance-Adaptive PID Control System Using Model Predictive Approach</i> , pp. 902-907.	
Sato, Takao Yamamoto, Toru Araki, Nozomu Konishi, Yasuo	Univ. of Hyogo Hiroshima Univ. Univ. of Hyogo Univ. of Hyogo
15:20-15:40	WeB12.5
<i>High-Gain Feedback Stability of a Nonlinear Drivetrain System</i> , pp. 908-913.	
Loepelmann, Peter Bäker, Bernard	Daimler AG Tech. Univ. Dresden
15:40-16:00	WeB12.6
<i>Design of Adaptive Block Backstepping Controllers for Semi-Strict Feedback Nonlinear Systems with Perturbation Estimation</i> , pp. 914-919.	
Cheng, Chih-Chiang Chien, An-Fu Huang, Yi-Chun	National Sun Yat-Sen Univ. National Sun Yat-Sen Univ. National Sun Yat-Sen Univ.
WeB13	HG D5.2
Fault Detection and Identification II (Regular Session)	
Chair: Gerencser, Laszlo Co-Chair: Wahrburg, Arne	MTA SZTAKI Tech. Univ. Darmstadt
14:00-14:20	WeB13.1
<i>Integrated Fault Detection in Multiple Switched Systems</i> , pp. 920-925.	
Hasan Abdo, Ali Ding, Steven X. Sajjai, Jedsada Damlakhi, Waseem	Univ. of Duisburg-Essen Univ. of Duisburg-Essen Duisburg-Essen Univ. Duisburg-essen Univ.
14:20-14:40	WeB13.2
<i>An Algebraic Observer for Leak Detection and Isolation in Plastic Pipelines</i> , pp. 926-931.	
Navarro, Adrián Sánchez, Juan Diego Begovich, Ofelia Besancon, Gildas Patiño Murillo, Julian Alberto	CINVESTAV CINVESTAV del IPN unidad Guadalajara CINVESTAV Ense3 - Grenoble INP Univ. Nacional de Colombia
14:40-15:00	WeB13.3
<i>Distributed Fault Detection Using Sensor Networks and Pareto Estimation</i> , pp. 932-937.	
Boem, Francesca Xu, Yuzhe Fischione, Carlo Parisini, Thomas	Univ. of Trieste KTH Royal Inst. of Tech. KTH Imperial Coll. & Univ. of Trieste
15:00-15:20	WeB13.4
<i>Modeling Improvements for Leak Detection in Pipelines of LPG</i> , pp. 938-942.	
Torres, Lizeth Verde, Cristina	UNAM Inst. de Ingenieria, UNAM
15:20-15:40	WeB13.5
<i>LMI-Based Design of Robust Fault Isolation Filters for Linear Systems</i> , pp. 943-949.	

Wahrburg, Arne	Tech. Univ. Darmstadt
Adamy, Juergen	Tech. Univ. Darmstadt

15:40-16:00 WeB13.6

Change Detection for Finite Dimensional Gaussian Linear Systems - a Bound for the Almost Sure False Alarm Rate, pp. 950-955.

Gerencser, Laszlo	MTA SZTAKI
Prosdocimi, Cecilia	LUISS Guido Carli, Rome
Vago, Zsuzsanna	Peter Pazmany Catholic Univ. Budapest, Hungary

WeB14 HG D7.1
Vehicle Dynamics and Control (Regular Session)

Chair: Notarstefano, Giuseppe	Univ. of Lecce
Co-Chair: Abel, Dirk	RWTH Aachen Univ.

14:00-14:20 WeB14.1

Wheelie Detection for Single-Track Vehicles, pp. 956-961.

Panzani, Giulio	Univ. degli Studi di Trento
Corno, Matteo	Pol. di Milano
Savaresi, Sergio M.	Pol. Di Milano

14:20-14:40 WeB14.2

Controller Design and Evaluation for Vehicle Run-Off-The-Road and Recovery, pp. 962-967.

Jensen, Matthew	Florida Inst. of Tech.
Freeman, Paul (Tim)	Clemson Univ.
Wagner, John	Clemson Univ.
Alexander, Kim	Clemson Univ.

14:40-15:00 WeB14.3

Immersion and Invariance Control for Lateral Dynamics of Autonomous Vehicles, with Experimental Validation, pp. 968-973.

Talj, Reine	Lab. HEUDIASYC, Univ. of Tech. of Compiègne
Tagne, Gilles	Heudiasyc, Univ. of Tech. of Compiègne
Charara, Ali	UMR CNRS 7253

15:00-15:20 WeB14.4

Optimal Vehicle Dynamics Control for Combined Longitudinal and Lateral Autonomous Vehicle Guidance, pp. 974-979.

Katriniok, Alexander	RWTH Aachen Univ. Inst. of Automatic Control
Maschuw, Jan P.	RWTH Aachen Univ.
Christen, Frederic	Forschungsgesellschaft Kraftfahrwesen mbH Aachen
Eckstein, Lutz	RWTH Aachen Univ. Inst. of Automotive Engineering
Abel, Dirk	RWTH Aachen Univ.

15:20-15:40 WeB14.5

On a Reduced-Order Two-Track Car Model Including Longitudinal and Lateral Load Transfer, pp. 980-985.

Rucco, Alessandro	Univ. of Salento
Notarstefano, Giuseppe	Univ. of Lecce
Hauser, John	Univ. of Colorado at Boulder

15:40-16:00 WeB14.6

Continuous-Time and Discrete-Time Switched H_{∞} State Feedback Controllers: Application for a Robust Steering Vehicle Control, pp. 986-991.

Lghani, Menhour	Mines ParisTech, Centre de Robotique, 60 boulevard Saint-Michel,
Koenig, Damien	Grenoble - Inp
D'Andrea-Novet, Brigitte	Ec. des Mines de Paris

WeB15 HG D7.2
Control of Airborne Wind Energy Systems (Invited Session)

Chair: Fagiano, Lorenzo	ETH Zurich
Co-Chair: Erhard, Michael	SkySails GmbH
Organizer: Fagiano, Lorenzo	ETH Zurich
Organizer: Gambier, Adrian	Fraunhofer Inst. for Wind Energy and Energy System Tech.

14:00-14:20	WeB15.1
<i>Automatic Control of Tethered Wings for Airborne Wind Energy: Design and Experimental Results (I)</i> , pp. 992-997.	
Fagiano, Lorenzo	ETH Zurich
Zraggen, Aldo	ETH Zurich
Morari, Manfred	ETH Zurich
Khammash, Mustafa H.	Univ. of California at Sta. Barbara
14:20-14:40	WeB15.2
<i>Sensors and Navigation Algorithms for Flight Control of Tethered Kites (I)</i> , pp. 998-1003.	
Erhard, Michael	SkySails GmbH
Strauch, Hans	SkySails GmbH
14:40-15:00	WeB15.3
<i>Reference Governor Design for Computationally Efficient Attitude and Tether Tension Constraint Enforcement on a Lighter-Than-Air Wind Energy System (I)</i> , pp. 1004-1010.	
Kalabic, Uros V.	Univ. of Michigan
Vermillion, Christopher	Altaeros Energies
Kolmanovsky, Ilya V.	Univ. of Michigan
15:00-15:20	WeB15.4
<i>A Relaxation Strategy for the Optimization of Airborne Wind Energy Systems (I)</i> , pp. 1011-1016.	
Gros, Sébastien	KU Leuven
Zanon, Mario	KU Leuven
Diehl, Moritz	KU Leuven
15:20-15:40	WeB15.5
<i>Control of Airborne Wind Energy Systems Based on Nonlinear Model Predictive Control & Moving Horizon Estimation (I)</i> , pp. 1017-1022.	
Gros, Sébastien	KU Leuven
Zanon, Mario	KU Leuven
Diehl, Moritz	KU Leuven
15:40-16:00	WeB15.6
<i>Rotational Start-Up of Tethered Airplanes Based on Nonlinear MPC and MHE (I)</i> , pp. 1023-1028.	
Zanon, Mario	KU Leuven
Gros, Sébastien	KU Leuven
Diehl, Moritz	KU Leuven
WeC1	HG F1
Distributionally Robust Optimization (Tutorial Session)	
Chair: Kuhn, Daniel	Imperial Coll. London
Co-Chair: Natarajan, Karthik	Singapore Univ. of Tech. and Design
Organizer: Kuhn, Daniel	Imperial Coll. London
Organizer: Natarajan, Karthik	Singapore Univ. of Tech. and Design
16:20-17:20	WeC1.1
<i>Distributionally Robust Convex Optimization (I)*</i> .	
Kuhn, Daniel	Imperial Coll. London
17:20-18:20	WeC1.2
<i>Distributionally Robust Discrete Optimization (I)*</i> .	
Natarajan, Karthik	Singapore Univ. of Tech. and Design
WeC2	HG F3
Model Predictive Control III (Regular Session)	
Chair: Pannocchia, Gabriele	Univ. of Pisa
Co-Chair: Van Impe, Jan F.M.	Katholieke Univ. Leuven
16:20-16:40	WeC2.1
<i>Scenario-Based MPC for Energy-Efficient Building Climate Control under Weather and Occupancy Uncertainty</i> , pp. 1029-1034.	
Zhang, Xiaojing	ETH Zurich

Schildbach, Georg	ETH Zurich
Sturzenegger, David	ETH Zurich
Morari, Manfred	ETH Zurich
16:40-17:00	WeC2.2
<i>Explicit MPC of LPV Systems in the Controllable Canonical Form</i> , pp. 1035-1040.	
Kvasnica, Michal	Slovak Univ. of Tech. in Bratislava
Szucs, Alexander	Slovak Univ. of Tech. in Bratislava
Fikar, Miroslav	Slovak Univ. of Tech.
Drgona, Jan	Slovak Univ. of Tech. in Bratislava
17:00-17:20	WeC2.3
<i>Constrained Decomposition Based Control Approach for Linear Parameter Varying Systems</i> , pp. 1041-1046.	
Nguyen, Hoai-Nam	Tech.
Gutman, Per-Olof	Tech.
Olaru, Sorin	Supelec
17:20-17:40	WeC2.4
<i>Sparse Quadratic Regulator</i> , pp. 1047-1052.	
Jovanovic, Mihailo	Univ. of Minnesota
Lin, Fu	Univ. of Minnesota
17:40-18:00	WeC2.5
<i>Model Predictive Control of a Pilot-Scale Distillation Column Using a Programmable Automation Controller</i> , pp. 1053-1058.	
Huyck, Bart	KU Leuven
De Brabanter, Jos	K.U.Leuven
De Moor, Bart L.R.	Katholieke Univ. Leuven
Van Impe, Jan F.M.	Katholieke Univ. Leuven
Logist, Filip	Katholieke Univ. Leuven
18:00-18:20	WeC2.6
<i>Achieving a Large Domain of Attraction with Short-Horizon Linear MPC Via Polyhedral Lyapunov Functions</i> , pp. 1059-1064.	
Grammatico, Sergio	ETH Zurich
Pannocchia, Gabriele	Univ. of Pisa
WeC3	HG F5
Fluid Systems (Regular Session)	
Chair: Duncan, Stephen	Univ. of Oxford
Co-Chair: Aarsnes, Ulf Jakob F.	NTNU
16:20-16:40	WeC3.1
<i>Application of an Infinite-Dimensional Observer for Drilling Systems Incorporating Kick and Loss Detection</i> , pp. 1065-1070.	
Hauge, Espen	Norwegian Univ. of Science and Tech.
Aamo, Ole Morten	NTNU
Godhavn, John-Morten	Statoil
16:40-17:00	WeC3.2
<i>Limits of Controller Performance in the Heave Disturbance Attenuation Problem</i> , pp. 1071-1076.	
Aarsnes, Ulf Jakob F.	NTNU
Aamo, Ole Morten	NTNU
Hauge, Espen	Norwegian Univ. of Science and Tech.
Pavlov, Alexey	Statoil Res. center
17:00-17:20	WeC3.3
<i>Passivity of Plane Poiseuille Flow</i> , pp. 1077-1082.	
Zhao, Shi	Univ. of Oxford
Duncan, Stephen	Univ. of Oxford
17:20-17:40	WeC3.4
<i>Optimal Placement of Actuators and Sensors for Control of Nonequilibrium Dynamics</i> , pp. 1083-1088.	
Sinha, Subhrajit	Iowa State Univ.
Vaidya, Umesh	Iowa State Univ.

Rajaram, Rajeev	Iowa State Univ.
17:40-18:00	WeC3.5
<i>Non-Linear Position Control of a Pneumatic Actuator with Closed-Loop Stiffness and Damping Tuning</i> , pp. 1089-1094.	
Abry, Frédéric	Univ. de Lyon
Brun, Xavier	Insa de Lyon
Sesmat, Sylvie	Lab. Ampère, Univ. de Lyon
Bideaux, Eric	INSA Lyon, Lab. Ampere
18:00-18:20	WeC3.6
<i>Optimal Wells Scheduling of a Petroleum Reservoir</i> , pp. 1095-1100.	
Hasan, Agus	Norwegian Univ. of Science and Tech.
Foss, Bjarne A.	Norwegian Univ. of Science & Tech.
WeC4	HG F7
Uncertain Systems (Regular Session)	
Chair: Kowalewski, Stefan	RWTH Aachen Univ.
Co-Chair: Henrion, Didier	LAAS-CNRS, Univ. Toulouse
16:20-16:40	WeC4.1
<i>Comparison of Reachability Methods for Uncertain Linear Time-Invariant Systems</i> , pp. 1101-1106.	
Ben Makhlof, Ibtissem	RWTH Aachen
Haensch, Paul	RWTH Aachen Univ.
Kowalewski, Stefan	RWTH Aachen Univ.
16:40-17:00	WeC4.2
<i>Finding an LFT Uncertainty Model with Minimal Uncertainty</i> , pp. 1107-1113.	
Hagblom, Kurt E.	Abo Akademi Univ.
17:00-17:20	WeC4.3
<i>Set Approximation Via Minimum-Volume Polynomial Sublevel Sets</i> , pp. 1114-1119.	
Dabbene, Fabrizio	Pol. di Torino
Henrion, Didier	Czech Tech. Univ. in Prague
17:20-17:40	WeC4.4
<i>A New Observer-Based Stabilization Method for Linear Systems with Uncertain Parameters</i> , pp. 1120-1125.	
Kheloufi, Houria	Mouloud Mammeri Univ.
Zemouche, Ali	Nancy-Univ.
Bedouhene, Fazia	Lab. de Mathématiques Pures et Appliquées(LMPA),Mouloud M
Boutayeb, M.	Lorraine Univ.
17:40-18:00	WeC4.5
<i>Design of Interval Observers for LPV Systems Subject to Exogenous Disturbances</i> , pp. 1126-1131.	
Thabet, Rihab El Houda	Univ. OF BORDEAUX 1
Raïssi, Tarek	Conservatoire National des Arts et Métiers
Combastel, Christophe	Ec.
Zolghadri, Ali	Univ. Bordeaux I
18:00-18:20	WeC4.6
<i>Fixed-Order H_∞ and H_2 Controller Design for Continuous-Time Polytopic Systems: An LMI-Based Approach</i> , pp. 1132-1137.	
Sadabadi, Mahdieh Sadat	Ec. Pol. Federale de Lausanne (EPFL)
Karimi, Alireza	Ec. Pol. Federale
WeC5	HG E1.1
Event-Triggered Control (Regular Session)	
Chair: Johansson, Karl Henrik	Royal Inst. of Tech.
Co-Chair: Dimarogonas, Dimos V.	Royal Inst. of Tech. (KTH)
16:20-16:40	WeC5.1
<i>Extension and Evaluation of Model-Based Periodic Event-Triggered Control</i> , pp. 1138-1144.	
Verhaegh, Jan	Eindhoven Univ. of Tech.

Gommans, Tom	Eindhoven Univ. of Tech.
Heemels, Maurice	Eindhoven Univ. of Tech.
16:40-17:00	WeC5.2
<i>Input-To-State Stability of Event-Based State-Feedback Control</i> , pp. 1145-1150.	
Stoecker, Christian	Ruhr-Univ. Bochum
Lunze, Jan	Ruhr-Univ. Bochum
17:00-17:20	WeC5.3
<i>Self-Triggered Stabilization of Continuous Stochastic State-Feedback Controlled Systems</i> , pp. 1151-1155.	
Anderson, Ross	Univ. of California, Santa Cruz
Milutinovic, Dejan	Univ. of California at Santa Cruz
Dimarogonas, Dimos V.	Royal Inst. of Tech. (KTH)
17:20-17:40	WeC5.4
<i>Event-Triggered Model Predictive Control of Discrete-Time Linear Systems Subject to Disturbances</i> , pp. 1156-1161.	
Lehmann, Daniel	Ruhr-Univ. Bochum
Henriksson, Erik	KTH Royal Inst. of Tech.
Johansson, Karl Henrik	Royal Inst. of Tech.
17:40-18:00	WeC5.5
<i>Event-Triggered Consensus of Heterogeneous Multi-Agent Systems with Double-Integrator Dynamics</i> , pp. 1162-1167.	
Xue, Dong	Tech. Univ. München
Hirche, Sandra	Inst. of Automatic Control Engineering
18:00-18:20	WeC5.6
<i>On the Trade-Off between Control Performance and Communication Cost for Event-Triggered Control Over Lossy Networks</i> , pp. 1168-1174.	
Demirel, Burak	KTH Royal Inst. of Tech.
Gupta, Vijay	Univ. of Notre Dame
Johansson, Mikael	Royal Inst. of Tech.
WeC6	HG E1.2
Iterative Control (Regular Session)	
Chair: Camacho, Eduardo F.	Univ. of Sevilla
Co-Chair: Alleyne, Andrew G.	Univ. of Illinois at Urbana-Champaign
16:20-16:40	WeC6.1
<i>Learning Control in Spatial Coordinates for the Path-Following of Autonomous Vehicles</i> , pp. 1175-1180.	
Consolini, Luca	Univ. of Parma
Verrelli, Cristiano Maria	Univ. Di Roma
16:40-17:00	WeC6.2
<i>Optimal Iterative Learning Control Design with Trial-Varying Initial Conditions</i> , pp. 1181-1186.	
Son, Tong Duy	KU Leuven
Pipeleers, Goele	KU Leuven
Swevers, Jan	KU Leuven
17:00-17:20	WeC6.3
<i>Repetitive Control to Counteract the Effect of People on Thermal Comfort Control</i> , pp. 1187-1191.	
Álvarez Hervás, José Domingo	Univ. of Seville
Costa-Castello, Ramon	Univ. Pol. de Catalunya (UPC)
Castilla, Maria Del Mar	Univ. OF ALMERÍA
Camacho, Eduardo F.	Univ. of Sevilla
17:20-17:40	WeC6.4
<i>Iterative Learning Control of the Electrostatic Microbridge Actuator</i> , pp. 1192-1197.	
Cichy, Blazej	Univ. of Zielona Gora
Galkowski, Krzysztof	Univ. of Zielona Gora
Rauh, Andreas	Univ. of Rostock
Aschemann, Harald	Univ. of Rostock
17:40-18:00	WeC6.5

Learning/Repetitive Control for Building Systems with Nearly Periodic Disturbances, pp. 1198-1203.

Vinther, Kasper
Chandan, Vikas
Alleyne, Andrew G.

Aalborg Univ.
Univ. of Illinois at Urbana Champaign
Univ. of Illinois at Urbana-Champaign

18:00-18:20

WeC6.6

Transformation-Based Iterative Learning Control for Non-Collocated Sensing of a Galvanometer Scanner, pp. 1204-1209.

Yoo, Han Woong
Ito, Shingo
Verhaegen, Michel
Schitter, Georg

Delft Univ. of Tech.
Vienna Univ. of Tech.
Delft Univ. of Tech.
Vienna Univ. of Tech.

WeC7

HG E3

Applications of Optimization and Optimal Control (Regular Session)

Chair: Giglio, Davide
Co-Chair: Summers, Sean

Univ. of Genova
ETH Zurich

16:20-16:40

WeC7.1

Optimal Control of Inventory-Production Systems in Presence of Perturbations on the Inventory Level, pp. 1210-1217.

Giglio, Davide
Siri, Silvia

Univ. of Genova
Univ. of Genova

16:40-17:00

WeC7.2

Optimizing the Anaerobic Digestion of Microalgae in a Coupled Process, pp. 1218-1223.

Bayen, T rence
Mairet, Francis
Martinon, Pierre
Sebbah, Matthieu

Univ. Montpellier 2
Univ. T cnica Federico Santa Mar a
INRIA
INRIA Sophia-Antipolis Mediterranee, UMR INRA-SupAgro

17:00-17:20

WeC7.3

Optimal Pedestrian Evacuation Using Model Predictive Control, pp. 1224-1229.

Blom V stberg, Oskar
Hu, Xiaoming
Dong, Hairong

Royal Inst. of Tech. KTH
Royal Inst. of Tech.
Beijing Jiaotong Univ.

17:20-17:40

WeC7.4

Collocation Methods for Multi-Vehicle Trajectory Optimization, pp. 1230-1235.

Turnbull, Oliver David Naismith
Richards, Arthur

Univ. of Bristol
Univ. of Bristol

17:40-18:00

WeC7.5

Extension of the Global Optimization Using Multi-Unit Extremum Seeking Control for Noisy Scalar Systems, pp. 1236-1241.

Esmaeilzadeh Azar, Farhad
Perrier, Michel

Ec. Pol. de Montreal
Ec. Pol.

18:00-18:20

WeC7.6

Optimization-Based Autonomous Remote Sensing of Surface Objects Using an Unmanned Aerial Vehicle, pp. 1242-1249.

Haugen, Joakim
Imsland, Lars

Norwegian Univ. of Science and Tech.
Norwegian Univ. of Science and Tech.

WeC8

HG E5

Cooperative Control (Regular Session)

Chair: Zhang, Fumin
Co-Chair: Georges, Didier

Georgia Inst. of Tech.
Grenoble Inst. of Tech.

16:20-16:40

WeC8.1

Energy-Information Tradeoffs in Motion and Sensing for Target Localization, pp. 1250-1255.

Wu, Wencen
Zhang, Fumin
Wardi, Yorai

Georgia Inst. of Tech.
Georgia Inst. of Tech.
Georgia Inst. of Tech.

16:40-17:00	WeC8.2
<i>Synthesis of an Asynchronous Communication Protocol for Search and Rescue Robots</i> , pp. 1256-1261.	
Wiltzsche, Clemens	Univ. of Oxford
Ramponi, Federico Alessandro	Univ. di Brescia
Lygeros, John	ETH Zurich
17:00-17:20	WeC8.3
<i>A Bondgraph Approach to Formation Control Using Relative State Measurements</i> , pp. 1262-1267.	
Stacey, Geoff	Australian National Univ.
Mahony, Robert	Australian National Univ.
Corke, Peter	CSIRO
17:20-17:40	WeC8.4
<i>Spatio-Temporal Symmetries in Linear Systems with an Application to Formation Control</i> , pp. 1268-1273.	
Consolini, Luca	Univ. of Parma
Tosques, Mario	Univ. of Parma
17:40-18:00	WeC8.5
<i>Formation Control Design for Car--Like Nonholonomic Robots Using the Backstepping Approach</i> , pp. 1274-1279.	
Sadowska, Anna	TU Delft
Huijberts, Henri	Queen Mary, Univ. of London
18:00-18:20	WeC8.6
<i>Optimal Location of Mobile Sensors for Environmental Monitoring</i> , pp. 1280-1285.	
Georges, Didier	Grenoble Inst. of Tech.
WeC9	HG E7
Mechatronic Systems III (Regular Session)	
Chair: Ozbay, Hitay	Bilkent Univ.
Co-Chair: Dasdemir, Janset	Yildiz Tech. Univ.
16:20-16:40	WeC9.1
<i>On the Robust Controller Design for Hard Disk Drive Servo Systems with Time Delays</i> , pp. 1286-1291.	
Yan, Peng	Shandong Univ.
Ozbay, Hitay	Bilkent Univ.
16:40-17:00	WeC9.2
<i>Smith Predictor Based Generalized PI Control for a Class of Input Delayed Nonlinear Mechanical Systems</i> , pp. 1292-1297.	
Ramirez-Neria, Mario	CINVESTAV-IPN
Sira-Ramirez, Hebert J.	CINVESTAV-IPN
Luviano-Juárez, Alberto	UPIITA - IPN Mexico
Rodriguez-Angeles, Alejandro	CINVESTAV
17:00-17:20	WeC9.3
<i>Control of a Class of Nonlinear Mechanical Systems with Input Delay</i> , pp. 1298-1303.	
Loria, Antonio	Yildiz Tech. Univ.
	CNRS
17:20-17:40	WeC9.4
<i>Smooth Frequency Domain Parametric Optimization in Loop-Shaping Control</i> , pp. 1304-1309.	
Lantto, Erkki	Sulzer Pump Solutions Finland
Hölttä, Vesa	Sulzer Pump Solutions Finland
Zenger, Kai	Aalto Univ. School of Electrical Engineering
Tommila, Ville	Sulzer Pump Solutions Finland
17:40-18:00	WeC9.5
<i>Metric Visual-Inertial Navigation System Using Single Optical Flow Feature</i> , pp. 1310-1316.	
Omari, Sammy	ETH Zurich
Ducard, Guillaume	I3S, UMR7271, CNRS, Univ. de Nice Sophia Antipolis
18:00-18:20	WeC9.6
<i>Resonance-Shifting Integral Resonant Control Scheme for Increasing the Positioning Bandwidth of Nanopositioners</i> , pp. 1317-1322.	

Namavar, Mohammad
Fleming, Andrew J.
Aphale, Sumeet

Univ. of Aberdeen
Univ. of Newcastle
Univ. of Aberdeen

WeC10		HG D1.1
Linear Time-Varying Systems (Regular Session)		
Chair: Mourllion, Benjamin		Univ. de Haute-Alsace
Co-Chair: Svaricek, Ferdinand		Univ. of the German Armed Forces, Munich
16:20-16:40		WeC10.1
<i>Young Duality and Schmidt-Pair for Linear Systems</i> , pp. 1323-1328.		
Mourllion, Benjamin		Univ. de Haute-Alsace
Birouche, Abderazik		Univ. de Haute Alsace
16:40-17:00		WeC10.2
<i>Solving Discrete-Time Game Theoretic Periodic Riccati Equations: An Iterative Procedure</i> , pp. 1329-1334.		
Dragan, Vasile		Romanian Acad.
Aberkane, Samir		UHP, NANCY 1
Ivanov, Ivan		Sofia Univ. "St.Kl.Ohridski"
17:00-17:20		WeC10.3
<i>Necessary Conditions for Structural and Strong Structural Controllability of Linear Time-Varying Systems</i> , pp. 1335-1340.		
Hartung, Christoph		Univ. of the German Armed Forces, Munich
Reissig, Gunther		Univ. of the Federal Armed Forces Munich
Svaricek, Ferdinand		Univ. of the German Armed Forces, Munich
17:20-17:40		WeC10.4
<i>Derivative Based Control for LTV System with Unknown Parameters</i> , pp. 1341-1346.		
Maalej, Sonia		LAGIS, CNRS, Ec. LILLE
Kruszewski, Alexandre		Ec. Centrale de LILLE
Belkoura, Lotfi		Univ. des Sciences et Tech. de Lille (Lille 1)
17:40-18:00		WeC10.5
<i>Model Invalidation for Repeated ℓ_1-Bounded Linear Time-Varying Uncertainty Models</i> , pp. 1347-1352.		
Rödönyi, Gábor		Comp. and Automation Res. Inst.
Gaspar, Peter		Computer & Automation Inst. of HAS
18:00-18:20		WeC10.6
<i>A Discrete Time-Varying Internal Model Based Approach for High Precision Tracking</i> , pp. 1353-1358.		
Zhang, Zhen		Tsinghua Univ.
Lu, Chao		Univ. of South Carolina
Leng, Tongtong		Shandong Univ.
Yan, Peng		Beihang Univ.
Ye, Peiqing		Tsinghua Univ.
WeC11		HG D1.2
Predictive Control of UAVs (Regular Session)		
Chair: Kerrigan, Eric C.		Imperial Coll. London
Co-Chair: Summers, Tyler H.		ETH Zurich
16:20-16:40		WeC11.1
<i>Predictive Control for Spacecraft Rendezvous in an Elliptical Orbit Using an FPGA</i> , pp. 1359-1364.		
Hartley, Edward Nicholas		Univ. of Cambridge
Maciejowski, Jan M.		Univ. of Cambridge
16:40-17:00		WeC11.2
<i>Nonlinear Predictive Control of Autonomous Soaring UAVs Using 3DOF Models</i> , pp. 1365-1370.		
Liu, Yuyi		Imperial Coll. London
Longo, Stefano		Cranfield Univ.
Kerrigan, Eric C.		Imperial Coll. London

17:00-17:20		WeC11.3
<i>Trajectory-Tracking and Path-Following Controllers for Constrained Underactuated Vehicles Using Model Predictive Control</i> , pp. 1371-1376.		
Alessandretti, Andrea	Inst. Superior Técnico - École Pol. Fédérale de Lau	
Aguiar, A. Pedro	Faculty of Engineering, Univ. of Porto (FEUP)	
Jones, Colin N	EPFL, Lausanne	
17:20-17:40		WeC11.4
<i>Fast Model Predictive Control of Miniature Helicopters</i> , pp. 1377-1382.		
Kunz, Konstantin		ETH Zurich
Huck, Stephan Marc		ETH Zurich
Summers, Tyler H.		ETH Zurich
17:40-18:00		WeC11.5
<i>A Model Predictive Controller for Quadcopter State Interception</i> , pp. 1383-1389.		
Mueller, Mark Wilfried		ETH Zurich
D'Andrea, Raffaello		ETH Zurich
18:00-18:20		WeC11.6
<i>Waypoint Trajectory Planning in the Presence of Obstacles with a Tunnel-MILP Approach</i> , pp. 1390-1397.		
Afonso, Rubens Junqueira Magalhães	ITA - Inst. Tecnológico de Aeronáutica	
Galvão, Roberto Kawakami Harrop	Inst. Tecnológico de Aeronáutica	
Kienitz, Karl Heinz	Inst. Tecnológico de Aeronautica	
WeC12		HG D3.2
Identification for Control (Regular Session)		
Chair: Wahlberg, Bo		KTH
Co-Chair: Van den Hof, Paul M.J.		Eindhoven Univ. of Tech.
16:20-16:40		WeC12.1
<i>Dual Control Approach for Zone Model Predictive Control</i> , pp. 1398-1403.		
Zacekova, Eva	Department of Control Engineering, Faculty of Electrical Engineering	
Privara, Samuel	Czech Technical University in Prague, Faculty of Electrical Engineering	
Vana, Zdenek	Department of Control Engineering, Faculty of Electrical Engineering	
Cigler, Jiri	Czech Tech. Univ. in Prague, Faculty of Electrical Engineering	
16:40-17:00		WeC12.2
<i>Physics-Based Modeling and Identification for HVAC Systems</i> , pp. 1404-1409.		
Scotton, Francesco		KTH Royal Inst. of Tech.
Huang, Lirong		Swiss Federal Inst. of Tech.
Ahmadi, Seyed A.		KTH Royal Inst. of Tech.
Wahlberg, Bo		KTH Royal Inst. of Tech.
17:00-17:20		WeC12.3
<i>Model-Based and Data-Driven Model-Reference Control: A Comparative Analysis</i> , pp. 1410-1415.		
Formentin, Simone		Pol. di Milano
van Heusden, Klaske		Univ. of British Columbia
Karimi, Alireza		Ec. Pol. Federale
17:20-17:40		WeC12.4
<i>Robust and Adaptive Excitation Signal Generation for Input and Output Constrained Systems</i> , pp. 1416-1421.		
Hägg, Per		KTH Royal Inst. of Tech.
Larsson, Christian A.		KTH Royal Inst. of Tech.
Hjalmarsson, Håkan		Royal Inst. of Tech.
17:40-18:00		WeC12.5
<i>Predictor Input Selection for Two Stage Identification in Dynamic Networks</i> , pp. 1422-1427.		
Dankers, Arne Geert		Delft Univ. of Tech.
Van den Hof, Paul M.J.		Eindhoven Univ. of Tech.
Bombois, Xavier		Delft Univ. of Tech.
Heuberger, Peter		Eindhoven Univ. of Tech.

18:00-18:20	WeC12.6
<i>Consistency Analysis of Orthogonal Projection Based Closed-Loop Subspace Identification Methods</i> , pp. 1428-1432.	
Liu, Tao	Dalian Univ. of Tech.
Shao, Cheng	Dalian Univ. of Tech.
WeC13	HG D5.2
Fault Detection and Identification III (Regular Session)	
Chair: Merzouki, Rochdi	Ec. Pol. de Lille
Co-Chair: Sen, Siddhartha	Indian Inst. of Tech. Kharagpur
16:20-16:40	WeC13.1
<i>A H-Infinity Approach to Robust Fault Estimation of Non-Linear Discrete-Time Systems</i> , pp. 1433-1438.	
Witczak, Marcin	Univ. of Zielona Gora
Korbicz, Jozef	Univ. of Zielona Gora
Jozefowicz, Rafal	Univ. of Zielona Gora
16:40-17:00	WeC13.2
<i>Robust Fault Detection for Systems with Electronic Induced Delays: Application to the Rendezvous Phase of the MSR Mission (I)</i> , pp. 1439-1444.	
Fonod, Robert	Univ. of Bordeaux 1
Henry, David	Univ. Bordeaux I
Bornschlegl, Eric	European Space Res. and Tech. Centre
Charbonnel, Catherine	Thales Alenia Space
17:00-17:20	WeC13.3
<i>Application of Principal Components Analysis to Improve Fault Detection and Diagnosis on Semiconductor Manufacturing Equipment (I)</i> , pp. 1445-1450.	
Thieullen, Alexis	LSIS - STMicroelectronics
Ouladsine, Mustapha	Univ. d'aix marseille III
Pinaton, Jacques	STMicroelectronics
17:20-17:40	WeC13.4
<i>Data-Driven Prognostics Based on Health Indicator Construction: Application to PRONOSTIA's Data (I)</i> , pp. 1451-1456.	
Medjaher, Kamal	FEMTO-ST / ENSMM
Zerhouni, Nouredine	FEMTO-ST Inst. UMR CNRS 6174 - UFC / ENSMM / UTBM
Baklouti, Jihène	FEMTO-ST Inst.
17:40-18:00	WeC13.5
<i>Merging Bond Graph and Signed Directed Graph to Improve FDI Procedure (I)</i> , pp. 1457-1462.	
Chatti, Nizar	Pol. Lille
Ould Bouamama, Belkacem	Pol. Lille
Gehin, Anne-Lise	LAGIS
Merzouki, Rochdi	Ec. Pol. de Lille
18:00-18:20	WeC13.6
<i>A Reconfigurable Direct Control Allocation Method</i> , pp. 1463-1468.	
Naskar, Asim Kr	Indian Inst. of Tech. Kharagpur
Patra, Sourav	Indian Inst. of Tech. Kharagpur
Sen, Siddhartha	Indian Inst. of Tech. Kharagpur
WeC14	HG D7.1
Automotive Suspension and Traction Control (Regular Session)	
Chair: Aschemann, Harald	Univ. of Rostock
Co-Chair: Göhrle, Christoph	Univ. of Stuttgart
16:20-16:40	WeC14.1
<i>Suspension Control Strategy for a Fully Electrified Vehicle</i> , pp. 1469-1474.	
Tudon-Martinez, Juan Carlos	Tecnológico de Monterrey
Varrier, Sébastien	Gipsa-Lab.
Morales-Menendez, Ruben	Tecnológico de Monterrey, Campus Monterrey

16:40-17:00	WeC14.2
<i>Hysteresis Compensation and Adaptive LQR Design for an Electro-Pneumatic Clutch for Heavy Trucks</i> , pp. 1475-1480.	
Aschemann, Harald	Univ. of Rostock
Prabel, Robert	Univ. of Rostock
Schindele, Dominik	Univ. of Rostock
17:00-17:20	WeC14.3
<i>Variable-Geometry Suspension Design in Driver Assistance Systems</i> , pp. 1481-1486.	
Nemeth, Balazs	MTA SZTAKI
Gaspar, Peter	Computer & Automation Inst. of HAS
17:20-17:40	WeC14.4
<i>A LPV Suspension Control with Performance Adaptation to Roll Behavior, Embedded in a Global Vehicle Dynamic Control Strategy</i> , pp. 1487-1492.	
Fergani, Soheib	GIPSA-Lab. Control Systems Dept, Grenoble Univ.
Senname, Olivier	INPG
Dugard, Luc	CNRS-INPG
17:40-18:00	WeC14.5
<i>Improving High Speed Road-Holding Using Actively Controlled Aerodynamic Surfaces</i> , pp. 1493-1498.	
Corno, Matteo	Pol. di Milano
Bottelli, Stefano	Pol. di Milano
Panzani, Giulio	Univ. degli Studi di Trento
Tanelli, Mara	Pol. di Milano
Spelta, Cristiano	Univ. degli Studi di Bergamo
Savaresi, Sergio M.	Pol. Di Milano
18:00-18:20	WeC14.6
<i>Model Predictive Control of Semi-Active and Active Suspension Systems with Available Road Preview</i> , pp. 1499-1504.	
Göhrle, Christoph	Univ. of Stuttgart
Schindler, Andreas	Audi AG
Wagner, Andreas	Audi AG
Sawodny, Oliver	Univ. of Stuttgart
WeC15	HG D7.2
Emerging Control Problems in Power Electronics Systems (Invited Session)	
Chair: Mariethoz, Sebastien	ETH Zurich
Co-Chair: Warrington, Joseph	ETH Zurich
Organizer: Mariethoz, Sebastien	ETH Zurich
16:20-16:40	WeC15.1
<i>Stability Analysis of Droop Controlled Inverters Via Dynamic Phasors and Contraction Theory (I)</i> , pp. 1505-1510.	
Mariani, Valerio	Univ. degli Studi del Sannio
Vasca, Francesco	Univ. of Sannio
16:40-17:00	WeC15.2
<i>Multi-Core Parallelisation of Integer Optimisation Model Predictive Control for Power Electronic Applications (I)</i> , pp. 1511-1516.	
Peyrl, Helfried	ABB Corp. Res.
Richter, Stefan	ABB
Zanarini, Alessandro	ABB Schweiz AG - Corp. Res. Center, Segelhofstrasse 1K,
17:00-17:20	WeC15.3
<i>Constrained Real-Time Optimal Control for Cyclic AC PWM Systems (I)</i> , pp. 1517-1522.	
Fischer, Claudia	ETH Zurich
Mariethoz, Sebastien	ETH Zurich
Morari, Manfred	ETH Zurich
17:20-17:40	WeC15.4
<i>Extending Affine Control Policies to Hybrid Systems: Robust Control of a DC-DC Buck Converter (I)</i> , pp. 1523-1528.	

Vujanic, Robin	ETH Zurich
Schmitt, Marius	ETHZ
Warrington, Joseph	ETH Zurich
Morari, Manfred	ETH Zurich
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17:40-18:00	WeC15.5
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<i>Actuator Performance Evaluation Using LMIs for Optimal HVDC Placement (I)</i> , pp. 1529-1534.	
Fuchs, Alexander	ETH Zurich
Morari, Manfred	ETH Zurich
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18:00-18:20	WeC15.6
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<i>Dynamic Analysis and Control of Dc/dc Boost Converters Used in Stand-Alone PV Systems</i> , pp. 1535-1540.	
Krommydas, Konstantinos	Univ. of Patras
Alexandridis, Antonios	Univ. of Patras

Technical Program for Thursday July 18, 2013

ThPT1	HG F30, F1, F7
Plenary 2: Control for Smart Grids: Applications and Opportunities in the Customer Domain (Plenary Session)	
Chair: Canudas de Wit, Carlos	CNRS-LAG-Grenoble
08:00-09:00	ThPT1.1
<i>Control for Smart Grids: Applications and Opportunities in the Customer Domain*.</i>	
Samad, Tariq	Honeywell Lab.
ThA1	HG F1
Control of Electrical Energy Systems (Tutorial Session)	
Chair: Hiskens, Ian A.	Univ. of Michigan
Organizer: Hiskens, Ian A.	Univ. of Michigan
09:20-10:00	ThA1.1
<i>Overview of Power System Controls (I)*.</i>	
Hiskens, Ian A.	Univ. of Michigan
10:00-10:40	ThA1.2
<i>Energy Hub Concepts and Controls (I)*.</i>	
Andersson, Goran	Swiss Federal Inst. of Tech.
10:40-11:20	ThA1.3
<i>Demand Response Strategies for Enhanced Control of Power Systems (I)*.</i>	
Callaway, Duncan	UC Berkeley
ThA2	HG F3
Model Predictive Control IV (Regular Session)	
Chair: Pannocchia, Gabriele	Univ. of Pisa
Co-Chair: Domahidi, Alexander	Automatic Control Lab. ETH Zurich
09:20-09:40	ThA2.1
<i>Multi-Objective Predictive Control for Non Steady-State Operation</i> , pp. 1541-1546.	
Maree, Johannes Philippus	Norwegian Univ. of Science and Tech.
Imsland, Lars	Norwegian Univ. of Science and Tech.
09:40-10:00	ThA2.2
<i>Code Generation for Embedded Second-Order Cone Programming</i> , pp. 1547-1552.	
Chu, Eric	Stanford Univ.
Parikh, Neal	Stanford Univ.
Domahidi, Alexander	Automatic Control Lab. ETH Zurich
Boyd, Stephen P.	Stanford Univ.
10:00-10:20	ThA2.3
<i>A Parsimonious Algorithm for the Solution of Continuous-Time Constrained LQR Problems with Guaranteed Convergence</i> , pp. 1553-1558.	
Pannocchia, Gabriele	Univ. of Pisa
Mayne, David Q.	Imperial Coll. London
Rawlings, James B.	Univ. of Wisconsin at Madison
Mancuso, Giulio Mosè	Scuola Superiore Sant'Anna
10:20-10:40	ThA2.4
<i>Model Predictive Control for a Thermostatic Controlled System</i> , pp. 1559-1564.	
Shafiei, Seyed Ehsan	Aalborg Univ.
Rasmussen, Henrik	Aalborg Univ.
Stoustrup, Jakob	Aalborg Univ.
10:40-11:00	ThA2.5
<i>A Supervisory Control Approach in Economic MPC Design for Refrigeration Systems</i> , pp. 1565-1570.	
Shafiei, Seyed Ehsan	Aalborg Univ.
Stoustrup, Jakob	Aalborg Univ.

Rasmussen, Henrik	Aalborg Univ.
11:00-11:20	ThA2.6
<i>A Flexible Low Cost Embedded System for Model Predictive Control of Industrial Processes</i> , pp. 1571-1576.	
Lima, Daniel Martins	Univ. Federal de Santa Catarina
Americano da Costa, Marcus V.	Federal Univ. of Santa Catarina
Normey-Rico, Julio Elias	Federal Univ. of Santa Catarina
ThA3	HG F5
Estimation and Control of DPS I (Invited Session)	
Chair: Demetriou, Michael A.	Worcester Pol. Inst.
Co-Chair: Meurer, Thomas	Christian-Albrechts-Univ. Kiel
Organizer: Demetriou, Michael A.	Worcester Pol. Inst.
Organizer: Meurer, Thomas	Christian-Albrechts-Univ. Kiel
09:20-09:40	ThA3.1
<i>Spatial Proportional-Integral-Derivative Penalization of Distributed Consensus Filters for Spatially Distributed Processes (I)</i> , pp. 1577-1582.	
Demetriou, Michael A.	Worcester Pol. Inst.
09:40-10:00	ThA3.2
<i>Estimation of the Distributed Temperature of a SI Engine Catalyst for Light-Off Strategy (I)</i> , pp. 1583-1590.	
Bresch-Pietri, Delphine	MIT
Leroy, Thomas	IFP
Petit, Nicolas	MINES ParisTech
10:00-10:20	ThA3.3
<i>A Contribution to Parameter Identification in Infinite-Dimensional Systems (I)</i> , pp. 1591-1596.	
Knüppel, Torsten	Tech. Univ. Dresden
Woittennek, Frank	Tech. Univ. Dresden
10:20-10:40	ThA3.4
<i>A Backstepping Boundary Observer for a Class of Linear First-Order Hyperbolic Systems (I)</i> , pp. 1597-1602.	
Di Meglio, Florent	MINES ParisTech
Vazquez, Rafael	Escuela Superior de Ingenieros, Univ. Sevilla
Krstic, Miroslav	Univ. of California at San Diego
10:40-11:00	ThA3.5
<i>State Estimation for Parabolic PDEs with Reactive-Convective Non-Linearities (I)</i> , pp. 1603-1608.	
Jadachowski, Lukas	Vienna Univ. of Tech.
Meurer, Thomas	Christian-Albrechts-Univ. Kiel
Kugi, Andreas	Vienna Univ. of Tech. (VUT)
11:00-11:20	ThA3.6
<i>A Parallel Algorithm for Optimum Monitoring Network Design in Parameter Estimation of Distributed Systems (I)</i> , pp. 1609-1614.	
Ucinski, Dariusz	Univ. of Zielona Gora
Baranowski, Przemyslaw	Univ. of Zielona Gora
ThA4	HG F7
Stochastic Filtering (Regular Session)	
Chair: Hanebeck, Uwe	Karlsruhe Inst. of Tech. (KIT)
Co-Chair: Mahdianfar, Hessam	Norwegian Univ. of Science and Tech. (NTNU)
09:20-09:40	ThA4.1
<i>An Empirical Method to Fuse Partially Overlapping State Vectors for Distributed State Estimation</i> , pp. 1615-1620.	
Sijs, Joris	TNO
Hanebeck, Uwe	Karlsruhe Inst. of Tech. (KIT)
Noack, Benjamin	Karlsruhe Inst. of Tech. (KIT)
09:40-10:00	ThA4.2
<i>Multiple Model Adaptive Estimation for Open Loop Unstable Plants</i> , pp. 1621-1626.	

Hassani, Vahid	Inst. Superior Técnico
Pascoal, Antonio Manuel	Inst. Superior Tecnico
Aguiar, A. Pedro	Faculty of Engineering, Univ. of Porto (FEUP)
Athans, Michael	Inst. Superior Tecnico
10:00-10:20	ThA4.3
<i>On the Relation of Nonanticipative Rate Distortion Function and Filtering Theory</i> , pp. 1627-1632.	
Charalambous, Charalambos D.	Univ. of Cyprus
Stavrou, Photios A.	Univ. of Cyprus
10:20-10:40	ThA4.4
<i>Equivalent Linearization Kalman Filter with Application to Cubic Sensor Problems</i> , pp. 1633-1638.	
Katayama, Tohru	Ritsumeikan Univ.
10:40-11:00	ThA4.5
<i>Particle Filters for Max Plus Systems</i> , pp. 1639-1644.	
Ferreira Cândido, Renato Markele	Univ. Estadual de Campinas
Santos-Mendes, Rafael	State Univ. of Campinas
Hardouin, Laurent	Univ. of Angers
Maia, Carlos Andrey	Univ. Federal de Minas Gerais
11:00-11:20	ThA4.6
<i>Joint Unscented Kalman Filter for State and Parameter Estimation in Managed Pressure Drilling</i> , pp. 1645-1650.	
Mahdianfar, Hessam	Norwegian Univ. of Science and Tech. (NTNU)
Pavlov, Alexey	Statoil Res. center
Aamo, Ole Morten	NTNU
ThA5	HG E1.1
Analysis of Hybrid Systems (Regular Session)	
Chair: Trenn, Stephan	Univ. of Kaiserslautern
Co-Chair: Mattsson, Per	Uppsala Univ.
09:20-09:40	ThA5.1
<i>What to Do When Hybrid Systems "freeze" Due to an Interconnection?</i> , pp. 1651-1656.	
Dashkovskiy, Sergey	Univ. of Applied Sciences Erfurt
Kosmykov, Michael	Univ. of Bremen
Promkam, Ratthaprom	Univ. of Bremen
09:40-10:00	ThA5.2
<i>A Sum-Of-Squares Approach to the Analysis of Zero Stability in Polynomial Hybrid Systems</i> , pp. 1657-1662.	
Murti, Chaitanya	Illinois Inst. of Tech.
Peet, Matthew Monnig	Arizona State Univ.
10:00-10:20	ThA5.3
<i>Controllability of a Class of Bimodal Discrete-Time Piecewise Linear Systems</i> , pp. 1663-1668.	
Yurtseven, Evren	SKF
Camlibel, Kanat	Univ. of Groningen
Heemels, Maurice	Eindhoven Univ. of Tech.
10:20-10:40	ThA5.4
<i>The Bang-Bang Funnel Controller: Time Delays and Case Study</i> , pp. 1669-1674.	
Liberzon, Daniel	Univ. of Illinois at Urbana-Champaign
Trenn, Stephan	Univ. of Kaiserslautern
10:40-11:00	ThA5.5
<i>State Estimation in Linear Time-Invariant Systems with Unknown Impulsive Inputs</i> , pp. 1675-1680.	
Mattsson, Per	Uppsala Univ.
Medvedev, Alexander V.	Uppsala Univ.
11:00-11:20	ThA5.6
<i>Static Anti-Windup Scheme for a Class of Homogeneous Dwell-Time Hybrid Controllers</i> , pp. 1681-1686.	
Fichera, Francesco	CNRS
Prieur, Christophe	CNRS

ThA6		HG E1.2
Stability of Nonlinear Systems I (Regular Session)		
Chair: Heath, William Paul		Univ. of Manchester
Co-Chair: Perruquetti, Wilfrid		Ec. Centrale de Lille
09:20-09:40		ThA6.1
<i>Basic Properties and Stability of Fractional Order Reset Control Systems</i> , pp. 1687-1692.		
Hosseinnia, S. Hassan		Univ. de Extremadura
Tejado, Ines	Univ. Técnica de Lisboa, Inst. Superior Técnico	
Vinagre, B. M.		Univ. de Extremadura
09:40-10:00		ThA6.2
<i>Extension of the Krylov-Bogoliubov Method and Its Application to the Decay Rate Analysis of Nonlinear Control Algorithms</i> , pp. 1693-1698.		
Röthig, Andreea	Darmstadt Univ. of Tech. Inst. of Automatic Contr	
10:00-10:20		ThA6.3
<i>A Generalisation of the Nonlinear Small-Gain Theorem for Systems with Abstract Initial Conditions</i> , pp. 1699-1704.		
Liu, Jing		Univ. of Southampton
French, Mark		Univ. of Southampton
10:20-10:40		ThA6.4
<i>On ISS and Iiss Properties of Homogeneous Systems</i> , pp. 1705-1710.		
Bernuau, Emmanuel		Ec. Lille
Polyakov, Andrey		INRIA Lille Nord-Europe
Efimov, Denis		INRIA - LNE
Perruquetti, Wilfrid		Ec. Centrale de Lille
10:40-11:00		ThA6.5
<i>On Multipliers for Bounded and Monotone Nonlinearities</i> , pp. 1711-1716.		
Carrasco, Joaquin		Univ. of Manchester
Heath, William Paul		Univ. of Manchester
Lanzon, Alexander		Univ. of Manchester
ThA7		HG E3
Algebraic and Geometric Methods (Regular Session)		
Chair: Aguiar, A. Pedro	Faculty of Engineering, Univ. of Porto (FEUP)	
Co-Chair: Biggs, James Douglas		Univ. of Strathclyde
09:20-09:40		ThA7.1
<i>Quadratic Hamiltonians on Non-Euclidean Spaces of Arbitrary Constant Curvature</i> , pp. 1717-1721.		
Biggs, James Douglas		Univ. of Strathclyde
09:40-10:00		ThA7.2
<i>Sufficiency of a Necessary Condition for Local Observability of Discrete-Time Polynomial Systems</i> , pp. 1722-1727.		
Kawano, Yu		Osaka Univ.
Ohtsuka, Toshiyuki		Osaka Univ.
10:00-10:20		ThA7.3
<i>Input-Output Linearization by Dynamic Output Feedback</i> , pp. 1728-1733.		
Kaldmäe, Arvo		Inst. of Cybernetics at TUT
Kotta, Ülle		Inst. of Cybernetics at TUT
10:20-10:40		ThA7.4
<i>A New Algorithm for Linearization up to Multi-Output Injection for a Class of Systems with Implicitly Defined Outputs</i> , pp. 1734-1739.		
Rodrigues, Sergio		RICAM-OEAW, Linz
Aguiar, A. Pedro	Faculty of Engineering, Univ. of Porto (FEUP)	
10:40-11:00		ThA7.5

Stationary Trajectories, Singular Hamiltonian Systems and Ill-Posed Interconnection, pp. 1740-1745.

Jugade, Shriram	Indian Inst. of Tech. Bombay
Pal, Debasattam	Indian Inst. of Tech. Guwahati
Kalaimani, Rachel Kalpana	Indian Inst. of Tech. Bombay
Belur, Madhu N.	Indian Inst. of Tech. Bombay

11:00-11:20

ThA7.6

Almost Global Attitude Stabilization of a Rigid Body for Both Internal and External Actuation Schemes, pp. 1746-1751.

Bayadi, Ramaprakash	Indian Inst. of Tech. Bombay
Banavar, Ravi N.	Indian Inst. of Tech.

ThA8

HG E5

Networks and Consensus (Regular Session)

Chair: Hadjicostis, Christoforos	Univ. of Cyprus
Co-Chair: Hendrickx, Julien M.	UCL

09:20-09:40

ThA8.1

Distributed Formation of Balanced and Bistochastic Weighted Digraphs in Multi-Agent Systems, pp. 1752-1757.

Charalambous, Themistoklis	Royal Inst. of Tech. (KTH)
Hadjicostis, Christoforos	Univ. of Cyprus

09:40-10:00

ThA8.2

Singularly Perturbed Algorithms for Dynamic Average Consensus, pp. 1758-1763.

Kia, Solmaz	Univ. of California San Diego
Cortes, Jorge	Univ. of California, San Diego
Martinez, Sonia	Univ. of California at San Diego

10:00-10:20

ThA8.3

A GTS Scheduling for Consensus Problems Over IEEE 802.15.4 Wireless Networks, pp. 1764-1769.

Hayashi, Naoki	Osaka Univ.
Takai, Shigemasa	Osaka Univ.

10:20-10:40

ThA8.4

On Distributed Cluster Consensus for Multiple Double-Integrator Agents, pp. 1770-1775.

Qin, Jiahu	The Australian National Univ.
Yu, Changbin	Australian National Univ.
Anderson, Brian D.O.	Australian National Univ.

10:40-11:00

ThA8.5

A Distributed Randomized Algorithm for Relative Localization in Sensor Networks, pp. 1776-1781.

Ravazzi, Chiara	Pol. di Torino
Frasca, Paolo	Pol. di Torino
Ishii, Hideaki	Tokyo Inst. of Tech.
Tempo, Roberto	Pol. di Torino

11:00-11:20

ThA8.6

Large Network Consensus Is Robust to Packet Losses and Interferences, pp. 1782-1787.

Frasca, Paolo	Pol. di Torino
Hendrickx, Julien M.	UCL

ThA9

HG E7

Quadrotor Control (Regular Session)

Chair: Silvestre, Carlos	Inst. Superior Tecnico
Co-Chair: Tzes, Anthony	Univ. of Patras

09:20-09:40

ThA9.1

Time-Optimal Quadrotor Flight, pp. 1788-1792.

Van Loock, Wannes	KU Leuven
Pipeleers, Goele	KU Leuven
Swevers, Jan	KU Leuven

09:40-10:00	ThA9.2
<i>Hybrid Model Predictive Flight Mode Conversion Control of Unmanned Quad-TiltRotors</i> , pp. 1793-1798.	
Papachristos, Christos	Univ. of Patras
Alexis, Kostas	Eidgenössische Tech. Hochschule Zürich
Tzes, Anthony	Univ. of Patras
10:00-10:20	ThA9.3
<i>An Iterative Learning Scheme for High Performance, Periodic Quadrocopter Trajectories</i> , pp. 1799-1804.	
Hehn, Markus	ETH Zurich
D'Andrea, Raffaello	ETH Zurich
10:20-10:40	ThA9.4
<i>Admittance Control for Physical Human-Quadrocopter Interaction</i> , pp. 1805-1810.	
Augugliaro, Federico	ETH Zurich
D'Andrea, Raffaello	ETH Zurich
10:40-11:00	ThA9.5
<i>Experimental Validation of a Nonlinear Quadrocopter Controller with Wind Disturbance Rejection</i> , pp. 1811-1816.	
Cabecinhas, David	Inst. Superior Tecnico
Cunha, Rita	Inst. Superior Técnico
Silvestre, Carlos	Inst. Superior Tecnico
11:00-11:20	ThA9.6
<i>A Novel Leader-Following Strategy Applied to Formations of Quadrocopters</i> , pp. 1817-1822.	
Roldão, Valter	Inst. Superior Técnico
Cunha, Rita	Inst. Superior Técnico
Cabecinhas, David	Inst. Superior Tecnico
Silvestre, Carlos	Inst. Superior Tecnico
Oliveira, Paulo Jorge	Inst. Superior Técnico
ThA10	HG D1.1
Linear Parameter-Varying Systems (Regular Session)	
Chair: Puig, Vicenc	Univ. Pol. de Catalunya
Co-Chair: Bokor, Jozsef	Hungarian Acad. of Sciences
09:20-09:40	ThA10.1
<i>H-Infinity LPV Filtering for Discrete-Time Linear Systems Subject to Additive and Multiplicative Uncertainties in the Measurement</i> , pp. 1823-1828.	
Lacerda, Márcio Júnior	Univ. of Campinas
Tognetti, Eduardo S.	Univ. of Brasilia
Oliveira, Ricardo C. L. F.	Univ. of Campinas
Peres, Pedro L. D.	Univ. of Campinas
09:40-10:00	ThA10.2
<i>A Shifting Pole Placement Approach for the Design of Parameter-Scheduled State-Feedback Controllers</i> , pp. 1829-1834.	
Rotondo, Damiano	UPC
Nejjari, Fatiha	Univ. Pol. de Catalunya
Puig, Vicenc	Univ. Pol. de Catalunya
10:00-10:20	ThA10.3
<i>Reduced-Order Two-Parameter Plpv Controller for the Rejection of Nonstationary Harmonically Related Multisine Disturbances</i> , pp. 1835-1842.	
Ballesteros, Pablo	Clausthal Univ. of Tech.
Shu, Xinyu	Clausthal Univ. of Tech.
Heins, Wiebke	Clausthal Univ. of Tech.
Bohn, Christian	Clausthal Univ. of Tech.
10:20-10:40	ThA10.4
<i>Continuity of the Maximal Negative Graph Spaces</i> , pp. 1843-1847.	
Szabo, Zoltan	MTA SZTAKI
Biro, Zsolt	MTA SZTAKI

Bokor, Jozsef	Hungarian Acad. of Sciences
10:40-11:00	ThA10.5
<i>LPV Observer Design and Damping Control of Container Crane Load Swing</i> , pp. 1848-1853.	
Mendez Gonzalez, Antonio	Hamburg Univ. of Tech.
Hoffmann, Christian	Hamburg Univ. of Tech.
Radisch, Christian	Hamburg Univ. of Tech.
Werner, Herbert	Hamburg Univ. of Tech.
11:00-11:20	ThA10.6
<i>Finite Time Robust Filtering for Time-Varying Uncertain Polytopic Linear Systems</i> , pp. 1854-1859.	
Borges, Renato Alves	Univ. of Brasilia
Ishihara, João Yoshiyuki	Univ. of Brasília
Rocha, Lara Guimarães	Univ. of Brasilia
Risso, Lara de Oliveira	Univ. of Brasilia
Kussaba, Hugo Tadashi	Univ. of Brasília
ThA11	HG D1.2
Multi-Agent Systems (Regular Session)	
Chair: Allgower, Frank	Univ. of Stuttgart
Co-Chair: Werner, Herbert	Hamburg Univ. of Tech.
09:20-09:40	ThA11.1
<i>Robust Design of Sparse Relative Sensing Networks</i> , pp. 1860-1865.	
Schuler, Simone	Univ. of Stuttgart
Zelazo, Daniel	Tech. - Israel Inst. of Tech.
Allgower, Frank	Univ. of Stuttgart
09:40-10:00	ThA11.2
<i>Convergence Bounds for Discrete-Time Second-Order Multi-Agent-Systems</i> , pp. 1866-1871.	
Eichler, Annika	Hamburg Univ. of Tech. (TUHH)
Werner, Herbert	Hamburg Univ. of Tech.
10:00-10:20	ThA11.3
<i>Stability of Continuous-Time Consensus Algorithms for Switching Networks with Bidirectional Interaction</i> , pp. 1872-1877.	
Matveev, Alexey S.	St.Petersburg Univ.
Novitsyn, Igor	St.Petersburg State Univ.
Proskurnikov, Anton	St.-Petersburg State Univ.
10:20-10:40	ThA11.4
<i>Distributed Stabilization of 3D Circular Formations</i> , pp. 1878-1883.	
El-Hawwary, Mohamed I.	Cairo Univ.
10:40-11:00	ThA11.5
<i>Consensus of Multi-Agent Systems with Nonuniform Non-Differentiable Time-Varying Delays</i> , pp. 1884-1889.	
Savino, Heitor J.	Univ. Federal de Minas Gerais
Cota, Anna Paula	Univ. Federal de Minas Gerais
Souza, Fernando de Oliveira	Federal Univ. of Minas Gerais
Pimenta, Luciano Cunha de Araújo	Federal Univ. of Minas Gerais
Mendes, Eduardo Mazoni Andrade Marçal	Federal Univ. of Minas Gerais
Mozelli, Leonardo	Federal Univ. of São João Del-Rei
11:00-11:20	ThA11.6
<i>H_infinity Almost Regulated Synchronization and H_infinity Almost Formation for Heterogeneous Networks under External Disturbances</i> , pp. 1890-1895.	
Peymani Ferooshani, Ehsan	Norwegian Univ. of Sci. and Tech.
Grip, Håvard Fjær	NTNU
Saberi, Ali	Washington State Univ.
Wang, Xu	New York Univ.
Fossen, Thor I.	Norwegian Univ. of Sci and Tech.

ThA12	HG D3.2
System Identification I (Regular Session)	
Chair: Diversi, Roberto	Univ. of Bologna
Co-Chair: Ramos, Jose A.	Nova Southeastern Univ.
09:20-09:40	ThA12.1
<i>Identification of Errors-In-Variables Models As a Quadratic Eigenvalue Problem</i> , pp. 1896-1901.	
Diversi, Roberto	Univ. of Bologna
Soverini, Umberto	Univ. of Bologna
09:40-10:00	ThA12.2
<i>Algebraic Parameter Estimation of a Multi-Sinusoidal Waveform Signal from Noisy Data</i> , pp. 1902-1907.	
Ushirobira, Rosane	Inria Lille - Nord Europe & Univ. de Bourgogne
Perruquetti, Wilfrid	Ec. Centrale de Lille
Mboup, Mamadou	Univ. de Reims Champagne Ardenne
Fliess, Michel	Ec. Pol.
10:00-10:20	ThA12.3
<i>Errors-In-Variables Identification of Thermal Models for Many-Core Computing Systems</i> , pp. 1908-1915.	
Diversi, Roberto	Univ. of Bologna
Tilli, Andrea	Univ. of Bologna
Bartolini, Andrea	Univ. of Bologna - DEIS
Benini, Luca	Univ. of Bologna - DEIS
10:20-10:40	ThA12.4
<i>A Local Approach Framework for Black-Box and Gray-Box LPV System Identification</i> , pp. 1916-1921.	
Vizer, Daniel	Univ. of Tech. and Ec. of Budapest, Univ. d
Mercère, Guillaume	Poitiers Univ.
Prot, Olivier	Univ. de Limoges
Ramos, Jose A.	Nova Southeastern Univ.
10:40-11:00	ThA12.5
<i>A Generalized Vector Observation for Discrete-Time Varying Delay Systems Identification</i> , pp. 1922-1927.	
Bedoui, Saïda	Gabes Univ. National Engineering school of Gabes
Ltaief, Majda	National School of Engineering of Gabes Tunisia
Kamel, Abderrahim	National School of Engineers of Gabes
11:00-11:20	ThA12.6
<i>Mixed Frequency Structured AR Model Identification</i> , pp. 1928-1933.	
Zamani, Mohsen	Australian National Univ.
Felsenstein, Elisabeth	Vienna Univ. of Tech.
Anderson, Brian D.O.	Australian National Univ.
Deistler, Manfred	Tech. Univ. of Vienna
ThA13	HG D5.2
Fault Diagnosis I (Regular Session)	
Chair: Raimondo, Davide Martino	Univ. of Pavia
Co-Chair: Reppa, Vasso	Univ. of Cyprus
09:20-09:40	ThA13.1
<i>Semidefinite Programming Relaxation of Optimum Active Input Design for Fault Detection and Diagnosis: Model-Based Finite Horizon Prediction</i> , pp. 1934-1939.	
Kim, Kwang-Ki	Univ. of Illinois
Braatz, Richard D.	Massachusetts Inst. of Tech.
09:40-10:00	ThA13.2
<i>Optimum Input Design for Fault Detection and Diagnosis: Model-Based Prediction and Statistical Distance Measures</i> , pp. 1940-1945.	
Kim, Kwang-Ki	Univ. of Illinois
Raimondo, Davide Martino	Univ. of Pavia
Braatz, Richard D.	Massachusetts Inst. of Tech.

10:00-10:20	ThA13.3
<i>Fault Diagnosis in Managed Pressure Drilling Using Nonlinear Adaptive Observers</i> , pp. 1946-1951.	
Willersrud, Anders	Univ. of Science and Tech. (NTNU)
Imslund, Lars	Norwegian Univ. of Science and Tech.
10:20-10:40	ThA13.4
<i>Multiple Sensor Fault Detection and Isolation for Large-Scale Interconnected Nonlinear Systems</i> , pp. 1952-1957.	
Reppa, Vasso	Univ. of Cyprus
Polycarpou, Marios M.	Univ. of Cyprus
Panayiotou, Christos	Univ. of Cyprus
10:40-11:00	ThA13.5
<i>A Generative Approach to Qualitative Trend Analysis for Batch Process Fault Diagnosis</i> , pp. 1958-1963.	
Villez, Kris	Eawag
Rengaswamy, Raghunathan	Clarkson Univ. Texas Tech. Univ.
11:00-11:20	ThA13.6
<i>Isolating Faulty Variables for Fault Propagation Using Bayesian Decision Theory</i> , pp. 1964-1969.	
Liu, Jialin	National Tsing Hua Univ.
Wong, David Shan Hill	National Tsing Hua Univ.
Chen, Ding-Sou	China Steel Corp.
ThA14	HG D7.1
Control of Internal Combustion Engines (Regular Session)	
Chair: Aschemann, Harald	Univ. of Rostock
Co-Chair: Tayamon, Soma	Uppsala Univ.
09:20-09:40	ThA14.1
<i>A Multiple Model-Based Controller for NO_x Reduction in a Selective Catalytic Reduction System</i> , pp. 1970-1975.	
Tayamon, Soma	Uppsala Univ.
Zambrano, Darine	Univ. De Los Andes
09:40-10:00	ThA14.2
<i>Influence of Transitions between SI and HCCI Combustion on Driving Cycle Fuel Consumption</i> , pp. 1976-1981.	
Nuesch, Sandro	Univ. of Michigan
Hellstrom, Erik	Univ. of Michigan
Jiang, Li	Robert Bosch LLC
Stefanopoulou, Anna G.	Univ. of Michigan
10:00-10:20	ThA14.3
<i>Easily Adaptable Model of Test Benches for Internal Combustion Engines</i> , pp. 1982-1987.	
Blumenschein, Josef	JKU Linz
Schranagl, Patrick	JKU Linz
Passenbrunner, Thomas Ernst	Johannes Kepler Univ. Linz
Trogmann, Hannes	Johannes Kepler Univ. Linz
Del Re, Luigi	Johannes Kepler Univ. Linz
10:20-10:40	ThA14.4
<i>Model-Predictive On-Off Control of a Combustion-Heating-System for Vehicles</i> , pp. 1988-1993.	
Butt, Saif Siddique	Univ. of Rostock
Prabel, Robert	Univ. of Rostock
Aschemann, Harald	Univ. of Rostock
10:40-11:00	ThA14.5
<i>Common Rail Injection System Controller Design Using Input-To-State Linearization and Optimal Control Strategy with Integral Action</i> , pp. 1994-1999.	
Rivas, Maria	Gipsa Lab.
Sename, Olivier	INPG
Witrant, Emmanuel	Univ. Joseph Fourier
Caillol, Christian	Univ. of Orleans
Higelin, Pascal	Univ. of Orleans

11:00-11:20	ThA14.6
<i>Piecewise Affine Modeling of NOx Emission Produced by a Diesel Engine</i> , pp. 2000-2005.	
Vereshchaga, Yana	Johannes Kepler Univ. Linz
Stadlbauer, Stephan	Johannes Kepler Univ. Linz
Bako, Laurent	Ec. des Mines de Douai
Del Re, Luigi	Johannes Kepler Univ. Linz
ThA15	HG D7.2
Control of Smart Grids and Micro Grids (Regular Session)	
Chair: Piroddi, Luigi	Pol. di Milano
Co-Chair: Glielmo, Luigi	Univ. of Sannio
09:20-09:40	ThA15.1
<i>Stability Concerns for Indirect Consumer Control in Smart Grids</i> , pp. 2006-2013.	
Juelsgaard, Morten	Aalborg Univ.
Andersen, Palle	Aalborg Univ.
Wisniewski, Rafael	Section for Automation and Control, Aalborg Univ.
09:40-10:00	ThA15.2
<i>Stochastic Model Predictive Control for Economic/Environmental Operation Management of Microgrids (I)</i> , pp. 2014-2019.	
Parisio, Alessandra	Royal Inst. of Tech. Stockholm, Sweden
Glielmo, Luigi	Univ. of Sannio
10:00-10:20	ThA15.3
<i>Fuzzy Demand Forecasting in a Predictive Control Strategy for a Renewable-Energy Based Microgrid</i> , pp. 2020-2025.	
Ávila, Fernanda	Univ. de Chile
Saez, Doris	Univ. de Chile
Jiménez-Estévez, Guillermo	Univ. de Chile
Reyes, Lorenzo	Univ. de Chile
Núñez, Alfredo	Delft Univ. of Tech.
10:20-10:40	ThA15.4
<i>An Approximate Dynamic Programming Approach to the Energy Management of a Building Cooling System (I)</i> , pp. 2026-2031.	
Ceriani, Nicola Maria	Pol. di Milano
Vignali, Riccardo	Pol. DI MILANO
Piroddi, Luigi	Pol. di Milano
Prandini, Maria	Pol. di Milano
10:40-11:00	ThA15.5
<i>A Game Theory Framework for Active Power Injection Management with Voltage Boundary in Smart Grids</i> , pp. 2032-2037.	
Cavraro, Guido	Univ. of Padova
Badia, Leonardo	Univ. of Padova
11:00-11:20	ThA15.6
<i>Voltage Stability and Robustness for Microgrid Systems (I)</i> , pp. 2038-2043.	
Wang, Le Yi	Wayne State Univ.
Polis, Michael	Oakland Univ.
Wang, Caisheng	Wayne State Univ.
Lin, Feng	Wayne State Univ.
ThST1	HG F1, F3
Semi-Plenary 3: The Design and Control of Airborne Wind Turbines (Semi-Plenary Session)	
Chair: Jones, Colin N	EPFL, Lausanne
11:30-12:15	ThST1.1
<i>The Design and Control of Airborne Wind Turbines*</i> .	
Vander Lind, Damon	Macani Power

ThST2	HG F7, F5
Semi-Plenary 4: Demand-Side Modeling, Estimation and Control in Electric Power Systems (Semi-Plenary Session)	
Chair: Johansson, Karl Henrik	Royal Inst. of Tech.
11:30-12:15	ThST2.1
<i>Demand-Side Modeling, Estimation and Control in Electric Power Systems*</i> .	
Callaway, Duncan	UC Berkeley
ThB1	HG F1
Partial Control of Agents on Networks and Applications to Rerouting a Subset of Drivers on Freeways (Tutorial Session)	
Chair: Bayen, Alexandre M.	Univ. of California at Berkeley
Co-Chair: Reilly, Jack	U.C. Berkeley
Organizer: Bayen, Alexandre M.	Univ. of California at Berkeley
Organizer: Reilly, Jack	U.C. Berkeley
13:40-14:40	ThB1.1
<i>Nash Equilibria and Stackelberg Games on Horizontal Queueing Networks (I)*.</i>	
Reilly, Jack	U.C. Berkeley
14:40-15:40	ThB1.2
<i>Adjoint-Based Optimization of PDE Systems on Networks with Applications to Ramp Metering and Partial Rerouting (I)*.</i>	
Bayen, Alexandre M.	Univ. of California at Berkeley
ThB2	HG F3
Nonlinear Model Predictive Control (Regular Session)	
Chair: Glad, S. Torkel	Linköping Univ.
Co-Chair: Baldea, Michael	Univ. of Texas at Austin
13:40-14:00	ThB2.1
<i>Economic Model Predictive Control with Self-Tuning Terminal Weight</i> , pp. 2044-2049.	
Muller, Matthias A.	Univ. of Stuttgart
Angeli, David	Univ. of Firenze
Allgower, Frank	Univ. of Stuttgart
14:00-14:20	ThB2.2
<i>Robust Stabilizing Output Feedback Nonlinear Model Predictive Control by Using Passivity and Dissipativity</i> , pp. 2050-2055.	
Yu, Han	Univ. of Notre Dame
Zhu, Feng	Univ. of Notre Dame
Xia, Meng	Univ. of Notre Dame
Antsaklis, Panos J.	Univ. of Notre Dame
14:20-14:40	ThB2.3
<i>Nonlinear Model Predictive Control Using Feedback Linearization and Local Inner Convex Constraint Approximations</i> , pp. 2056-2061.	
Simon, Daniel	Linköping Univ.
Löfberg, Johan	Linköping Univ.
Glad, S. Torkel	Linköping Univ.
14:40-15:00	ThB2.4
<i>Concurrent Nonlinear Predictive Control and Economic Management of Energy-Integrated Systems</i> , pp. 2062-2067.	
Baldea, Michael	Univ. of Texas at Austin
Touretzky, Cara R.	Univ. of Texas at Austin
15:00-15:20	ThB2.5
<i>Discrete-Time Incremental ISS: A Framework for Robust NMPC</i> , pp. 2068-2073.	
Bayer, Florian	Univ. of Stuttgart
Bürger, Mathias	Univ. of Stuttgart
Allgower, Frank	Univ. of Stuttgart
15:20-15:40	ThB2.6
<i>Simulation Based Evaluation of a Nonlinear Model Predictive Controller for Friction Stir Welding of Nuclear Waste Canisters</i> , pp. 2074-2079.	

Nielsen, Isak
 Garpinger, Olof
 Cederqvist, Lars

Linköping Univ.
 Lund Univ.
 Swedish Nuclear Fuel and Waste Management Company

ThB3		HG F5
Estimation and Control of DPS II (Invited Session)		
Chair: Demetriou, Michael A.		Worcester Pol. Inst.
Co-Chair: Meurer, Thomas		Christian-Albrechts-Univ. Kiel
Organizer: Demetriou, Michael A.		Worcester Pol. Inst.
Organizer: Meurer, Thomas		Christian-Albrechts-Univ. Kiel
13:40-14:00		ThB3.1
<i>On Some Open Questions in Bilinear Quantum Control (I)</i> , pp. 2080-2085.		
Boscain, Ugo V.		SISSA-ISAS
Chambrion, Thomas		Univ. de Lorraine
Sigalotti, Mario		INRIA Saclay
14:00-14:20		ThB3.2
<i>Parametric State Feedback Design for Linear Infinite-Dimensional Systems (I)</i> , pp. 2086-2091.		
Mohr, Andreas		Univ. Erlangen-Nürnberg
Deutscher, Joachim		Univ. Erlangen-Nürnberg
14:20-14:40		ThB3.3
<i>H_∞-Control with State Feedback of an Inclined Cable (I)</i> , pp. 2092-2097.		
Baudouin, Lucie		LAAS-CNRS ; Univ. de Toulouse
Neild, Simon		Univ. of Bristol, Department of Mechanical Engineering
Wagg, David		Univ. of Bristol, Department of Mechanical Engineering
14:40-15:00		ThB3.4
<i>Passivity-Based Control of Implicit Port-Hamiltonian Systems (I)</i> , pp. 2098-2103.		
Macchelli, Alessandro		Univ. of Bologna - Italy
15:00-15:20		ThB3.5
<i>On an Approximation with Prescribed Zeros of SISO Abstract Boundary Control Systems (I)</i> , pp. 2104-2109.		
Iftime, Orest V.		Univ. of Groningen
Ionescu, Tudor Corneliu		Imperial Coll. London
15:20-15:40		ThB3.6
<i>On the Control of Spin-Boson Systems (I)</i> , pp. 2110-2115.		
Boscain, Ugo V.		SISSA-ISAS
Mason, Paolo		CNRS, Lab. des Signaux et Systèmes, Supélec
Panati, Gianluca		Univ. degli Studi di Roma "La Sapienza"
Sigalotti, Mario		INRIA Saclay
ThB4		HG F7
Observers for Nonlinear Systems (Regular Session)		
Chair: Richard, Jean-Pierre		Ec. Centrale de Lille
Co-Chair: Maree, Johannes Philippus		Norwegian Univ. of Science and Tech.
13:40-14:00		ThB4.1
<i>On Reduced-Order Interval Observers for Time-Delay Systems</i> , pp. 2116-2121.		
Efimov, Denis		INRIA - LNE
Perruquetti, Wilfrid		Ec. Centrale de Lille
Richard, Jean-Pierre		Ec. Centrale de Lille
14:00-14:20		ThB4.2
<i>State Observer for a First-Order Plant under Intrinsic Pulse-Modulated Feedback: A Case Study</i> , pp. 2122-2127.		
Churilov, Alexander		St.Petersburg State Marine Tech. Univ.
Medvedev, Alexander V.		Uppsala Univ.
Zhusubaliev, Zhanybai		South-West State Univ.

14:20-14:40	ThB4.3
<i>A Novel Adaptive Unscented Kalman Filter Attitude Estimation and Control System for a 3U Nanosatellite</i> , pp. 2128-2133.	
Li, Junquan	York Univ.
Post, Mark	York Univ.
Lee, Regina	York Univ.
14:40-15:00	ThB4.4
<i>A Convergence Result for the Unscented Kalman-Bucy Filter Using Contraction Theory</i> , pp. 2134-2139.	
Maree, Johannes Philippus	Norwegian Univ. of Science and Tech.
Imsland, Lars	Norwegian Univ. of Science and Tech.
Jouffroy, Jerome	Univ. of Southern Denmark
15:00-15:20	ThB4.5
<i>Cascade Observer for a Class of Nonlinear Systems with Output Delays</i> , pp. 2140-2145.	
Fall, Mamadou Lamine	ENSICAEN, Univ. de Caen, CNRS
Farza, Mondher	Univ. DE CAEN, ENSICAEN
M'Saad, Mohammed	ENSICAEN
Pigeon, Eric	GREYC
Gehan, Olivier	ENSICAEN
15:20-15:40	ThB4.6
<i>State Observers for a Class of Continuous Nonlinear Systems with Discrete Measurements</i> , pp. 2146-2151.	
Fall, Mamadou Lamine	ENSICAEN, Univ. de Caen, CNRS
Farza, Mondher	Univ. DE CAEN, ENSICAEN
M'Saad, Mohammed	ENSICAEN
Pigeon, Eric	GREYC
Gehan, Olivier	ENSICAEN
Mosrati, Ridha	Univ. de Caen, ERPCB
ThB5	HG E1.1
Switched Linear Systems (Regular Session)	
Chair: Valcher, Maria Elena	Univ. di Padova
Co-Chair: Raisch, Joerg	Tech. Univ. Berlin
13:40-14:00	ThB5.1
<i>A New Stability Result for Switched Linear Systems</i> , pp. 2152-2156.	
Kouhi, Yashar	Max Planck Insitute
Bajcinca, Naim	Max Planck Insitute
Raisch, Joerg	Tech. Univ. Berlin
Shorten, Robert	Nat. Univ. of Ireland
14:00-14:20	ThB5.2
<i>Measurable Disturbance Rejection with Quadratic Stability in Continuous-Time Linear Switching Systems</i> , pp. 2157-2162.	
Zattoni, Elena	Alma Mater Studiorum - Univ. of Bologna
Marro, Giovanni	Univ. of Bologna
14:20-14:40	ThB5.3
<i>On Averaging for Switched Linear Differential Algebraic Equations</i> , pp. 2163-2168.	
Iannelli, Luigi	Univ. of Sannio in Benevento
Pedicini, Carmen	Univ. of Sannio, Benevento
Trenn, Stephan	Univ. of Kaiserslautern
Vasca, Francesco	Univ. of Sannio
14:40-15:00	ThB5.4
<i>On the Stability and Stabilizability of a Class of Continuous-Time Positive Switched Systems with Rank One Difference</i> , pp. 2169-2174.	
Fornasini, Ettore	Univ. of Padova
Valcher, Maria Elena	Univ. di Padova
15:00-15:20	ThB5.5
<i>On the Numerical Solution of the Control Problem of Switched Linear Systems</i> , pp. 2175-2179.	

Vargas, Alessandro N Ishihara, João Yoshiyuki Do Val, Joao B.R.	Univ. Tec Federal do Parana, UTFPR Univ. of Brasília UNICAMP - FEEC
15:20-15:40	ThB5.6
<i>On-Line Switching Signal Estimation of Switched Linear Systems with Measurement Noise</i> , pp. 2180-2185.	
Lee, Chanhwa Ping, Zhaowu Shim, Hyungbo	Seoul National Univ. Seoul National Univ. Seoul National Univ.
ThB6	HG E1.2
Stability of Nonlinear Systems II (Regular Session)	
Chair: Normand-Cyrot, Marie-Dorothée Co-Chair: Turner, Matthew C.	CNRS-Supélec Univ. of Leicester
13:40-14:00	ThB6.1
<i>Stabilization of Nonlinear Discrete-Time Dynamics in Strict Feedforward Form</i> , pp. 2186-2191.	
Monaco, Salvatore Normand-Cyrot, Marie-Dorothée	Univ. di Roma La Sapienza CNRS-Supélec
14:00-14:20	ThB6.2
<i>High-Order Zames-Falb Multiplier Analysis Using Linear Matrix Inequalities</i> , pp. 2192-2197.	
Turner, Matthew C. Sofrony, Jorge	Univ. of Leicester Univ. nacional de colombia
14:20-14:40	ThB6.3
<i>Controller Synthesis for Incremental Stability: Application to Symbolic Controller Synthesis</i> , pp. 2198-2203.	
Zamani, Majid Van De Wouw, Nathan	Delft Univ. of Tech. Eindhoven Univ. of Tech.
14:40-15:00	ThB6.4
<i>On an Extension of Homogeneity Notion for Differential Inclusions</i> , pp. 2204-2209.	
Bernuau, Emmanuel Efimov, Denis Perruquetti, Wilfrid Polyakov, Andrey	Ec. Lille INRIA - LNE Ec. Centrale de Lille INRIA Lille Nord-Europe
15:00-15:20	ThB6.5
<i>On the Stability of Lyapunov Exponents of Discrete Linear Systems</i> , pp. 2210-2213.	
Czornik, Adam Nawrat, Aleksander Niezabitowski, Michal	Silesian Tech. Univ. Silesian Tech. Univ. Silesian Univ. of Tech. of AutomaticControl
15:20-15:40	ThB6.6
<i>Synchronization Control of Fractional-Order Discrete-Time Chaotic Systems</i> , pp. 2214-2219.	
Liao, Xiaozhong Gao, Zhe Huang, Hong	Beijing Inst. of Tech. Beijing Inst. of Tech. Beijing Inst. of Tech.
ThB7	HG E3
Idempotent Methods in Control and Estimation (Invited Session)	
Chair: McEneaney, William Co-Chair: Gaubert, Stephane Organizer: Sridharan, Srinivas Organizer: McEneaney, William Organizer: Gaubert, Stephane	Univ. of California, San Diego INRIA and Ec. Pol. Univ. of California San Diego Univ. of California, San Diego INRIA and Ec. Pol.
13:40-14:00	ThB7.1
<i>Deterministic Filtering for Optimal Attitude Estimation on $SO(3)$ Using Max-Plus Methods (I)</i> , pp. 2220-2225.	
Sridharan, Srinivas McEneaney, William	Univ. of California San Diego Univ. of California, San Diego

14:00-14:20	ThB7.2
<i>Contraction of Riccati Flows Applied to the Convergence Analysis of the Max-Plus Curse of Dimensionality Free Method (I)</i> , pp. 2226-2231.	
Qu, Zheng	CMAP, Pol.
14:20-14:40	ThB7.3
<i>Max-Plus Based Computation of Nonlinear L2-Gain Performance Bounds Using a Piecewise Affine-Quadratic Basis (I)</i> , pp. 2232-2237.	
Zhang, Huan	The Univ. of Melbourne
Dower, Peter M.	The Univ. of Melbourne
14:40-15:00	ThB7.4
<i>A Max-Plus Based Fundamental Solution to a Class of Linear Regulator Problems with Non-Quadratic Terminal Payoff (I)</i> , pp. 2238-2243.	
Zhang, Huan	The Univ. of Melbourne
Dower, Peter M.	The Univ. of Melbourne
15:00-15:20	ThB7.5
<i>Certification of Inequalities Involving Transcendental Functions: Combining SDP and Max-Plus Approximation (I)</i> , pp. 2244-2250.	
Allamigeon, Xavier	INRIA Saclay -- Ile-de-France and CMAP, Ec. Pol.
Gaubert, Stephane	INRIA and Ec. Pol.
Magron, Victor, Liev	INRIA/Pol.
Benjamin, Werner	Ec. Pol.
15:20-15:40	ThB7.6
<i>On Fourier Transform, Parseval Equality, and the Inversion Formula in Idempotent Analysis (I)</i> , pp. 2251-2256.	
Avantaggiati, Antonio	Sapienza, Univ. di Roma
Loreti, Paola	Sapienza, Univ. di Roma
ThB8	HG E5
Networked Systems (Regular Session)	
Chair: Bitmead, Robert	Univ. of California San Diego
Co-Chair: Sarlette, Alain	Ghent Univ.
13:40-14:00	ThB8.1
<i>Performance Cost of Adaptation in Mobile Wireless Power Control</i> , pp. 2257-2262.	
Ha, Minh Hong	Univ. of California, San Diego
Bitmead, Robert	Univ. of California San Diego
14:00-14:20	ThB8.2
<i>Network Localization by Shadow Edges</i> , pp. 2263-2268.	
Oliva, Gabriele	Univ. degli Studi Roma Tre
Panzieri, Stefano	Univ. degli Studi Roma Tre
Pascucci, Federica	Univ. degli Studi Roma Tre
Setola, Roberto	Univ. Campus BioMedico of Rome
14:20-14:40	ThB8.3
<i>A Fixed-Neighbor, Distributed Algorithm for Solving a Linear Algebraic Equation</i> , pp. 2269-2273.	
Mou, Shaoshuai	Yale Univ.
Morse, A. Stephen	Yale Univ.
14:40-15:00	ThB8.4
<i>Performance Limitations for Distributed Systems Via Spatial-Frequency Bode Integrals</i> , pp. 2274-2279.	
Sarlette, Alain	Ghent Univ.
15:00-15:20	ThB8.5
<i>Node Knock-Out Based Structure Identification in Networks of Identical Multi-Dimensional Subsystems</i> , pp. 2280-2285.	
Suzuki, Masayasu	Japan Science and Tech. Agency
Takatsuki, Nobuki	Tokyo Inst. of Tech.
Imura, Jun-ichi	Tokyo Inst. of Tech.
Aihara, Kazuyuki	The Univ. of Tokyo

15:20-15:40	ThB8.6
<i>A Distributed Control Law with Guaranteed Convergence Rate for Identically Coupled Linear Systems</i> , pp. 2286-2291.	
Wang, Qingling	Harbin Inst. of Tech.
Yu, Changbin	Australian National Univ.
Gao, Huijun	Harbin Inst. of Tech.
Liu, Fangzhou	Res. Inst. of Intelligent Control and Systems, Harbin In

ThB9	HG E7
Robotics (Regular Session)	

Chair: Cadenat, Viviane	LAAS-CNRS
Co-Chair: Moustris, George	National Tech. Univ. of Athens

13:40-14:00	ThB9.1
<i>Generalization of Bernstein's Problem Toward Autonomous Action Development of Artificial Muscle Based Robots</i> , pp. 2292-2298.	
Suzuki, Masakazu	Tokai Univ.

14:00-14:20	ThB9.2
<i>Internal and External Force-Based Impedance Control for Cooperative Manipulation</i> , pp. 2299-2304.	
Heck, Dennis	Eindhoven Univ. of Tech.
Kostic, Dragan	SEGULA Tech. Nederland BV
Denasi, Alper	Tech. Univ. Eindhoven
Nijmeijer, Hendrik	Eindhoven Univ. of Tech.

14:20-14:40	ThB9.3
<i>Management of Visual Signal Loss During Image Based Visual Servoing</i> , pp. 2305-2310.	
Durand Petiteville, Adrien	LAAS/CNRS; Univ. de Toulouse UPS
Durola, Sylvain	LAAS/CNRS; Univ. de Toulouse UPS
Cadenat, Viviane	Laas/cnrs
Courdesses, Michel	CNRS/LAAS and Univ. de Toulouse , UPS, INSA, INP, ISAE

14:40-15:00	ThB9.4
<i>Active Motion Compensation in Robotic Cardiac Surgery</i> , pp. 2311-2316.	
Moustris, George	National Tech. Univ. of Athens
Mantelos, Andreas Ioannis	National Tech. Univ. of Athens
Tzafestas, Costas	National Tech. Univ. of Athens

15:00-15:20	ThB9.5
<i>Control of a Swinging Juggling Robot</i> , pp. 2317-2322.	
Fontana, Flavio	ETH Zurich
Reist, Philipp	ETH Zurich
D'Andrea, Raffaello	ETH Zurich

ThB10	HG D1.1
Robust Control of Linear Systems I (Regular Session)	

Chair: Bokor, Jozsef	Hungarian Acad. of Sciences
Co-Chair: Grammatico, Sergio	ETH Zurich

13:40-14:00	ThB10.1
<i>Eigenvalue Assignment for Componentwise Ultimate Bound Minimisation in LTI Discrete-Time Systems</i> , pp. 2323-2330.	
Heidarihaei, Rahmatollah	Univ. of Newcastle
Seron, Maria M.	The Univ. of Newcastle
Braslavsky, Julio H.	Commonwealth Scientific and Industrial Res.
Haimovich, Hernan	Univ. Nacional de Rosario

14:00-14:20	ThB10.2
<i>A Universal Class of Non-Homogeneous Control Lyapunov Functions for Linear Differential Inclusions</i> , pp. 2331-2336.	
Grammatico, Sergio	ETH Zurich
Blanchini, Franco	Univ. degli Studi di Udine
Caiti, Andrea	Univ. of Pisa

14:20-14:40	ThB10.3
<i>Time-Varying Generalisations of the Gap and Nu-Gap Metrics Induce the Same Topology in Continuous Time</i> , pp. 2337-2342.	
Khong, Sei Zhen	Univ. of Melbourne
Cantoni, Michael	Univ. of Melbourne
14:40-15:00	ThB10.4
<i>Robust Control of Flexible High-Speed Rotors Via Mixed Uncertainties</i> , pp. 2343-2350.	
Riemann, Bernd	TU Darmstadt
Sehr, Martin	TU Darmstadt, Inst. for Mechatronic Systems in Mechanical En
Schittenhelm, Rudolph Sebastian	TU Darmstadt, Inst. for Mechatronic Systems in Mechanical En
Rinderknecht, Stephan	Tech. Univ. Darmstadt
15:00-15:20	ThB10.5
<i>Sufficiency of Vertex Matrix Check for Robust Stability of Interval Matrices Via the Concept of Qualitative Robustness</i> , pp. 2351-2356.	
Yedavalli, Rama K.	Ohio State Univ.
Devarakonda, Nagini	The Ohio State Univ.
15:20-15:40	ThB10.6
<i>Probabilistic μ for Rank-One and Perturbed Rank-One Matrices</i> , pp. 2357-2361.	
Mánfay, Máté	MTA SZTAKI, Central European Univ.
Balas, Gary J.	Univ. of Minnesota
Bokor, Jozsef	Hungarian Acad. of Sciences
Gerencsér, László	MTA SZTAKI
ThB11	HG D1.2
Control Over Communication Channels (Regular Session)	
Chair: Ishii, Hideaki	Tokyo Inst. of Tech.
Co-Chair: Sinopoli, Bruno	Carnegie Mellon Univ.
13:40-14:00	ThB11.1
<i>Transient Response of Minimum Variance Control Over a Gaussian Communication Channel</i> , pp. 2362-2367.	
Freudenberg, James S.	Univ. of Michigan
Middleton, Richard H.	The Univ. of Newcastle
14:00-14:20	ThB11.2
<i>Stabilization of Uncertain Systems with Finite Data Rates and Markovian Packet Losses</i> , pp. 2368-2373.	
Okano, Kunihisa	Tokyo Inst. of Tech.
Ishii, Hideaki	Tokyo Inst. of Tech.
14:20-14:40	ThB11.3
<i>LQG Cheap Control Subject to Packet Loss and SNR Limitations</i> , pp. 2374-2379.	
Chiuso, Alessandro	Univ. di Padova
Schenato, Luca	Univ. of Padova
Laurenti, Nicola	Univ. of Padova
Zanella, Andrea	Univ. of Padova
14:40-15:00	ThB11.4
<i>LQG Control with Markovian Packet Loss</i> , pp. 2380-2385.	
Mo, Yilin	Carnegie Mellon Univ.
Garone, Emanuele	Univ. degli Studi della Calabria
Sinopoli, Bruno	Carnegie Mellon Univ.
15:00-15:20	ThB11.5
<i>On Stabilization Over Gaussian Interference Channel</i> , pp. 2386-2391.	
Zaidi, Ali	Royal Inst. of Tech. (KTH)
Oechtering, Tobias J.	Royal Inst. of Tech. (KTH)
Skoglund, Mikael	Royal Inst. of Tech.
15:20-15:40	ThB11.6
<i>Continuous-Time Indefinite Linear Quadratic Optimal Control with Random Input Gains</i> , pp. 2392-2397.	
Chen, Wei	The Hong Kong Uni. of Sci. and Tech.

ThB12	HG D3.2
System Identification II (Regular Session)	
Chair: Picci, Giorgio	Univ. di Padova
Co-Chair: Rojas, Cristian R.	KTH Royal Inst. of Tech.
13:40-14:00	ThB12.1
<i>An EM-Based Estimation Algorithm for a Class of Systems Promoting Sparsity</i> , pp. 2398-2403.	
Godoy, Boris I.	The Univ. of Newcastle
Carvajal, Rodrigo	Univ. Tecnica Federico Santa Maria
Aguero, Juan C.	The Univ. of Newcastle
14:00-14:20	ThB12.2
<i>A Spectral Estimation Case Study in Frequency-Domain by Subspace Methods</i> , pp. 2404-2409.	
Akçay, Huseyin	Anadolu Univ.
Turkay, Semiha	Anadolu Univ.
14:20-14:40	ThB12.3
<i>A Sparse Estimation Technique for General Model Structures</i> , pp. 2410-2414.	
Rojas, Cristian R.	KTH Royal Inst. of Tech.
Wahlberg, Bo	KTH Royal Inst. of Tech.
Hjalmarsson, Håkan	Royal Inst. of Tech.
14:40-15:00	ThB12.4
<i>Identification of Finite Dimensional Linear Stochastic Systems Driven by Levy Processes</i> , pp. 2415-2420.	
Manfay, Mate	MTA SZTAKI
Gerencsér, László	MTA SZTAKI
15:00-15:20	ThB12.5
<i>Modeling Random Flocks through Generalized Factor Analysis</i> , pp. 2421-2426.	
Bottegal, Giulio	Univ. of Padova
Picci, Giorgio	Univ. di Padova
15:20-15:40	ThB12.6
<i>Recursive Estimation Algorithm for l_1-Norm Approximation in Dynamic Systems with Nonoptimality Levels</i> , pp. 2427-2432.	
Matasov, Alexander	Lomonosov Moscow State Univ.
Akimov, Pavel A.	Lomonosov Moscow State Univ.
ThB13	HG D5.2
Fault Diagnosis II (Regular Session)	
Chair: Mahulea, Cristian	Univ. of Zaragoza
Co-Chair: Ferrari, Riccardo	Danieli Automation S.p.A.
13:40-14:00	ThB13.1
<i>Fault Detection and Isolation on a Three Tank System Using Differential Flatness</i> , pp. 2433-2438.	
Martinez Torres, Cesar	Bordeaux 1 IMS
Lavigne, Loic	Univ. Bordeaux1
Cazaurang, Franck	Univ. Bordeaux I
Alcorta-García, Efraín	Univ. Autonoma De Nuevo Leon
Diaz-Romero, David Alejandro	Univ. Autonoma de Nuevo Leon
14:00-14:20	ThB13.2
<i>Online Diagnosis of PEMFC by Analyzing Individual Cell Voltages</i> , pp. 2439-2444.	
Li, Zhongliang	Univ. of Aix-Marseille
Outbib, Rachid	Isis
Hissel, Daniel	Univ. of Franche-Comte
Giurgea, Stefan	Univ. of Tech. Belfort-Montbéliard (UTBM)
14:20-14:40	ThB13.3
<i>An Algebraic Approach for Robust Fault Detection of Input-Output Elastodynamic Distributed Parameter Systems</i> , pp.	

2445-2452.	Ferrari, Riccardo Parisini, Thomas Polycarpou, Marios M.	Danieli Automation S.p.A. Imperial Coll. & Univ. of Trieste Univ. of Cyprus
14:40-15:00		ThB13.4
<i>Data-Based Causality Detection from a System Identification Perspective</i> , pp. 2453-2458.		
	Marques, Vinicius Moura Munaro, Celso Jose Shah, Sirish L	Federal Univ. of the Espirito Santo Federal Univ. of Espirito Santo Univ. of Alberta
15:00-15:20		ThB13.5
<i>Fault Diagnosis Graph of Time Petri Nets</i> , pp. 2459-2464.		
	Wang, Xu Mahulea, Cristian Silva, Manuel	Univ. de Zaragoza Univ. of Zaragoza Univ. De Zaragoza
15:20-15:40		ThB13.6
<i>State Estimation of Unknown Input Fuzzy Bilinear Systems: Application to Fault Diagnosis</i> , pp. 2465-2470.		
	Saoudi, Dhikra Chadli, Mohammed Benhadj Braiek, Naceur	ESSTT Univ. de Picardie-Jules Verne Ec. Pol. de Tunisie
ThB14		HG D7.1
Modelling and Control of Fuel Cells (Invited Session)		
	Chair: Kunusch, Cristian Co-Chair: Usai, Elio Organizer: Kunusch, Cristian Organizer: Ocampo-Martinez, Carlos	IRI (UPC-CSIC) Univ. degli Studi di Cagliari IRI (UPC-CSIC) Tech. Univ. of Catalonia (UPC)
13:40-14:00		ThB14.1
<i>A Multiagent Model for PEM Fuel Cell Microscopic Simulation (I)</i> , pp. 2471-2476.		
	Gechter, Franck Bouquain, David Gao, Fei Koukam, Abderafiaa Miraoui, Abdellatif	Univ. of Tech. of Belfort-Montbeliard Univ. of Tech. of Belfort-Montbeliard Univ. of Tech. of Belfort-Montbeliard Univ. of Tech. of Belfort-Montbeliard Univ. de Tech. de Belfort-Montbeliard
14:00-14:20		ThB14.2
<i>Differential Flatness-Based Observer Design for a PEM Fuel Cell Using Adaptive-Gain Sliding Mode Differentiators (I)</i> , pp. 2477-2482.		
	Liu, Jianxing Laghrouche, Salah Wack, Maxime	Univ. of Tech. of Belfort-Montbeliard (UTBM) Supélec / CNRS Lab. systems and Transport, Univ. of Tech. of Belfort-
14:20-14:40		ThB14.3
<i>Experimental Validation of Equilibria in Fuel Cells with Dead-Ended Anodes (I)</i> , pp. 2483-2488.		
	Chen, Jixin Siegel, Jason Matsuura, Toyooki Stefanopoulou, Anna G. Yesilyurt, Serhat	Univ. of Michigan Univ. of Michigan Univ. of Michigan Univ. of Michigan Sabanci Univ.
14:40-15:00		ThB14.4
<i>Experimental Validation of Interval-Based Sliding Mode Control for Solid Oxide Fuel Cell Systems (I)</i> , pp. 2489-2494.		
	Doetschel, Thomas Rauh, Andreas Aschemann, Harald Senkel, Luise	Univ. of Rostock Univ. of Rostock Univ. of Rostock Univ. of Rostock, Chair of Mechatronics
15:00-15:20		ThB14.5
<i>Observer-Based Output Feedback Control of a PEM Fuel Cell System by High-Order Sliding Mode Technique (I)</i> , pp.		

2495-2500.		
Pisano, Alessandro		Univ. di Cagliari
Salimbeni, Domenico	Univ. of Cagliari, Dept of Electrical and Electronic Engine	
Usai, Elio		Univ. degli Studi di Cagliari
Rakhtala Rostami, Seyed Mehdi	Faculty of electrical and computer engineering, Babol industrial	
Ranjbar, Noei	Faculty of electrical and computer engineering, Babol industrial	
15:20-15:40		ThB14.6
<i>On the Implementation of an Adaptive Extremum Seeking Algorithm for Hydrogen Minimization in PEM Fuel Cell Based Systems (I)</i> , pp. 2501-2506.		
Kunusch, Cristian		IRI (CSIC)
Castanos, Fernando		Coninvestav del IPN
ThB15		HG D7.2
Generation and Load Side Control for Power Systems with Stochastic Uncertainty (Invited Session)		
Chair: Callaway, Duncan		UC Berkeley
Co-Chair: Kamgarpour, Maryam		ETH Zurich
Organizer: Margellos, Konstantinos		ETH Zurich
Organizer: Kamgarpour, Maryam		ETH Zurich
Organizer: Callaway, Duncan		UC Berkeley
13:40-14:00		ThB15.1
<i>A Comparative Study of Stochastic Unit Commitment and Security-Constrained Unit Commitment Using High Performance Computing (I)</i> , pp. 2507-2512.		
Papavasiliou, Anthony		Catholic Univ. of Louvain
Oren, Shmuel		UC Berkeley
14:00-14:20		ThB15.2
<i>Stochastic Unit Commitment and Reserve Scheduling: A Tractable Formulation with Probabilistic Certificates (I)</i> , pp. 2513-2518.		
Margellos, Konstantinos		ETH Zurich
Rostampour, Vahab		ETH Zurich
Vrakopoulou, Maria		ETH Zurich
Prandini, Maria		Pol. di Milano
Andersson, Goran		Swiss Federal Inst. of Tech.
Lygeros, John		ETH Zurich
14:20-14:40		ThB15.3
<i>Energy Arbitrage with Thermostatically Controlled Loads (I)</i> , pp. 2519-2526.		
Mathieu, Johanna		ETH Zurich
Kamgarpour, Maryam		ETH Zurich
Lygeros, John		ETH Zurich
Callaway, Duncan		UC Berkeley
14:40-15:00		ThB15.4
<i>Predictive Control of Buildings for Demand Response with Dynamic Day-Ahead and Real-Time Prices</i> , pp. 2527-2534.		
Vrettos, Evangelos		Power Systems Lab. Swiss Federal Inst. of Tech.
Lai, KuanLin		Department of Electrical Engineering and Information Tech.
Oldewurtel, Frauke		ETH Zurich
Andersson, Goran		Swiss Federal Inst. of Tech.
15:00-15:20		ThB15.5
<i>State-Space Modelling of Hysteresis-Based Control Schemes (I)</i> , pp. 2535-2540.		
Kundu, Soumya		Univ. of Michigan
Hiskens, Ian A.		Univ. of Michigan
15:20-15:40		ThB15.6
<i>Smart Grid Dispatch Strategy for ON/OFF Demand-Side Devices</i> , pp. 2541-2548.		
Biegel, Benjamin		Aalborg Univ.
Andersen, Palle		Aalborg Univ.
Pedersen, Tom S.		Aalborg Univ.

Nielsen, Kirsten Mølgaard
 Stoustrup, Jakob
 Hansen, Lars Henrik

Aalborg Univ.
 Aalborg Univ.
 Dong Energy A/S

ThC1		HG F1
Cyber-Secure Control (Tutorial Session)		
Chair: Sandberg, Henrik		Royal Inst. of Tech. (KTH)
Co-Chair: Sinopoli, Bruno		Carnegie Mellon Univ.
Organizer: Sandberg, Henrik		KTH Royal Inst. of Tech.
Organizer: Sinopoli, Bruno		Carnegie Mellon Univ.
16:00-16:40		ThC1.1
<i>Theory for Secure Control Systems (I)*.</i>		
Sinopoli, Bruno		Carnegie Mellon Univ.
16:40-17:00		ThC1.2
<i>Game Theory for Secure Control (I)*.</i>		
Langbort, Cedric		UIUC
17:00-17:40		ThC1.3
<i>Secure Control and Applications in Power Systems (I)*.</i>		
Sandberg, Henrik		KTH Royal Inst. of Tech.
17:40-18:00		ThC1.4
<i>Air-Gap to Always-Connected: An Industry Perspective on Security for Control Systems (I)*.</i>		
Griffin, Robert		RSA Security
ThC2		HG F3
Applications of Model Predictive Control (Regular Session)		
Chair: De Keyser, Robin M.C.		Univ. of Gent
Co-Chair: Casale Brunet, Simone		EPFL
16:00-16:20		ThC2.1
<i>A Lego Mindstorms NXT Experiment for Model Predictive Control Education, pp. 2549-2554.</i>		
Canale, Massimo		Pol. di Torino
Casale Brunet, Simone		EPFL
16:20-16:40		ThC2.2
<i>Performance Improvement of an NMPC Problem by Search Space Reduction and Experimental Validation to a PEM Fuel Cell System, pp. 2555-2560.</i>		
Ziogou, Chrysovalantou		Centre for Res. and Tech. Hellas (CERTH)
Georgiadis, Michael C.		Univ. of Western Macedonia, Department of Engineering Informatics
Pistikopoulos, Efstratios N.		Imperial Coll.
Voutetakis, Spyridon		Centre for Res. and Tech. Hellas (CERTH)
Papadopoulou, Simira		Alexander Tech. Educational Inst.
16:40-17:00		ThC2.3
<i>Centralised and Decentralised Control of the Broken River, pp. 2561-2566.</i>		
Foo, Mathias		Asia Pacific Center for Theoretical Physics (APCTP)
Ooi, Su Ki		NICTA
Weyer, Erik		Univ. of Melbourne
17:00-17:20		ThC2.4
<i>Thermal Storage Power Balancing with Model Predictive Control, pp. 2567-2572.</i>		
Halvgaard, Rasmus		Tech. Univ. of Denmark
Poulsen, Niels Kjølstad		Tech. Univ. of Denmark
Madsen, Henrik		Tech. Univ. of Denmark
Jørgensen, John Bagterp		Tech. Univ. of Denmark
17:20-17:40		ThC2.5
<i>Nonlinear Predictive Control of an Evaporator for Bioethanol Production, pp. 2573-2578.</i>		
Ipanaque Alama, William		Univ. de Piura

Oliden, José Carlos	Univ. de Piura
Manrique, José	Univ. de Piura
Hernandez, Andres	Ghent Univ.
Dutta, Abhishek	Ghent Univ.
De Keyser, Robin M.C.	Univ. of Gent

17:40-18:00 ThC2.6

Governor Principles for Increased Safety on Vessels with Diesel-Electric Propulsion, pp. 2579-2584.

Veksler, Aleksander	Norwegian Univ. of Sci. & Tech.
Johansen, Tor Arne	Norwegian Univ. of Sci. & Tech.
Skjetne, Roger	Norwegian Univ. of Science And Tech.
Mathiesen, Eirik	Kongsberg Maritime AS

ThC3 HG F5

Sampled Data Control and Delay Systems (Regular Session)

Chair: Griggs, Wynita M.	NUIM
Co-Chair: Hetel, Laurentiu	LAGIS UMR CNRS 8219

16:00-16:20 ThC3.1

On the Stability of Input-Affine Nonlinear Systems with Sampled-Data Control, pp. 2585-2590.

Omran, Hassan	Ec. Centrale de Lille
Hetel, Laurentiu	LAGIS UMR CNRS 8219
Richard, Jean-Pierre	Ec. Centrale de Lille
Lamnabhi-Lagarrigue, Françoise	CNRS-EECI

16:20-16:40 ThC3.2

Digital Stabilization of Finite Sampled Nonlinear Dynamics with Delays: The Unicycle Example, pp. 2591-2596.

Tanasa, Valentin	Univ. Paris 11
Monaco, Salvatore	Univ. di Roma La Sapienza
Normand-Cyrot, Marie-Dorothée	CNRS-Supélec

16:40-17:00 ThC3.3

Characterisations of the "Mixed" Small Gain and Passivity Property for Linear Systems in Discrete Time, pp. 2597-2602.

Griggs, Wynita M.	NUIM
Ordóñez-Hurtado, Rodrigo H.	Univ. of Chile
Sajja, Shravan	NUI Maynooth
Lanzon, Alexander	Univ. of Manchester
Shorten, Robert	Nat. Univ. of Ireland

17:00-17:20 ThC3.4

A Robust Polytopic Approach for State-Dependent Sampling, pp. 2603-2608.

Fiter, Christophe	CNRS - Ec. Centrale de Lille
Hetel, Laurentiu	LAGIS UMR CNRS 8219
Perruquetti, Wilfrid	Ec. Centrale de Lille
Richard, Jean-Pierre	Ec. Centrale de Lille

17:20-17:40 ThC3.5

Stability of Discrete-Time Systems with Stochastically Delayed Feedback, pp. 2609-2614.

Gomez, Marcella Mary	California Inst. of Tech.
Orosz, Gabor	Univ. of Michigan, Ann Arbor
Murray, Richard	Caltech

17:40-18:00 ThC3.6

Numerical Simulation and Identification of Fractional Systems Using Digital Adjustable Fractional Order Integrator, pp. 2615-2620.

Djouambi, Abdelbaki	Univ. Oum El Bouaghi
Charef, Abdelfatah	Univ. Constantine
Voda, Alina	UJF

ThC4 HG F7

State Estimation (Regular Session)

Chair: Zolghadri, Ali	Univ. Bordeaux I
Co-Chair: Bharani Chandra, Kumar Pakki	Univ. of Leicester
16:00-16:20	ThC4.1
<i>An Iterative Partition-Based Moving Horizon Estimator for Large-Scale Linear Systems</i> , pp. 2621-2626.	
Schneider, René	RWTH Aachen Univ.
Scheu, Holger	RWTH Aachen Univ.
Marquardt, Wolfgang	Aachener Verfahrenstechnik - Prozesstechnik
16:20-16:40	ThC4.2
<i>Observer-Based Stabilization of Uncertain Linear Systems with Recycle: An LMI Approach</i> , pp. 2627-2632.	
Parada, Miguel	Tech. Univ. Berlin
Borges, Renato Alves	Univ. of Brasilia
Sbarbaro, Daniel G.	Univ. de Concepcion
Peres, Pedro L. D.	Univ. of Campinas
16:40-17:00	ThC4.3
<i>Distributed Bounded-Error State Estimation for Partitioned Systems Based on Practical Robust Positive Invariance</i> , pp. 2633-2638.	
Riverso, Stefano	Univ. degli Studi di Pavia
Rubini, Daria	Univ. degli Studi di Pavia
Ferrari Trecate, Giancarlo	Univ. degli Studi di Pavia
17:00-17:20	ThC4.4
<i>Cubature H_∞ Information Filter</i> , pp. 2639-2644.	
Bharani Chandra, Kumar Pakki	Control Res. Group, Dept. of Engineering, Univ. of Leicester
Gu, Dawei	Univ. of Leicester
Postlethwaite, Ian	Northumbria Univ.
17:20-17:40	ThC4.5
<i>Adaptive Observer-Based Sinusoid Identification: Structured and Bounded Unstructured Measurement Disturbances</i> , pp. 2645-2650.	
Chen, Boli	Imperial Coll. London
Pin, Gilberto	Univ. of Trieste (Italy)
Parisini, Thomas	Imperial Coll. & Univ. of Trieste
17:40-18:00	ThC4.6
<i>On Interval Observer Design for Time-Invariant Discrete-Time Systems</i> , pp. 2651-2656.	
Efimov, Denis	INRIA - LNE
Perruquetti, Wilfrid	Ec. Centrale de Lille
Raïssi, Tarek	Conservatoire National des Arts et Métiers
Zolghadri, Ali	Univ. Bordeaux I

ThC5

HG E1.1

Optimization for Hybrid Systems (Regular Session)

Chair: Daoutidis, Prodromos	Univ. of Minnesota
Co-Chair: Hempel, Andreas Berndt	ETH Zurich
16:00-16:20	ThC5.1
<i>Every Continuous Piecewise Affine Function Can Be Obtained by Solving a Parametric Linear Program</i> , pp. 2657-2662.	
Hempel, Andreas Berndt	ETH Zurich
Goulart, Paul J.	ETH Zurich
Lygeros, John	ETH Zurich
16:20-16:40	ThC5.2
<i>Suboptimality Bounds for Linear Quadratic Problems in Hybrid Linear Systems</i> , pp. 2663-2668.	
Kouhi, Yashar	Max Planck Insitute
Bajcinca, Naim	Max Planck Insitute
Sanfelice, Ricardo G.	Univ. of Arizona
16:40-17:00	ThC5.3

Dynamic Real-Time Optimization and Control of a Hybrid Energy System, pp. 2669-2674.

Trifkovic, Milana	Univ. of Minnesota
Marvin, W. Alex	Univ. of Minnesota
Sheikhzadeh, Mehdi	Lambton Coll.
Daoutidis, Prodomos	Univ. of Minnesota

17:00-17:20 ThC5.4

Hybrid MPC Approach to Reconfiguration of Building Heating System, pp. 2675-2680.

Siroky, Jan	Univ. of West Bohemia in Pilsen, Faculty of Applied Sciences
Cigler, Jiri	Czech Tech. Univ. in Prague, Faculty of Electrical Engine
Ferkl, Lukas	Czech Tech. Univ. in Prague

17:20-17:40 ThC5.5

Modeling and Predictive Control of Nonlinear Hybrid Systems Using Disaggregation of Variables – a Convex Formulation, pp. 2681-2686.

Nandola, Nareshkumar Naranbhai	ABB Corp. Res. Center
Puttannaiah, Karan	Arizona State Univ.

17:40-18:00 ThC5.6

Low-Rank and Sparse Optimization for GPCA with Applications to SARX System Identification, pp. 2687-2692.

Konishi, Katsumi	Kogakuin Univ.
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ThC6 HG E1.2

Quantum Control (Regular Session)

Chair: Petersen, Ian R.	Australian Defence Force Acad.
Co-Chair: Albertini, Francesca	Univ. Di Padova

16:00-16:20 ThC6.1

Markov Operators on Cones and Non-Commutative Consensus, pp. 2693-2700.

Gaubert, Stephane	INRIA and Ec. Pol.
Qu, Zheng	CMAP, Pol.

16:20-16:40 ThC6.2

Algebraic Conditions for Indirect Controllability in Quantum Coherent Feedback Schemes, pp. 2701-2706.

Albertini, Francesca	Univ. Di Padova
D'Alessandro, Domenico	Iowa State Univ.

16:40-17:00 ThC6.3

Quantum Popov Robust Stability Analysis of an Optical Cavity Containing a Saturated Kerr Medium, pp. 2707-2711.

Petersen, Ian R.	Australian Defence Force Acad.
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17:00-17:20 ThC6.4

A Stochastic Lyapunov Feedback Technique for Propagator Generation of Quantum Systems on $U(n)$, pp. 2712-2716.

Silveira, Hector Bessa	Federal Univ. of Santa Catarina
Pereira da Silva, Paulo Sergio	Univ. of Sao Paulo
Rouchon, Pierre	ENSMP

17:20-17:40 ThC6.5

Coherent Quantum Filtering for Physically Realizable Linear Quantum Plants, pp. 2717-2723.

Vladimirov, Igor	Univ. of New South Wales at the Australian Defence Force Acad.
Petersen, Ian R.	Australian Defence Force Acad.

17:40-18:00 ThC6.6

Quantum Implementation of an LTI System with the Minimal Number of Additional Quantum Noise Inputs, pp. 2724-2727.

Vuglar, Shanon Leigh	Univ. of New South Wales (ADFA)
Petersen, Ian R.	Australian Defence Force Acad.

ThC7 HG E3

Constrained Control (Regular Session)

Chair: Prandini, Maria	Pol. di Milano
Co-Chair: Duncan, Stephen	Univ. of Oxford

16:00-16:20	ThC7.1
<i>Further Results on Saturated Globally Stabilizing Linear State Feedback Control Laws for Single-Input Neutrally Stable Planar Systems</i> , pp. 2728-2733.	
Yang, Tao	Royal Inst. of Tech.
Stoorvogel, Anton A.	Univ. of Twente
Saberi, Ali	Washington State Univ.
Johansson, Karl Henrik	Royal Inst. of Tech.
16:20-16:40	ThC7.2
<i>Prioritization Schemes for Reference and Command Governors</i> , pp. 2734-2739.	
Kalabic, Uros V.	Univ. of Michigan
Chitalia, Yash	Univ. of Michigan
Julia, Buckland	Ford Motor Company
Kolmanovsky, Ilya V.	Univ. of Michigan
16:40-17:00	ThC7.3
<i>Stochastic Constrained Control: Trading Performance for State Constraint Feasibility</i> , pp. 2740-2745.	
Deori, Luca	Dipartimento di Elettronica e Informazione, Pol. di Milan
Garatti, Simone	Pol. di Milano
Prandini, Maria	Pol. di Milano
17:00-17:20	ThC7.4
<i>The Linear Quadratic Regulator with Chance Constraints</i> , pp. 2746-2751.	
Schildbach, Georg	ETH Zurich
Goulart, Paul J.	ETH Zurich
Morari, Manfred	ETH Zurich
17:20-17:40	ThC7.5
<i>Anti-Windup Compensation for Electron Beam Stabilisation Control Systems on Synchrotrons with Rate Constrained Actuators</i> , pp. 2752-2757.	
Gayadeen, Sandira	Univ. of Oxford
Duncan, Stephen	Univ. of Oxford
17:40-18:00	ThC7.6
<i>Null-Controllable Set Computation for a Class of Constrained Bilinear Systems</i> , pp. 2758-2763.	
Schulze Darup, Moritz	Ruhr-Univ. Bochum
Mönnigmann, Martin	Ruhr-Univ. Bochum
ThC8	HG E5
Distributed Control and Optimization (Invited Session)	
Chair: Necoara, Ion	Univ. Pol. Bucharest
Co-Chair: Zeilinger, Melanie N.	Ec. Pol. Fédéral de Lausanne (EPFL)
Organizer: Zeilinger, Melanie N.	UC Berkeley
Organizer: Necoara, Ion	Univ. Pol. Bucharest
16:00-16:20	ThC8.1
<i>Robust Distributed Model Predictive Control of Linear Systems (I)</i> , pp. 2764-2769.	
Conte, Christian	ETH Zurich
Zeilinger, Melanie N.	UC Berkeley
Morari, Manfred	ETH Zurich
Jones, Colin N	EPFL, Lausanne
16:20-16:40	ThC8.2
<i>Distributed Model Predictive Control for Energy Distribution</i> , pp. 2770-2776.	
Scherer, Helton Fernando	Univ. Federal de Santa Catarina
Pasamontes Romera, Manuel	Univ. de Almeria
Álvarez Hervás, José Domingo	Univ. of Seville
Guzman, Jose Luis	Univ. of Almeria
Camponogara, Eduardo	Univ. Federal de Santa Catarina
Normey-Rico, Julio Elias	Federal Univ. of Santa Catarina

16:40-17:00	ThC8.3
<i>Hierarchical Task Allocation for Multi-Agent Systems Encoded by Stochastic Reachability Specifications (I)</i> , pp. 2777-2782.	
Kariotoglou, Nikolaos	ETH Zurich
Summers, Sean	ETH Zurich
Raimondo, Davide Martino	Univ. of Pavia
17:00-17:20	ThC8.4
<i>Fast Coordinated Model Predictive Control of Large-Scale Distributed Systems with Single Coupling Constraint</i> , pp. 2783-2788.	
Spudic, Vedrana	Univ. of Zagreb
Baotic, Mato	Univ. of Zagreb
17:20-17:40	ThC8.5
<i>A Random Coordinate Descent Algorithm for Large-Scale Sparse Nonconvex Optimization (I)</i> , pp. 2789-2794.	
Patrascu, Andrei	Automatic Control and Systems Engineering Department, Univ.
Necoara, Ion	Univ. Pol. Bucharest
17:40-18:00	ThC8.6
<i>From Non-Cooperative to Cooperative Distributed MPC: A Simplicial Approximation Perspective</i> , pp. 2795-2800.	
Bürger, Mathias	Univ. of Stuttgart
Notarstefano, Giuseppe	Univ. of Lecce
Allgower, Frank	Univ. of Stuttgart
ThC9 HG E7	
Vehicle Formation Control (Regular Session)	
Chair: Morbidi, Fabio	Inria, Grenoble - Rhone-Alpes
Co-Chair: Kim, Yoonsoo	Gyeongsang National Univ.
16:00-16:20	ThC9.1
<i>On the Control of the Algebraic Connectivity and Clustering of a Mobile Robotic Network</i> , pp. 2801-2806.	
Morbidi, Fabio	Inria, Grenoble - Rhone-Alpes
16:20-16:40	ThC9.2
<i>Consensus Control of Linear Multi-Agent Systems under Directed Dynamic Topology</i> , pp. 2807-2812.	
Qin, Jiahu	The Australian National Univ.
Yu, Changbin	Australian National Univ.
16:40-17:00	ThC9.3
<i>Cooperative Translation Control Based on Consensus with Reference Velocity: A Source-Seeking Application</i> , pp. 2813-2818.	
Briñón Arranz, Lara	Gipsa-Lab.
Seuret, Alexandre	LAAS
17:00-17:20	ThC9.4
<i>Collision-Free Vehicle Formation Control under Arbitrarily Switching Network Topology</i> , pp. 2819-2823.	
Kim, Yoonsoo	Gyeongsang National Univ.
17:20-17:40	ThC9.5
<i>Distributed Control of Swarm Motions As Continua Using Homogeneous Maps and Agent Triangulation</i> , pp. 2824-2830.	
Rastgoftar, Hossein	Univ. of Central Florida
Jayasuriya, Suhada	Univ. of Central Florida
17:40-18:00	ThC9.6
<i>Consensus-Based Source-Seeking with a Circular Formation of Agents</i> , pp. 2831-2836.	
Briñón Arranz, Lara	Gipsa-Lab.
Schenato, Luca	Univ. of Padova
ThC10 HG D1.1	
Robust Control of Linear Systems II (Regular Session)	
Chair: Glizer, Valery Y.	ORT Braude Coll.
Co-Chair: Vujanic, Robin	ETH Zurich
16:00-16:20	ThC10.1

On Practical Fixed Order H-Infinity Loop-Shaping, pp. 2837-2842.

Serge, Hirwa
Feyel, Philippe
Duc, Gilles
Sandou, Guillaume

SUPELEC
Sagem Défense Sécurité
Ec. Supérieure D' Electricité
Ec. Superieure d Electricite

16:20-16:40

ThC10.2

Solution of a Singular H-Infinity Control Problem for Linear Systems with State Delays, pp. 2843-2848.

Glizer, Valery Y.

ORT Braude Coll.

16:40-17:00

ThC10.3

Active Disturbance Rejection Control Based on a Simultaneous Adaptive Observer and a Time Varying Parameter Identifier, pp. 2849-2854.

Luviano-Juárez, Alberto
Chairez, Isaac

UPIITA - IPN Mexico
UPIBI - IPN

17:00-17:20

ThC10.4

I-PD Controller Design Based on Generalized KYP Lemma for Ball and Plate System, pp. 2855-2860.

Mochizuki, Shuichi
Ichihara, Hiroyuki

Meiji Univ.
Meiji Univ.

17:20-17:40

ThC10.5

Robust Stabilization Via Disturbance Observer with Noise Reduction, pp. 2861-2866.

Jo, Nam H.
Shim, Hyungbo

Soongsil Univ.
Seoul National Univ.

17:40-18:00

ThC10.6

On Quantifying Tolerable Closed-Loop Uncertainty in Frequency Domain, pp. 2867-2872.

Li, Yuping

The Univ. of Melbourne

ThC11

HG D1.2

Benchmark on Adaptive Regulation: Rejection of Unknown/time-Varying Multiple Narrow Band Disturbances (Invited Session)

Chair: Landau, Ioan Dore
Co-Chair: Castellanos Silva, Abraham
Organizer: Landau, Ioan Dore
Organizer: Airimitoie, Tudor-Bogdan
Organizer: Castellanos Silva, Abraham
Organizer: Buche, Gabriel
Organizer: Martinez, John-Jairo
Organizer: Alma, Marouane
Organizer: Karimi, Alireza

CNRS
GIPSA-Lab.
CNRS
Gipsa-Lab. Univ. de Grenoble
GIPSA-Lab.
GIPSA-Lab. CNRS
Gipsa-Lab. INP-Grenoble
Univ. Joseph Fourier
Ec. Pol. Federale

16:00-16:20

ThC11.1

An Active Vibration Control System As a Benchmark on Adaptive Regulation (I), pp. 2873-2878.

Landau, Ioan Dore
Castellanos Silva, Abraham
Airimitoie, Tudor-Bogdan
Buche, Gabriel
Noë, Mathieu

CNRS
GIPSA-Lab.
IRISA / Inria Rennes Bretagne Atlantique
GIPSA-Lab. CNRS
Paulstra S.A.; Vibrachoc Div.

16:20-16:40

ThC11.2

Adaptive Attenuation of Disturbance Formed As a Sum of Sinusoidal Signals Applied to a Benchmark Problem (I), pp. 2879-2884.

Aranovskiy, Stanislav

Umea Univ.

16:40-17:00

ThC11.3

Direct and Indirect Adaptive Regulation Strategies for Rejection of Time Varying Narrow Band Disturbances Applied to a Benchmark Problem (I), pp. 2885-2890.

Airimitoie, Tudor-Bogdan
Castellanos Silva, Abraham
Landau, Ioan Dore

IRISA / Inria Rennes Bretagne Atlantique
GIPSA-Lab.
CNRS

17:00-17:20

ThC11.4

Adaptive Regulation of Time Varying Disturbances Via Weighted Robust Estimation and Automatic Controller Tuning (I), pp. 2891-2896.

Fang, Huazhen
de Callafon, Raymond A.

Dept. of MAE, UCSD
Univ. of California, San Diego

17:20-17:40

ThC11.5

Selective Model Inversion and Adaptive Disturbance Observer for Rejection of Time-Varying Vibrations on an Active Suspension (I), pp. 2897-2903.

Chen, Xu
Tomizuka, Masayoshi

Univ. of California, Berkeley
UC Berkeley/NSF

17:40-18:00

ThC11.6

Nonlinear Learning-Based Adaptive Control for Electromagnetic Actuators, pp. 2904-2909.

Benosman, Mouhacine
Atinc, Gokhan M.

Mitsubishi Electric Res. Lab.
Univ. of Illinois at Urbana Champaign

ThC12

HG D3.2

Nonlinear System Identification (Regular Session)

Chair: Findeisen, Rolf
Co-Chair: Nie, Xiaokai

Univ. of Magdeburg
The Univ. of Sheffield

16:00-16:20

ThC12.1

An Indirect Model Selection Algorithm for Nonlinear Active Noise Control, pp. 2910-2915.

Morici, Simone
Spiriti, Emanuele
Piroddi, Luigi

Dipartimento di Elettronica e Informazione, Pol. di Milan
Dipartimento di Elettronica e Informazione, Pol. di Milan
Pol. di Milano

16:20-16:40

ThC12.2

A New Approach to Solving the Inverse Frobenius-Perron Problem, pp. 2916-2920.

Nie, Xiaokai
Coca, Daniel

The Univ. of Sheffield
The Univ. of Sheffield

16:40-17:00

ThC12.3

Outlier Analysis in Set-Based Estimation for Nonlinear Systems Using Convex Relaxations, pp. 2921-2926.

Streif, Stefan
Karl, Matthias
Findeisen, Rolf

Otto-von-Guericke-Univ. Magdeburg
Otto-von-Guericke-Univ. Magdeburg
Univ. of Magdeburg

17:00-17:20

ThC12.4

Non Linear Electromechanical Cart Characterization Using Minimal Modeling Approach, pp. 2927-2932.

Wongvanich, Napasool
Hann, Christopher Eric
Sirisena, Harsha

Univ. of Canterbury
Univ. of Canterbury
Univ. of Canterbury

17:20-17:40

ThC12.5

Three Free Data Sets for Development and Benchmarking in Nonlinear System Identification, pp. 2933-2938.

Wigren, Torbjorn
Schoukens, Johan

Uppsala Univ.
Vrije Univ. Brussels

17:40-18:00

ThC12.6

Guaranteed Robust Optimal Experiment Design for Nonlinear Dynamic Systems, pp. 2939-2944.

Telen, Dries
Houska, Boris
Logist, Filip
Diehl, Moritz
Van Impe, Jan F.M.

Katholieke Univ. Leuven
Univ. of Heidelberg
Katholieke Univ. Leuven
KU Leuven
Katholieke Univ. Leuven

ThC13

HG D5.2

Fault Tolerant Systems (Regular Session)

Chair: Schiavoni, Nicola
Co-Chair: Puig, Vicenc

Pol. di Milano
Univ. Pol. de Catalunya

16:00-16:20	ThC13.1
<i>Fault-Tolerant Pole-Placement in Single-Integrator Networks</i> , pp. 2945-2950.	
Locatelli, Arturo	Pol. di Milano
Schiavoni, Nicola	Pol. di Milano
16:20-16:40	ThC13.2
<i>Passive and Active FTC Comparison for Polytopic LPV Systems</i> , pp. 2951-2956.	
Rotondo, Damiano	UPC
Nejjari, Fatiha	Univ. Pol. de Catalunya
Puig, Vicenc	Univ. Pol. de Catalunya
16:40-17:00	ThC13.3
<i>Fault Tolerant Control for Polynomial Linear Parameter Varying (LPV) Systems Applied to the Stabilization of a Riderless Bicycle</i> , pp. 2957-2962.	
Brizuela Mendoza, Jorge Aurelio	cenidet
Astorga-Zaragoza, Carlos	National Center for Res. and Tech. Development
Zavala-Rio, Arturo	Inst. Potosino de Investigacion Cientifica y Tecnologica
Canales Abarca, Francisco	ABB
Reyes-Reyes, Juan	Inst. Tecnologico de Zacatepec
17:00-17:20	ThC13.4
<i>Design of Multi-Objective Control Systems with Optimal Failure Tolerance</i> , pp. 2963-2968.	
Mesbah, Ali	Massachusetts Inst. of Tech.
Braatz, Richard D.	Massachusetts Inst. of Tech.
17:20-17:40	ThC13.5
<i>Dynamic Modeling and Control of Power-Split HEV with Multi-Phase Electric Machines under Fault Condition</i> , pp. 2969-2975.	
Grossi, Federica	Univ. of Modena and Reggio Emilia
Fei, Marco	Univ. of Modena and Reggio Emilia
Zanasi, Roberto	Univ. of Modena and Reggio Emilia
17:40-18:00	ThC13.6
<i>Robust Fault Tolerant Application for HVAC System Based on Combination of Online SVM and ANN Black Box Model</i> , pp. 2976-2981.	
Dehestani, Davood	Univ. of Tech. Sydney (UTS)
Su, Steven	Univ. of Tech. Sydney (UTS)
Ying, Guo	CSIRO
Nguyen, Hung	Univ. of Tech. Sydney (UTS)
ThC14	HG D7.1
Maritime Systems (Regular Session)	
Chair: Picci, Giorgio	Univ. di Padova
Co-Chair: Guerreiro, Bruno J. N.	Inst. Superior Tecnico
16:00-16:20	ThC14.1
<i>GAS Tightly Coupled LBL/USBL Position and Velocity Filter for Underwater Vehicles</i> , pp. 2982-2987.	
Batista, Pedro	Inst. Superior Técnico
Silvestre, Carlos	Inst. Superior Tecnico
Oliveira, Paulo Jorge	Inst. Superior Técnico
16:20-16:40	ThC14.2
<i>GES Tightly Coupled Attitude Estimation Based on a LBL/USBL Positioning System</i> , pp. 2988-2993.	
Batista, Pedro	Inst. Superior Técnico
Silvestre, Carlos	Inst. Superior Tecnico
Oliveira, Paulo Jorge	Inst. Superior Técnico
16:40-17:00	ThC14.3
<i>System Identification for Tide Prediction in the Venetian Lagoon</i> , pp. 2994-2999.	
Parise, Francesca	Automatic Control Lab. ETH Swiss Federal Inst. of Tech.
Picci, Giorgio	Univ. di Padova
17:00-17:20	ThC14.4

A Study of Ship's Mooring Method with Controllable Pitch Propeller (CPP) by Applying Generalized Minimum Variance Control, pp. 3000-3005.

Doi, Masayoshi	Hiroshima Inst. of Tech.
Nagamoto, Kazuhisa	Yuge National Coll. of Maritime Tech.
Takehira, Tetsuya	Japan Air Self-Defense Force

17:20-17:40 ThC14.5

Trajectory Tracking Nonlinear Model Predictive Control for Autonomous Surface Craft, pp. 3006-3011.

Guerreiro, Bruno J. N.	Inst. Superior Tecnico
Silvestre, Carlos	Inst. Superior Tecnico
Cunha, Rita	Inst. Superior Técnico
Pascoal, Antonio Manuel	Inst. Superior Tecnico

17:40-18:00 ThC14.6

Modeling, Identification and Control of a Boat Parking Assistance System, pp. 3012-3017.

Berretta, Daniele	Pol. di Milano
Urbano, Nazario	Pol. di Milano
Formentin, Simone	Pol. di Milano
Boniolo, Ivo	Pol. di Milano
De Filippi, Pierpaolo	Pol. di Milano
Savaresi, Sergio M.	Pol. Di Milano

ThC15 HG D7.2

Control of Electrical Networks (Regular Session)

Chair: Rantzer, Anders	Lund Univ.
Co-Chair: Damm, Gilney	Lab. IBISC - CNRS/Evry Univ.

16:00-16:20 ThC15.1

A Decomposition Approach to Multi-Region Optimal Power Flow in Electricity Networks, pp. 3018-3024.

Chasparis, Georgios	Lund Univ.
Rantzer, Anders	Lund Univ.
Jörnsten, Kurt	Norwegian School of Ec.

16:20-16:40 ThC15.2

A Statistically Robust Payment Sharing Mechanism for an Aggregate of Renewable Energy Producers, pp. 3025-3031.

Nayyar, Ashutosh	Univ. of California, Berkeley
Poolla, Kameshwar	Univ. of California at Berkeley
Varaiya, Pravin P.	Univ. of California at Berkeley

16:40-17:00 ThC15.3

Dynamic Pricing in Consolidated Ancillary Service Markets, pp. 3032-3037.

Taylor, Joshua	Univ. of Toronto
Nayyar, Ashutosh	Univ. of California, Berkeley
Callaway, Duncan	UC Berkeley
Poolla, Kameshwar	Univ. of California at Berkeley

17:00-17:20 ThC15.4

Risk-Limiting, Market-Based Power Dispatch and Pricing, pp. 3038-3045.

Yo, Masaki	Keio Univ.
Ono, Masahiro	Keio Univ.
Williams, Brian	MIT
Adachi, Shuichi	Keio Univ.

17:20-17:40 ThC15.5

Risk Limiting Dispatch with Optimal Curtailing in Active Distribution Networks, pp. 3046-3052.

Georgiev, Daniel	Univ. of West Bohemia
Janecek, Eduard	Univ. of West Bohemia

17:40-18:00 ThC15.6

Adaptive Control Scheme for Maximum Power Point Tracking of a Photovoltaic System Connected to the Grid, pp. 3053-3058.

Jaramillo-Lopez, Fernando	Lab. des Signaux et Systemes, Supelec.
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Damm, Gilney
Kenne, Godpromesse
Lamnabhi-Lagarrigue, Françoise

Lab. IBISC - CNRS/Every Univ.
Univ. de Dschang
CNRS-EECI

Technical Program for Friday July 19, 2013

FrPT1	HG F30, F1, F7
Plenary 3: Synthetic Biology: From Parts to Modules to Therapeutic Systems (Plenary Session)	
Chair: Lygeros, John	ETH Zurich
08:00-09:00	FrPT1.1
<i>Synthetic Biology: From Parts to Modules to Therapeutic Systems*</i> .	
Weiss, Ron	M.I.T.
FrA1	HG F1
Systems and Synthetic Biology: Case Studies and Computational Challenges (Tutorial Session)	
Chair: Koepl, Heinz	ETH Zurich
Organizer: Koepl, Heinz	ETH Zurich
09:20-10:00	FrA1.1
<i>Tutorial on Synthetic Biology (I)*.</i>	
Benenson, Yaakov	ETH Zurich
10:00-10:40	FrA1.2
<i>Applied Modeling and Theory for Stochastic Descriptions of Biochemical Networks (I)*.</i>	
Khammash, Mustafa H.	Univ. of California at Sta. Barbara
10:40-11:20	FrA1.3
<i>Differential Equation Models in Systems and Synthetic Biology (I)*.</i>	
Craciun, Gheorghe	Univ. of Wisconsin-Madison
FrA2	HG F3
Embedded Optimization for Control and Estimation I – Numerical Method Development (Invited Session)	
Chair: Zeilinger, Melanie N.	Ec. Pol. Fédéral de Lausanne (EPFL)
Co-Chair: Domahidi, Alexander	Automatic Control Lab. ETH Zurich
Organizer: Zeilinger, Melanie N.	UC Berkeley
09:20-09:40	FrA2.1
<i>Stochastic Optimal Control in the Perspective of the Wiener Chaos (I)</i> , pp. 3059-3064.	
Huschto, Tony	Heidelberg Univ.
Sager, Sebastian	OVGU Magdeburg
09:40-10:00	FrA2.2
<i>Stabilizing Embedded MPC with Computational Complexity Guarantees (I)</i> , pp. 3065-3070.	
Rubagotti, Matteo	Nazarbayev Univ.
Patrinos, Panagiotis	IMT Inst. for Advanced Studies Lucca
Bemporad, Alberto	IMT Inst. for Advanced Studies Lucca
10:00-10:20	FrA2.3
<i>ECOS: An SOCP Solver for Embedded Systems (I)</i> , pp. 3071-3076.	
Domahidi, Alexander	Automatic Control Lab. ETH Zurich
Chu, Eric	Stanford Univ.
Boyd, Stephen P.	Stanford Univ.
10:20-10:40	FrA2.4
<i>Fast Auto Generated ACADO Integrators and Application to MHE with Multi-Rate Measurements (I)</i> , pp. 3077-3082.	
Quirynen, Rien	KU Leuven
Gros, Sébastien	KU Leuven
Diehl, Moritz	KU Leuven
10:40-11:00	FrA2.5
<i>Evaluation of Piecewise Affine Control Law Via Graph Traversal (I)</i> , pp. 3083-3088.	
Herceg, Martin	Swiss Federal Inst. of Tech. - ETH Zurich
Mariethoz, Sébastien	ETH Zurich
Morari, Manfred	ETH Zurich

11:00-11:20	FrA2.6
<i>A Hierarchical Time-Splitting Approach for Solving Finite-Time Optimal Control Problems (I)</i> , pp. 3089-3094.	
Stathopoulos, Georgios	Ec. Pol. Federale de Lausanne (EPFL)
Keviczky, Tamas	Delft Univ. of Tech.
Wang, Yang	Stanford Univ.

FrA3	HG F5
Biomedical Systems (Regular Session)	
Chair: Raisch, Joerg	Tech. Univ. Berlin
Co-Chair: Banaei Khosroushahi, Reza	Univ. of Alberta

09:20-09:40	FrA3.1
<i>Partial Stability of Controlled SEIR Epidemic Models</i> , pp. 3095-3100.	
Ibeas, Asier	Univ. Autonoma de Barcelona
de la Sen, Manuel	Univ. del Pais Vasco
Alonso-Quesada, Santiago	UPV /EHU
Nistal Riobello, Raul	Ehu Univ. of Basque Country

09:40-10:00	FrA3.2
<i>Nonlinear Joint-Angle Feedback Control of Electrically Stimulated and λ-Controlled Antagonistic Muscle Pairs</i> , pp. 3101-3107.	
Klauer, Christian	Tech. Univ. Berlin
Raisch, Joerg	Tech. Univ. Berlin
Schauer, Thomas	Tech. Univ. Berlin

10:00-10:20	FrA3.3
<i>Emulation of Ventricular Suction in a Hybrid Mock Circulation</i> , pp. 3108-3112.	
Ochsner, Gregor	ETH Zurich
Amacher, Raffael	ETH Zurich
Schmid Daners, Marianne	ETH Zurich

10:20-10:40	FrA3.4
<i>Reducing Domain Structural Complexity in PDE Backstepping Boundary Observer Design Using Conformal Mapping</i> , pp. 3113-3118.	
Banaei Khosroushahi, Reza	Univ. of Alberta
Marquez, Horacio J.	Univ. of Alberta

10:40-11:00	FrA3.5
<i>Close to Reality Evaluation of a PID Control Algorithm for Blood Glucose Regulation in Diabetic Goettingen Minipigs</i> , pp. 3119-3124.	
Lunze, Katrin	RWTH Aachen Univ.
Zimmermann, Markus	RWTH Aachen Univ.
Walter, Marian	RWTH Aachen Univ. ,Helmholtz Inst.
Leonhardt, Steffen	RWTH Aachen Univ.

11:00-11:20	FrA3.6
<i>Optimal Control of Influenza Epidemic Model with Virus Mutations</i> , pp. 3125-3130.	
Gubar, Elena	St. Petersburg State Univ.
Zhu, Quanyan	Univ. of Illinois at Urbana Champaign

FrA4	HG F7
Set Based Estimation and Control (Regular Session)	
Chair: Olaru, Sorin	Supelec
Co-Chair: Raimondo, Davide Martino	Univ. of Pavia

09:20-09:40	FrA4.1
<i>Active Fault Diagnosis Using Moving Horizon Input Design (I)</i> , pp. 3131-3136.	
Raimondo, Davide Martino	Univ. of Pavia
Braatz, Richard D.	Massachusetts Inst. of Tech.
Scott, Joseph K.	Massachusetts Inst. of Tech.

09:40-10:00	FrA4.2
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Analysis of Vehicle Actuators Based on Reachable Sets, pp. 3137-3142.

Nemeth, Balazs
Gaspar, Peter

MTA SZTAKI
Computer & Automation Inst. of HAS

10:00-10:20

FrA4.3

Set-Membership State Estimation for Discrete Time Piecewise Affine Systems Using Zonotopes (I), pp. 3143-3148.

Tabatabaeipour, Seyed Mojtaba
Stoustrup, Jakob

Tech. Univ. of Denmark
Aalborg Univ.

10:20-10:40

FrA4.4

Consensus Control Protocols for Nonlinear Dynamical Systems Via Hybrid Stabilization of Sets, pp. 3149-3154.

Haddad, Wassim M.
Nersesov, Sergey G.
Ghasemi, Masood

Georgia Inst. of Tech.
Villanova Univ.
Villanova Univ.

10:40-11:00

FrA4.5

Hyperplane Arrangements in Mixed-Integer Programming Techniques. Collision Avoidance Application with Zonotopic Sets (I), pp. 3155-3160.

Stoican, Florin
Prodan, Ionela
Olaru, Sorin

Norwegian Univ. of Science and Tech. (NTNU)
SUPELEC
Supelec

11:00-11:20

FrA4.6

An Interpolation-Based Robust MPC Algorithm Using Polyhedral Invariant Sets, pp. 3161-3166.

Bumroongsri, Pornchai
Kheawhom, Soorathep

Department of Chemical Engineering, Faculty of Engineering, Chul
Chulalongkorn Univ.

FrA5

HG E1.1

Switched Systems I (Regular Session)

Chair: Millerioux, Gilles
Co-Chair: Rodrigues, Luis

Henri Poincare Univ. of Nancy
Concordia Univ.

09:20-09:40

FrA5.1

Scalable Decay Factor and ISS Gain for Disturbed Linear Polytopic Discrete-Time Systems, pp. 3167-3172.

Millerioux, Gilles
Bloch, Gerard

Univ. de Lorraine
CRAN

09:40-10:00

FrA5.2

Measures and LMIs for Optimal Control of Piecewise-Affine Systems, pp. 3173-3178.

Abdalmoaty, Mohamed Rasheed-Hilmy
Henrion, Didier
Rodrigues, Luis

KTH
Czech Tech. Univ. in Prague
Concordia Univ.

10:00-10:20

FrA5.3

Discretized Switching Time Optimization Problems, pp. 3179-3184.

Flaßkamp, Kathrin
Murphey, Todd
Ober-Blöbaum, Sina

Univ. of Paderborn
Northwestern Univ.
Univ. of Paderborn

10:20-10:40

FrA5.4

Stability of Switching Systems and Generalized Joint Spectral Radius, pp. 3185-3190.

Ogura, Masaki
Martin, Clyde F.

Texas Tech. Univ.
Texas Tech. Univ.

10:40-11:00

FrA5.5

Convex Optimization Methods for Computing the Lyapunov Exponent of Matrices, pp. 3191-3196.

Protasov, Vladimir
Jungers, Raphaël

Moscow State Univ.
Univ. catholique de Louvain

11:00-11:20

FrA5.6

Generic Fractal Structure of the Optimal Synthesis in Problems with Affine Multi-Dimensional Control, pp. 3197-3202.

Hildebrand, Roland
Lokutsievskiy, Lev

Univ. Joseph Fourier / CNRS
Moscow State Univ.

FrA6	HG E1.2
Sliding Mode Control I (Regular Session)	
Chair: Pisano, Alessandro	Univ. di Cagliari
Co-Chair: Boiko, Igor	Petroleum Inst.
09:20-09:40	FrA6.1
<i>Improved Sliding Mode Control of a Class of Nonlinear Systems: Application to Quadruple Tanks System</i> , pp. 3203-3208.	
Larguech, Samia	National School of Engineers of Sfax
Aloui, Sinda	Univ. of Picardie Jules Verne, France
Chaari, Abdessattar	National Engineering School of Sfax
El Hajjaji, Ahmed	Univ. de Picardie-Jules Verne
Koubaa, Yassine	National Engineering School of Sfax
09:40-10:00	FrA6.2
<i>Dead-Beat Sliding Mode Control of Perishable Inventories with Transportation Losses and Multiple Suppliers</i> , pp. 3209-3215.	
Bartoszewicz, Andrzej	Tech. Univ. of Lodz
Maciejewski, Michal	Inst. of Automatic Control, Tech. Univ. of Lodz
10:00-10:20	FrA6.3
<i>Sliding-Mode Control of a Hydrostatic Drive Train with Uncertain Actuator Dynamics</i> , pp. 3216-3221.	
Sun, Hao	Rostock Univ.
Aschemann, Harald	Univ. of Rostock
10:20-10:40	FrA6.4
<i>Analysis of Performance of a Liquid Level Process Controlled by the Super-Twisting Algorithm</i> , pp. 3222-3227.	
Boiko, Igor	Petroleum Inst.
Al Ameri, Osama	The Petroleum Inst.
10:40-11:00	FrA6.5
<i>An Adaptive Version of a Second Order Sliding Mode Output Feedback Controller</i> , pp. 3228-3233.	
Estrada, Antonio	Inria
Plestan, Franck	Ec. Centrale De Nantes-CNRS
Allouche, Benyamine	Ec.
11:00-11:20	FrA6.6
<i>A New Approach to Causal Output Tracking for Non-Minimum Phase Nonlinear Systems Via Combined First/second Order Sliding Mode Control</i> , pp. 3234-3239.	
Pisano, Alessandro	Univ. di Cagliari
Baev, Simon	Department of Computer Science, Georgia Southwestern State Univ.
Salimbeni, Domenico	Univ. of Cagliari, Dept of Electrical and Electronic Engine
Shtessel, Yuri B.	Univ. of Alabama at Huntsville
Usai, Elio	Univ. degli Studi di Cagliari
FrA7	HG E3
Applications of Robust Control (Regular Session)	
Chair: Zenger, Kai	Aalto Univ. School of Electrical Engineering
Co-Chair: Richards, Arthur	Univ. of Bristol
09:20-09:40	FrA7.1
<i>Nonlinear and Asymmetric Thermal-Aware DVFS Control</i> , pp. 3240-3245.	
Durand, Sylvain	CNRS - CINVESTAV
Lesecq, Suzanne	CEA
09:40-10:00	FrA7.2
<i>Disturbance Feedback for Handling Uncertainty in Air Traffic Flow Management</i> , pp. 3246-3251.	
Clare, Gillian	Univ. of Bristol
Richards, Arthur	Univ. of Bristol
10:00-10:20	FrA7.3
<i>A Semi-Active Controller Tuning and Application to Base Seismically-Isolated Structures</i> , pp. 3252-3257.	

Teodorescu, Catalin-Stefan	CEA Saclay
Diop, Sette	CNRS
Politopoulos, Ioannis	CEA Saclay
Benidir, Messaoud	L2S-Supelec-UPS-11
10:20-10:40	FrA7.4
<i>Rotorcraft MAV Having an Onboard Manipulator: Longitudinal Modeling and Robust Control</i> , pp. 3258-3263.	
Escareno Castro, Juan Antonio	FEMTO-ST Inst.
Rakotondrabe, Micky	FEMTO-ST Inst. UMR CNRS - UFC / ENSMM / UTBM,
Flores Colunga, Gerardo Ramon	Univ. of Tech. of Compiègne
Lozano, Rogelio	Univ. de Tech. de Compiègne
10:40-11:00	FrA7.5
<i>An Instability Condition for Uncertain Systems Toward Robust Bifurcation Analysis</i> , pp. 3264-3269.	
Inoue, Masaki	Tokyo Inst. of Tech.
Imura, Jun-ichi	Tokyo Inst. of Tech.
Kashima, Kenji	Osaka Univ.
Arai, Takayuki	Tokyo Inst. of Tech.
Aihara, Kazuyuki	The Univ. of Tokyo
11:00-11:20	FrA7.6
<i>Nonsmooth Optimization Based Multiple Robust Controller Design under Coupling Partitioned Uncertainty</i> , pp. 3270-3275.	
Liu, Jiaqi	Aalto Univ.
Gao, Xiaozhi	Aalto Univ. of Automation and Systems Tech.
Zenger, Kai	Aalto Univ. School of Electrical Engineering
FrA8	HG E5
Distributed and Coordinated Control (Regular Session)	
Chair: Stursberg, Olaf	Univ. of Kassel
Co-Chair: Cantoni, Michael	Univ. of Melbourne
09:20-09:40	FrA8.1
<i>Distributed Model Predictive Control Techniques Applied to an Irrigation Canal (I)</i> , pp. 3276-3281.	
Alvarez, Antonio	Univ. of Seville
Ridao, Miguel A.	Univ. de Sevilla
Ramirez, Daniel R.	Univ. of Sevilla
Sanchez, Laura	AECOM
09:40-10:00	FrA8.2
<i>A Technique for Designing Stabilizing Distributed Controllers with Arbitrary Signal Structure Constraints</i> , pp. 3282-3287.	
Rai, Anurag	Massachusetts Inst. of Tech.
Warnick, Sean	Brigham Young Univ.
10:00-10:20	FrA8.3
<i>Design of Distributed Controllers and Communication Topologies Considering Link Failures (I)</i> , pp. 3288-3294.	
Groß, Dominic	Univ. of Kassel
Jilg, Martin	Univ. of Kassel
Stursberg, Olaf	Univ. of Kassel
10:20-10:40	FrA8.4
<i>Distributed MPC Applied to Power Demand Side Control (I)</i> , pp. 3295-3300.	
Larsen, Gunn Kristine Holst	Univ. of Groningen
Pons, Jarno	Univ. of Groningen
Achterop, Sietse	Univ. of Groningen
Scherpen, Jacquélien M.A.	Univ. of Groningen
10:40-11:00	FrA8.5
<i>Formation Control Via Quasi-Time Optimal Protocol</i> , pp. 3301-3305.	
Morozov, Yury	V.A. Trapeznikov Inst. of Control Sciences RAS
11:00-11:20	FrA8.6
<i>On Computing Quadratic Controls for Acyclic Networks of Heterogenous Systems</i> , pp. 3306-3311.	

Shames, Iman
Cantoni, Michael

Univ. of Melbourne
Univ. of Melbourne

FrA9		HG E7
Control of UAVs (Regular Session)		
Chair: Aguiar, A. Pedro	Faculty of Engineering, Univ. of Porto (FEUP)	
Co-Chair: Huck, Stephan Marc		ETH Zurich
09:20-09:40		FrA9.1
<i>Health Aware Planning under Uncertainty for UAV Missions with Heterogeneous Teams</i> , pp. 3312-3319.		
Ure, Nazim Kemal		Massachusetts Inst. of Tech.
Chowdhary, Girish		Massachusetts Inst. of Tech.
How, Jonathan P.		Massachusetts Inst. of Tech.
Vavrina, Matthew A.		Boeing Res. and Tech.
Vian, John		Boeing Res. and Tech.
09:40-10:00		FrA9.2
<i>Moving Path Following for Autonomous Robotic Vehicles</i> , pp. 3320-3325.		
Oliveira, Tiago	Acad. da Força Aérea Portuguesa	
Encarnação, Pedro		Catholic Univ. of Portugal
Aguiar, A. Pedro	Faculty of Engineering, Univ. of Porto (FEUP)	
10:00-10:20		FrA9.3
<i>A Multiplicative Filter for GLMAV Attitude Estimation</i> , pp. 3326-3331.		
Grandvallet, Bertrand		CRAN / ISL
Zemouche, Ali		Nancy-Univ.
Boutayeb, M.		Lorraine Univ.
10:20-10:40		FrA9.4
<i>An Evaluation of UAV Path Following Algorithms</i> , pp. 3332-3337.		
Pb, Sujit		Univ. of Porto
Saripalli, Srikanth		Arizona State Univ.
Sousa, Joao	Univ. do Porto - Faculdade Engenharia	
10:40-11:00		FrA9.5
<i>On the Construction of Barrier in a Connectivity Maintenance Game</i> , pp. 3338-3345.		
Bhattacharya, Sourabh		Iowa State Univ.
11:00-11:20		FrA9.6
<i>Position Trajectory Tracking of a Quadrotor Helicopter Based on L1 Adaptive Control</i> , pp. 3346-3353.		
De Monte, Paul		Tech. Univ. München
Lohmann, Boris		Tech. Univ. Muenchen
FrA10		HG D1.1
Stability of Linear Systems (Regular Session)		
Chair: Knorn, Steffi		Univ. of Newcastle
Co-Chair: Charalambous, Themistoklis		Royal Inst. of Tech. (KTH)
09:20-09:40		FrA10.1
<i>String Stability Analysis of a Vehicle Platoon with Communication Range 2 Using the Two-Dimensional Induced Operator Norm</i> , pp. 3354-3359.		
Knorn, Steffi		Univ. of Newcastle
Middleton, Rick		The Univ. of Newcastle
09:40-10:00		FrA10.2
<i>Integral Inequality for Time-Varying Delay Systems</i> , pp. 3360-3365.		
Seuret, Alexandre		LAAS
Gouaisbaut, Frederic		LAAS CNRS
10:00-10:20		FrA10.3
<i>Stability and Persistence Analysis of Large Scale Interconnected Positive Systems</i> , pp. 3366-3371.		
Ebihara, Yoshio		Kyoto Univ.

Peaucelle, Dimitri	LAAS-CNRS
Arzelier, Denis	LAAS-CNRS
10:20-10:40	FrA10.4
<i>On the Rate of Convergence of Continuous-Time Linear Positive Systems with Heterogeneous Time-Varying Delays</i> , pp. 3372-3377.	
Feyzmahdavian, Hamid Reza	Royal Inst. of Tech. - KTH
Charalambous, Themistoklis	Royal Inst. of Tech. (KTH)
Johansson, Mikael	Royal Inst. of Tech.
10:40-11:00	FrA10.5
<i>Stability and Stabilization of Discrete-Time Descriptor Systems with Several Extensions</i> , pp. 3378-3383.	
Masubuchi, Izumi	Kobe Univ.
Ohta, Yuzo	Kobe Univ.
FrA11	HG D1.2
Chemical Process Control (Regular Session)	
Chair: Fikar, Miroslav	Slovak Univ. of Tech.
Co-Chair: Kinnaert, Michel	Univ. Libre de Bruxelles
09:20-09:40	FrA11.1
<i>Multi-Objective Optimal Control of Ultrafiltration/diafiltration Processes</i> , pp. 3384-3389.	
Jelemensky, Martin	STU in Bratislava
Paulen, Radoslav	Faculty of Chemical and Food Tech. Slovak Univ. Tec
Fikar, Miroslav	Slovak Univ. of Tech.
Kovacs, Zoltan	Corvinus Univ. of Budapest
09:40-10:00	FrA11.2
<i>NCO-Tracking Based Control of Semi-Batch Antisolvent Crystallization Processes in the Presence of Uncertainties</i> , pp. 3390-3395.	
Kamaraju, Vamsi Krishna	National Univ. of Singapore
Srinivasan, B.	Ec. Pol. Montreal
Chiu, Min-Sen	National Univ. of Singapore
10:00-10:20	FrA11.3
<i>Temperature-Temperature Cascade Control of Binary Batch Distillation Columns</i> , pp. 3396-3401.	
Castellanos Sahagun, Eduardo	PARCAR DESARROLLOS Y SERVICIOS SA DE CV
Alvarez, Jesus	Univ. Autónoma Metropolitana, Unidad Iztapalapa
10:20-10:40	FrA11.4
<i>Application of First-Principles Based Techniques for Compounds Prediction in a Gasification Plant</i> , pp. 3402-3407.	
Zanoli, Silvia Maria	Univ. Pol. delle Marche
Astolfi, Giacomo	Univ. Pol. marche
10:40-11:00	FrA11.5
<i>POD-Based State Estimation of Simulated Moving Bed Chromatographic Processes</i> , pp. 3408-3414.	
Boulkroune, Boulaid	HEI
Kinnaert, Michel	Univ. Libre de Bruxelles
Zemouche, Ali	Nancy-Univ.
11:00-11:20	FrA11.6
<i>Static and Dynamic Set Point Optimization Techniques for Optimal Operation of Wastewater Treatment Plants</i> , pp. 3415-3420.	
Vega, Pastora	Univ. of Salamanca
Revollar, Silvana	Univ. de Salamanca
Martin Noguero, Jose Manuel	Univ. de Salamanca
Francisco, Mario	Univ. of Salamanca

FrA12	HG D3.2
Reduced Order Systems (Regular Session)	
Chair: de Carvalho, Martins J .L.	Faculdade de Engenharia da Univ. do Porto

Co-Chair: Belur, Madhu N.	Indian Inst. of Tech. Bombay
09:20-09:40	FrA12.1
<i>Continuous-Time IO Systems Identification through Downsampled Models</i> , pp. 3421-3426.	
Lopes dos Santos, P.	Univ. do Porto
Azevedo Perdicoulis, Teresa Paula	ISR-Coimbra & UTAD
Ramos, Jose A.	Nova Southeastern Univ.
Jank, Gerhard	RWTH
de Carvalho, Martins J .L.	Faculdade de Engenharia da Univ. do Porto
09:40-10:00	FrA12.2
<i>H2 Pseudo-Optimality in Model Order Reduction by Krylov Subspace Methods</i> , pp. 3427-3432.	
Wolf, Thomas	Tech. Univ. München
Panzer, Heiko K. F.	Tech. Univ. München
Lohmann, Boris	Tech. Univ. Muenchen
10:00-10:20	FrA12.3
<i>On Parametric Model Order Reduction by Matrix Interpolation</i> , pp. 3433-3438.	
Geuss, Matthias	TU München
Panzer, Heiko K. F.	Tech. Univ. München
Lohmann, Boris	Tech. Univ. Muenchen
10:20-10:40	FrA12.4
<i>Distributed Proper Orthogonal Decomposition for Large-Scale Networked Dynamical Systems</i> , pp. 3439-3445.	
Kojima, Chiaki	Univ. of Tokyo
Kawasaki, Issei	The Univ. of Tokyo
Moriyama, Satoshi	The Univ. of Tokyo
Wada, Jun	The Univ. of Tokyo
10:40-11:00	FrA12.5
<i>Minimal Controller Structure for Generic Pole Placement</i> , pp. 3446-3451.	
Kalaimani, Rachel Kalpana	Indian Inst. of Tech. Bombay
Belur, Madhu N.	Indian Inst. of Tech. Bombay
FrA13	HG D5.2
Fractional Dynamical Systems and Signals - Part 1 – Fractional Differentiation in Modeling and Systems Analysis (Invited Session)	
Chair: Sabatier, Jocelyn	LAPS - Bordeaux 1 Univ.
Co-Chair: Sierociuk, Dominik	Warsaw Univ. of Tech. (ISEP)
Organizer: Sabatier, Jocelyn	LAPS - Bordeaux 1 Univ.
Organizer: Farges, Christophe	IMS-LAPS
09:20-09:40	FrA13.1
<i>Fractional Order Identification of Human Arm Dynamics: Preliminary Results (I)</i> , pp. 3452-3457.	
Tejado, Ines	Univ. Técnica de Lisboa, Inst. Superior Técnico
Valério, Duarte Pedro Mata de Oliveira	IDMEC/IST, TULisbon
Pires, Pedro	IST, TULisbon
Martins, Jorge M.	Inst. Superior Tecnico
09:40-10:00	FrA13.2
<i>Fractional Models for Lithium-Ion Batterie (I)</i> , pp. 3458-3463.	
Sabatier, Jocelyn	LAPS - Bordeaux 1 Univ.
Francisco, Mbala Junior	PSA Peugeot Citroën
Guillemard, Franck	PSA Peugeot Citroën
10:00-10:20	FrA13.3
<i>Equivalent Switching Strategy and Analog Validation of the Fractional Variable Order Derivative Definition (I)</i> , pp. 3464-3469.	
Sierociuk, Dominik	Warsaw Univ. of Tech. (ISEP)
Malesza, Wiktor	Warsaw Univ. of Tech.
Macias, Michal	Warsaw Univ. of Tech.
10:20-10:40	FrA13.4
<i>Model Order Identification for Fractional Models</i> , pp. 3470-3475.	

Victor, Stéphane	Univ. de Bordeaux
Malti, Rachid	Univ. de Bordeaux
10:40-11:00	FrA13.5
<i>Analysis of Fractional-Order Telegraph Model for Neutron Transport in Nuclear Reactor with Slab Geometry (I)</i> , pp. 3476-3481.	
Vyawahare, Vishwesh	Indian Inst. of Tech. Bombay
Nataraj, P.S.V.	Indian Inst. of Tech.
11:00-11:20	FrA13.6
<i>A Non-Square MIMO Fractional Robust Control for the Airpath of a Diesel Engine</i> , pp. 3482-3487.	
Lamara, Abderrahim	Univ. of Bordeaux1
Chamaillard, Yann	Univ. of Orléans
Charlet, Alain	Univ. d'Orléans
Lanusse, Patrick	Univ. of Bordeaux / Bordeaux Pol. Inst. /ENSEIRB
Colin, Guillaume	Univ. of Orléans
FrA14	HG D7.1
Traffic Control (Regular Session)	
Chair: De Schutter, Bart	Delft Univ. of Tech.
Co-Chair: Kulcsar, Balazs	Chalmers Univ. of Tech.
09:20-09:40	FrA14.1
<i>Model Based Tracking Control Using Jerky Behavior in Platoon of Vehicles</i> , pp. 3488-3493.	
Merzouki, Rochdi	Ec. Pol. de Lille
Conrard, Blaise	LAGIS - Univ. de Lille 1
Kumar, Pushpendra	Univ. Lille1, Pol. LAGIS
Coelen, Vincent	Univ. Lille1, Pol. LAGIS
09:40-10:00	FrA14.2
<i>Decentralized Optimal Control of a Car Platoon with Guaranteed String Stability</i> , pp. 3494-3499.	
Morbidi, Fabio	Inria, Grenoble - Rhone-Alpes
Colaneri, Patrizio	Pol. di Milano
Stanger, Thomas	Johannes Kepler Univ. Linz
10:00-10:20	FrA14.3
<i>Optimal Hybrid Macroscopic Traffic Control for Urban Regions: Perimeter and Switching Signal Plans Controllers</i> , pp. 3500-3505.	
Hajjahmadi, Mohammadreza	Delft Univ. of Tech.
Haddad, Jack	Tech. - Israel Inst. of Tech.
De Schutter, Bart	Delft Univ. of Tech.
Geroliminis, Nikolas	Ec. Pol. Fédérale de Lausanne (EPFL), Urban Transport
10:20-10:40	FrA14.4
<i>Feedback Perimeter Control for Multi-Region Large-Scale Congested Networks</i> , pp. 3506-3511.	
Aboudolas, Konstantinos	Ec. Pol. Fédérale de Lausanne (EPFL), Urban Transport
Geroliminis, Nikolas	Ec. Pol. Fédérale de Lausanne (EPFL), Urban Transport
10:40-11:00	FrA14.5
<i>Synthesis of Intelligent Control of Traffic Flows in Urban Roads Based on the Logical Network Operator Method</i> , pp. 3512-3517.	
Diveev, Askhat	Inst. of Russian Acad. of Sci.
Sofronova, Elena	Peoples' Friendship Univ. of Russia
11:00-11:20	FrA14.6
<i>Incident Parameter Estimation</i> , pp. 3518-3523.	
Dabiri, Azita	Chalmers Univ.
Kulcsar, Balazs	Chalmers Univ. of Tech.
FrA15	HG D7.2
Control of Power Systems (Regular Session)	

Chair: Dimarogonas, Dimos V. Co-Chair: Rantzer, Anders	Royal Inst. of Tech. (KTH) Lund Univ.
09:20-09:40	FrA15.1
<i>Distributed vs. Centralized Power Systems Frequency Control</i> , pp. 3524-3529.	
Andreasson, Martin	Royal Inst. of Tech. (KTH)
Dimarogonas, Dimos V.	Royal Inst. of Tech. (KTH)
Johansson, Karl Henrik	Royal Inst. of Tech.
Sandberg, Henrik	Royal Inst. of Tech. (KTH)
09:40-10:00	FrA15.2
<i>A Detailed Study on a DC-Voltage-Based Control Scheme Using a Multi-Terminal HVDC System for Frequency Control</i> , pp. 3530-3535.	
Chen, Yijing	Lab. des Signaux et Systemes (LSS), CNRS
Dai, Jing	Lab. des Signaux et Systemes, CNRS
Damm, Gilney	Lab. IBISC - CNRS/Evry Univ.
Lamnabhi-Lagarrigue, Françoise	CNRS-EECI
10:00-10:20	FrA15.3
<i>Nonlinear Control Design for a Multi-Terminal VSC-HVDC System</i> , pp. 3536-3541.	
Chen, Yijing	Lab. des Signaux et Systemes (LSS), CNRS
Dai, Jing	Lab. des Signaux et Systemes, CNRS
Damm, Gilney	Lab. IBISC - CNRS/Evry Univ.
Lamnabhi-Lagarrigue, Françoise	CNRS-EECI
10:20-10:40	FrA15.4
<i>Non-Stationary Harmonic Tracking Using Piecewise-Overlapped Group-Harmonic Algorithm</i> , pp. 3542-3547.	
Lin, Hsiung Cheng	National Chin-Yi Univ. of Tech.
Huang, Guo-Shing	National Chin-Yi Univ. of Tech.
10:40-11:00	FrA15.5
<i>On Optimal Sensor Placement for Mitigation of Vulnerabilities to Cyber Attacks in Large-Scale Networks</i> , pp. 3548-3553.	
Vaidya, Umesh	Iowa State Univ.
Fardad, Makan	Syracuse Univ.
11:00-11:20	FrA15.6
<i>Dynamic Power Coordination for Load Reduction in Dispatchable Wind Power Plants</i> , pp. 3554-3559.	
Madjidian, Daria	Lund Univ.
Kristalny, Maxim	Tech. - IIT
Rantzer, Anders	Lund Univ.
FrST1	HG F1, F3
Semi-Plenary 5: Information Processing and Control in Biological Systems; Some Fundamental Limits (Semi-Plenary Session)	
Chair: Ferrari Trecate, Giancarlo	Univ. degli Studi di Pavia
11:30-12:15	FrST1.1
<i>Information Processing and Control in Biological Systems; Some Fundamental Limits*</i> .	
Vinnicombe, Glenn	Univ. of Cambridge
FrST2	HG F7, F5
Semi-Plenary 6: Legged Dynamics and Control: Basic Models, Neuromuscular Interpretation, and Robotic Application (Semi-Plenary Session)	
Chair: Smith, Roy S.	ETH Zurich
11:30-12:15	FrST2.1
<i>Legged Dynamics and Control: Basic Models, Neuromuscular Interpretation, and Robotic Application*</i> .	
Geyer, Hartmut	Carnegie Mellon Univ.
FrB1	HG F1
Emerging Control Applications I (Regular Session)	
Chair: Horn, Joachim	Helmut-Schmidt-Univ. / Univ. of the Federal Armed Forces Hamburg

13:40-14:00	FrB1.1
<i>State Estimation with Time Delay and State Feedback Control of Cathode Exhaust Gas Mass Flow for PEM Fuel Cell Systems</i> , pp. 3560-3565.	
Schultze, Martin	Helmut-Schmidt-Univ. Hamburg
Horn, Joachim	Helmut-Schmidt-Univ. / Univ. of the Federal Armed Forc
14:00-14:20	FrB1.2
<i>A Fixed-Structure Automaton for Load Management of Electric Vehicles</i> , pp. 3566-3571.	
Stuedli, Sonja	The Univ. of Newcastle
Middleton, Rick	The Univ. of Newcastle
Braslavsky, Julio H.	Commonwealth Scientific and Industrial Res.
14:20-14:40	FrB1.3
<i>Temperature Control of the FTU Liquid Lithium Limiter</i> , pp. 3572-3577.	
Boncagni, Luca	ENEA
Carnevale, Daniele	Univ. of Rome
Cristaldi, Alessia	Univ. of Rome, Tor Vergata
De Maio, Stefano	Univ. of Rome, Tor Vergata
Mazzitelli, Giuseppe	enea
Sassano, Mario	Univ. of Rome, Tor Vergata
Vitale, Vincenzo	ENEA
Vitelli, Riccardo	Univ. of Rome, Tor Vergata
Zaccarian, Luca	CNRS
14:40-15:00	FrB1.4
<i>Model Identification of a Proton-Exchange Membrane Fuel-Cell from an Input-Output Experiment : The Diffusive Representation Approach (I)</i> , pp. 3578-3583.	
Restrepo, Carlos	Delft Univ. of Tech.
Garcia, Germain	LAAS-CNRS
Calvente, Javier	Univ. Rovira i Virgili
Giral, Roberto	Univ. Rovira i Virgili
Martinez-Salamero, Luis	Escola Tecnica Superior d'EnginyeriaUniversitat Rovira iVirgili
15:00-15:20	FrB1.5
<i>Pricing Long-Term Permits and Scheduling of Electric Vehicle Charging in Parking Lots with Shared Resources</i> , pp. 3584-3589.	
Deshpande, Ajay	IBM T J Watson Res. Center
Murali, Pavankumar	IBM T J Watson Res. Center
FrB2	HG F3
Embedded Optimization for Control and Estimation II – Hardware Implementation (Invited Session)	
Chair: Zeilinger, Melanie N.	Ec. Pol. Fédéral de Lausanne (EPFL)
Co-Chair: Domahidi, Alexander	Automatic Control Lab. ETH Zurich
Organizer: Zeilinger, Melanie N.	UC Berkeley
Organizer: Domahidi, Alexander	Automatic Control Lab. ETH Zurich
13:40-14:00	FrB2.1
<i>A Predictive Control Solver for Low-Precision Data Representation (I)</i> , pp. 3590-3595.	
Longo, Stefano	Cranfield Univ.
Kerrigan, Eric C.	Imperial Coll. London
Constantinides, George Anthony	Imperial Coll. London
14:00-14:20	FrB2.2
<i>A Computationally Efficient Parallel Coordinate Descent Algorithm for MPC: Implementation on a PLC (I)</i> , pp. 3596-3601.	
Necoara, Ion	Univ. Pol. Bucharest
Clipici, Dragos	Pol. Univ. of Bucharest
14:20-14:40	FrB2.3
<i>Fixed-Point Dual Gradient Projection for Embedded Model Predictive Control (I)</i> , pp. 3602-3607.	
Patrinos, Panagiotis	IMT Inst. for Advanced Studies Lucca
Guiggiani, Alberto	IMT Inst. for Advanced Studies Lucca

Bemporad, Alberto	IMT Inst. for Advanced Studies Lucca
14:40-15:00	FrB2.4
<i>Energy-Aware MPC Co-Design for DC-DC Converters (I)</i> , pp. 3608-3613.	
Suardi, Andrea	Imperial Coll. London
Longo, Stefano	Cranfield Univ.
Kerrigan, Eric C.	Imperial Coll. London
Constantinides, George Anthony	Imperial Coll. London
15:00-15:20	FrB2.5
<i>Embedded Predictive Control on an FPGA Using the Fast Gradient Method (I)</i> , pp. 3614-3620.	
Jerez, Juan Luis	Imperial Coll. London
Goulart, Paul J.	ETH Zurich
Richter, Stefan	ETH Zurich
Constantinides, George Anthony	Imperial Coll. London
Kerrigan, Eric C.	Imperial Coll. London
Morari, Manfred	ETH Zurich
15:20-15:40	FrB2.6
<i>Monitoring Control Updating Period in Fast Gradient Based NMPC</i> , pp. 3621-3626.	
Alamir, Mazen	CNRS-Gipsa-Lab.
FrB3	HG F5
Genetic Regulatory Systems (Regular Session)	
Chair: Goncalves, Jorge M.	Univ. of Cambridge
Co-Chair: Stan, Guy-Bart Vincent	Imperial Coll. London
13:40-14:00	FrB3.1
<i>Network Reconstruction Using Knock-Out and Over-Expression Data</i> , pp. 3627-3632.	
Hayden, David P.	Univ. of Cambridge
Yuan, Ye	Univ. of Cambridge
Goncalves, Jorge M.	Univ. of Cambridge
14:00-14:20	FrB3.2
<i>Control of Protein Concentrations in Heterogeneous Cell Populations</i> , pp. 3633-3639.	
Vignoni, Alejandro	Univ. Pol. de Valencia
Oyarzún, Diego A.	Imperial Coll. London
Picó, Jesús	Univ. Pol. de Valencia
Stan, Guy-Bart Vincent	Imperial Coll. London
14:20-14:40	FrB3.3
<i>Multistability Equivalence between Gene Regulatory Networks of Different Dimensionality</i> , pp. 3640-3645.	
Schittler, Daniella	Univ. of Stuttgart
Allgower, Frank	Univ. of Stuttgart
Waldherr, Steffen	Univ. Stuttgart
14:40-15:00	FrB3.4
<i>Stochastic Simulation of Enzymatic Reactions under Transcriptional Feedback Regulation</i> , pp. 3646-3651.	
Lugagne, Jean-Baptiste	INRIA Paris-Rocquencourt, 78153 Le Chesnay
Oyarzún, Diego A.	Imperial Coll. London
Stan, Guy-Bart Vincent	Imperial Coll. London
15:00-15:20	FrB3.5
<i>Identification of Biological Models from Single-Cell Data: A Comparison between Mixed-Effects and Moment-Based Inference</i> , pp. 3652-3657.	
Gonzalez Vargas, Andres Mauricio	Univ. degli studi di Pavia
Uhlendorf, Jannis	INRIA, Paris-Rocquencourt, France
Schaul, Joé	INRIA, Paris-Rocquencourt, France
Cinquemani, Eugenio	INRIA Grenoble - Rhone-Alpes
Batt, Gregory	INRIA Paris Rocquencourt
Ferrari Trecate, Giancarlo	Univ. degli Studi di Pavia

15:20-15:40	FrB3.6
<i>State Estimation for Gene Networks with Intrinsic and Extrinsic Noise: A Case Study on E.coli Arabinose Uptake Dynamics</i> , pp. 3658-3663.	
Carta, Alfonso	Inria Sophia Antipolis - Méditerranée
Cinquemani, Eugenio	INRIA Grenoble - Rhone-Alpes

FrB4	HG F7
Computation and Control (Regular Session)	

Chair: Varga, Andreas	German Aerospace Center
Co-Chair: Svaricek, Ferdinand	Univ. of the German Armed Forces, Munich

13:40-14:00	FrB4.1
<i>On Computing Inner-Outer Factorizations of Periodic Systems</i> , pp. 3664-3669.	
Varga, Andreas	German Aerospace Center

14:00-14:20	FrB4.2
<i>Computing the Distance to Instability for Large-Scale Nonlinear Eigenvalue Problems</i> , pp. 3670-3675.	
Michiels, Wim	K.U. Leuven
Guglielmi, Nicola	Univ. of L'Aquila

14:20-14:40	FrB4.3
<i>A Comparison of Methods for Higher-Order Numerical Differentiation</i> , pp. 3676-3681.	
Listmann, Kim Daniel	ABB AG
Zhao, Zheng H.	ABB AG

14:40-15:00	FrB4.4
<i>Fast Jacobi-Type Algorithm for Computing Distances between Linear Dynamical Systems</i> , pp. 3682-3687.	
Jimenez, Nicolas	Center for Imaging Science, Johns Hopkins Univ.
Vidal, Rene	Johns Hopkins Univ.
Afsari, Bijan	Johns Hopkins Univ.

15:00-15:20	FrB4.5
<i>Computing the L-Infinity[0, H)-Induced Norm of a Compression Operator</i> , pp. 3688-3693.	
Kim, Jung Hoon	Kyoto Univ.
Hagiwara, Tomomichi	Kyoto Univ.

15:20-15:40	FrB4.6
<i>Fractional Order PID Controller (FOPID)-Toolbox</i> , pp. 3694-3699.	
Lachhab, Nabil	Federal Armed Forces Univ. Munich, Germany
Svaricek, Ferdinand	Univ. of the German Armed Forces, Munich
Wobbe, Frank	IAV GmbH
Rabba, Heiko	IAV GmbH

FrB5	HG E1.1
Switched Systems II (Regular Session)	

Chair: Di Bernardo, Mario	Univ. of Naples Federico II
Co-Chair: Bolzern, Paolo	Pol. di Milano

13:40-14:00	FrB5.1
<i>Hybrid Controllers for Mode-Observability of Switching Linear Systems: Existence and Genericity</i> , pp. 3700-3705.	
Baglietto, Marco	Univ. of Genova
Battistelli, Giorgio	Univ. of Firenze
Tesi, Pietro	Univ. of Genoa

14:00-14:20	FrB5.2
<i>Incremental Stability of Planar Filippov Systems</i> , pp. 3706-3711.	
Di Bernardo, Mario	Univ. of Naples Federico II
Liuzza, Davide	Univ. of Naples Federico II

14:20-14:40	FrB5.3
<i>Adaptive Control for State Dependent Switched Systems in Brunovsky Form</i> , pp. 3712-3717.	

Angulo García, Fabiola	Univ. Nacional de Colombia
Di Bernardo, Mario	Univ. of Naples Federico II
Montanaro, Umberto	Italian National Res. Council
Rincon, Alejandro	Univ. Católica de Manizales
Santini, Stefania	Univ. di Napoli Federico II
14:40-15:00	FrB5.4
<i>A Reduced Model of Three Ways Catalyst Converter and Stored Oxygen Rate Estimation Using Switched Observer</i> , pp. 3718-3723.	
Ngo, Caroline	INP Grenoble
Koenig, Damien	Grenoble - Inp
Sename, Olivier	INPG
Bechart, Hubert	RENAULT
15:00-15:20	FrB5.5
<i>Mean Square Stability of Non-Homogeneous Markov Jump Linear Systems Using Interval Analysis</i> , pp. 3724-3729.	
Chitraganti, Shaikshavali	Univ. de Lorraine
Aberkane, Samir	UHP, NANCY 1
Aubrun, Christophe	Univ. Henri Poincaré
15:20-15:40	FrB5.6
<i>On the Interplay between Periodic Switches and Uncontrolled Jumps in Linear Discrete-Time Systems</i> , pp. 3730-3735.	
Bolzern, Paolo	Pol. di Milano
Colaneri, Patrizio	Pol. di Milano
FrB6	HG E1.2
Sliding Mode Control II (Regular Session)	
Chair: Bandyopadhyay, Bijnan	IIT Bombay
Co-Chair: Fischer, Claudia	ETH Zurich
13:40-14:00	FrB6.1
<i>Discrete-Time Sliding Mode Control of GMAW Systems Using Infrequent Output Measurements</i> , pp. 3736-3741.	
Bera, Manas Kumar	Indian Inst. of Tech. Bombay
Priya, P.S Lal	Indian Inst. of Tech. Bombay
Bandyopadhyay, Bijnan	IIT Bombay
Paul, A.K	Welding Industry, Mumbai
14:00-14:20	FrB6.2
<i>Closed Loop NOx Control by Discrete Time Sliding Mode</i> , pp. 3742-3747.	
Rafetzeder, Christoph	Johannes Kepler Univ. Linz
Stadlbauer, Stephan	Johannes Kepler Univ. Linz
Waschl, Harald	Johannes Kepler Univ. Linz
Del Re, Luigi	Johannes Kepler Univ. Linz
14:20-14:40	FrB6.3
<i>Terminal Sliding Mode Impedance Control for Bilateral Teleoperation under Unknown Constant Time Delay and Uncertainties</i> , pp. 3748-3753.	
Vafaei, Alaleh	Univ. of Tehran
Yazdanpanah, M. J.	Tehran Univ.
14:40-15:00	FrB6.4
<i>Performance Analysis of Relay Feedback Position Regulators for Manipulators with Coulomb Friction</i> , pp. 3754-3759.	
Aguilar, Luis T.	Inst. Pol. Nacional
Freidovich, Leonid	Umeå Univ.
Orlov, Yury	CICESE
Mérida, Jován O.	Inst. Pol. Nacional
15:00-15:20	FrB6.5
<i>Integral Higher Order Sliding Mode in Singular Optimal Stabilization</i> , pp. 3760-3763.	
Fridman, Leonid M.	National Autonomous Univ. of Mexico
Jimenez-Lizarraga, Manuel	Univ. Autonoma de Nuevo Leon
Ibarra, Efrain	UANL

15:20-15:40 FrB6.6

Time Convergence Estimation of a Perturbed Double Integrator: Family of Continuous Sliding Mode Based Output Feedback Synthesis, pp. 3764-3769.

Raul Santiesteban, Raulcos

Inst. Tecnológico de Culiacán

FrB7 HG E3

Autonomous Maintenance of Model Based Control Systems (Invited Session)

Chair: Van den Hof, Paul M.J.

Eindhoven Univ. of Tech.

Co-Chair: Ozkan, Leyla

Eindhoven Univ. of Tech.

Organizer: Ozkan, Leyla

Eindhoven Univ. of Tech.

Organizer: Van den Hof, Paul M.J.

Eindhoven Univ. of Tech.

13:40-14:00 FrB7.1

Performance Monitoring for Model Predictive Control Maintenance (I), pp. 3770-3775.

Modén, Per Erik

ABB

Lundh, Michael

ABB

14:00-14:20 FrB7.2

Perspectives of Data-Driven LPV Modeling of High-Purity Distillation Columns (I), pp. 3776-3783.

Bachnas, Ahmad Alrianes

Eindhoven Univ. of Tech.

Tóth, Roland

Eindhoven Univ. of Tech.

Mesbah, Ali

Massachusetts Inst. of Tech.

Ludlage, Jobert

Delft Univ. of Tech.

14:20-14:40 FrB7.3

Asymptotic Behaviour of Toeplitz Matrix in Multi-Input Multi-Output Model Predictive Control (I), pp. 3784-3789.

Tran, Quang N.

Eindhoven Univ. of Tech.

Ozkan, Leyla

Eindhoven Univ. of Tech.

Ludlage, Jobert

Delft Univ. of Tech.

Backx, Ton

Eindhoven Univ. of Tech.

14:40-15:00 FrB7.4

Model Predictive Control with Integrated Experiment Design for Output Error Systems (I), pp. 3790-3795.

Larsson, Christian A.

KTH Royal Inst. of Tech.

Annergren, Mariette

KTH Royal Inst. of Tech.

Hjalmarsson, Håkan

Royal Inst. of Tech.

Rojas, Cristian R.

KTH - Royal Inst. of Tech.

Bombois, Xavier

Delft Univ. of Tech.

Mesbah, Ali

Massachusetts Inst. of Tech.

Modén, Per Erik

ABB

15:00-15:20 FrB7.5

Fault-Tolerant Servo Systems against Sensor Failures Using Limited Integrators, pp. 3796-3802.

Suyama, Koichi

Tokyo Univ. of Marine Science and Tech.

Sebe, Noboru

Kyushu Inst. of Tech.

15:20-15:40 FrB7.6

Applicative Fault Tolerant Control for Semi-Active Suspension System : Preliminary Results, pp. 3803-3808.

Varrier, Sébastien

Gipsa-Lab.

Vivas-Lopez, Carlos

Tecnologico de Monterrey, Campus Monterrey

Lozoya-Santos, Jorge de-J

Tecnologico de Monterrey, Campus Monterrey

Koenig, Damien

Grenoble - Inp

Martinez, John-Jairo

Gipsa-Lab. INP-Grenoble

Morales-Menendez, Ruben

Tecnológico de Monterrey, Campus Monterrey

Tudon-Martinez, Juan Carlos

Tecnológico de Monterrey

FrB8 HG E5

Synchronization in Networks (Regular Session)

Chair: Lunze, Jan

Ruhr-Univ. Bochum

Co-Chair: Cao, Ming	Univ. of Groningen
13:40-14:00	FrB8.1
<i>Graph Comparison and Its Application in Network Synchronization</i> , pp. 3809-3814.	
Liu, Hui	Univ. of Groningen
Cao, Ming	Univ. of Groningen
Wu, Chai Wah	IBM T. J. Watson Res. Center
14:00-14:20	FrB8.2
<i>Optimal Synchronization of Circulant Networked Multi-Agent Systems</i> , pp. 3815-3820.	
Mosebach, Andrej	Ruhr-Univ. Bochum
Lunze, Jan	Ruhr-Univ. Bochum
14:20-14:40	FrB8.3
<i>Robustness of Synchronization in Heterogeneous Multi-Agent Systems</i> , pp. 3821-3826.	
Kim, Jaeyong	Seoul National Univ.
Yang, Jongwook	Seoul National Univ.
Shim, Hyungbo	Seoul National Univ.
Kim, Jung-Su	Seoul National Univ. of Science and Tech.
14:40-15:00	FrB8.4
<i>Regulated Output Synchronization for Heterogeneous Networks of Non-Introspective, Minimum-Phase SISO Agents without Exchange of Controller States</i> , pp. 3827-3832.	
Grip, Håvard Fjær	NTNU
Saberi, Ali	Washington State Univ.
Stoorvogel, Anton A.	Univ. of Twente
15:00-15:20	FrB8.5
<i>Attitude Synchronization of Spacecraft Formation with Adaptation of Consensus Penalty Terms</i> , pp. 3833-3838.	
Zhang, Kewen	Worcester Pol. Inst.
Demetriou, Michael A.	Worcester Pol. Inst.
15:20-15:40	FrB8.6
<i>Synchronization of Dynamical Networks under Sampling</i> , pp. 3839-3844.	
Giraldo, Jairo	Univ. de los Andes
Mojica-Nava, Eduardo	National Univ. of Colombia
Quijano, Nicanor	Univ. de Los Andes
FrB9	HG E7
Nonlinear Control of UAVs (Regular Session)	
Chair: Lozano, Rogelio	Univ. de Tech. de Compiegne
Co-Chair: Nikolakopoulos, George	Luleå Univ. of Tech. Sweden
13:40-14:00	FrB9.1
<i>Geometric Nonlinear PID Control of a Quadrotor UAV on SE(3)</i> , pp. 3845-3850.	
Abootorabi Goodarzi, Farhad	The George Washington Univ.
Lee, Daewon	The George Washington Univ.
Lee, Taeyoung	George Washington Univ.
14:00-14:20	FrB9.2
<i>Fast and Saturating Attitude Control for a Quadrotor Helicopter</i> , pp. 3851-3857.	
Fritsch, Oliver	Tech. Univ. München
Henze, Bernd	Tech. Univ. München
Lohmann, Boris	Tech. Univ. Muenchen
14:20-14:40	FrB9.3
<i>Quadrotors Flight Formation Control Using a Leader-Follower Approach</i> , pp. 3858-3863.	
Mercado Ravell, Diego Alberto	Univ. de Tech. Compiegne
Castro-Linares, Rafael	CINVESTAV-IPN
Lozano, Rogelio	Univ. de Tech. de Compiegne
14:40-15:00	FrB9.4
<i>Full Quaternion Based Attitude Control for a Quadrotor</i> , pp. 3864-3869.	

Fresk, Emil Nikolakopoulos, George	Luleå Univ. of Tech. Luleå Univ. of Tech. Sweden
15:00-15:20	FrB9.5
<i>Nonlinear Control of the Longitudinal Dynamics and the Rotor Dynamics of a Small Scale Helicopter</i> , pp. 3870-3875.	
Benítez-Morales, José Gerardo Rodríguez-Cortes, Hugo Castro-Linares, Rafael	Centro de Investigación y Estudios Avanzados Northeastern Univ. CINVESTAV-IPN
15:20-15:40	FrB9.6
<i>Time-Parametrization Control of Quadrotors with a Robust Quaternion-Based Sliding Mode Controller for Aggressive Maneuvering</i> , pp. 3876-3881.	
Sanchez, Anand Parra Vega, Vicente Garcia Salazar, Octavio Ruiz Sanchez, Francisco Jose Ramos Velasco, Luis Enrique	CINVESTAV Centro de Investigación y de Estudios Avanzados del IPN(Unidad S Aerospace Engineering Res. and Innovation Center (CIIIA) - U CINVESTAV Saltillo Univ. Pol. de Pachuca
FrB10	HG D1.1
Linear Matrix Inequalities (Regular Session)	
Chair: Scherer, Carsten W. Co-Chair: Szabo, Zoltan	Univ. of Stuttgart MTA SZTAKI
13:40-14:00	FrB10.1
<i>Iterated Approximate Value Functions</i> , pp. 3882-3888.	
O'Donoghue, Brendan Wang, Yang Boyd, Stephen P.	Stanford Univ. Stanford Univ. Stanford Univ.
14:00-14:20	FrB10.2
<i>Homogeneous Polynomially Parameter-Dependent State Feedback Controllers for Finite Time Stabilization of Linear Time-Varying Systems</i> , pp. 3889-3894.	
Borges, Renato Alves Ishihara, João Yoshiyuki Kussaba, Hugo Tadashi Silva, Larissa de Paiva	Univ. of Brasilia Univ. of Brasilia Univ. of Brasilia Univ. of Brasilia
14:20-14:40	FrB10.3
<i>LMI & BMI Technics for the Design of a PI Control for Irrigation Channels</i> , pp. 3895-3900.	
Rodrigues, Mickael Wu, Yongxin Aberkane, Samir Dos Santos Martins, Valérie Sylvie	Univ. CLAUDE BERNARD LYON 1 Univ. Claude Bernard Lyon 1 UHP, NANCY 1 Univ. Claude Bernard Lyon 1
14:40-15:00	FrB10.4
<i>Gain-Scheduled Synthesis with Dynamic Stable Strictly Positive Real Multipliers: A Complete Solution</i> , pp. 3901-3906.	
Scherer, Carsten W.	Univ. of Stuttgart
15:00-15:20	FrB10.5
<i>Multivariate S-Procedure</i> , pp. 3907-3912.	
Szabo, Zoltan Biro, Zsolt Bokor, Jozsef	MTA SZTAKI MTA SZTAKI Hungarian Acad. of Sciences
15:20-15:40	FrB10.6
<i>Generalizing the KYP Lemma to the Union of Intervals</i> , pp. 3913-3918.	
Pipeleers, Goele Iwasaki, Tetsuya Hara, Shinji	KU Leuven UCLA The Univ. of Tokyo
FrB11	HG D1.2

Process Control (Regular Session)

Chair: Vilanova, Ramon UAB
 Co-Chair: Hahn, Juergen Rensselaer Pol. Inst.

13:40-14:00 FrB11.1

Automatic Feedforward Tuning for PID Control Loops, pp. 3919-3924.

Veronesi, Massimiliano Yokogawa Italy
 Visioli, Antonio Univ. of Brescia

14:00-14:20 FrB11.2

Paradigms for Unified Runtime Systems in Industrial Automation, pp. 3925-3930.

Gruener, Sten RWTH Aachen Univ.
 Epple, Ulrich RWTH Aachen Univ.

14:20-14:40 FrB11.3

Model Reference Based Robust Tuning of Five-Parameter 2DoF PID Controllers for First-Order Plus Dead-Time Models, pp. 3931-3936.

Alfaro, Victor M. Univ. of Costa Rica
 Vilanova, Ramon UAB

14:40-15:00 FrB11.4

A Tdof Pid Control System Design by Referring to the Md-Pid Control System and Its Sensitivities, pp. 3937-3942.

Shigemasa, Takashi TOSHIBA MITSUBISHI-ELECTRIC INDUSTRIAL SYSTEMS Corp.
 Negishi, Yasunori TOSHIBA MITSUBISHI-ELECTRIC INDUSTRIAL SYSTEMS Corp.
 Baba, Yasushi Toshiba IT & Control Systems Corp.

15:00-15:20 FrB11.5

Computing Optimal Operating Condition Profiles for Fed-Batch Fermentation of Fuel-Grade Ethanol, pp. 3943-3948.

Dai, Wei Rensselaer Pol. Inst.
 Hahn, Juergen Rensselaer Pol. Inst.

15:20-15:40 FrB11.6

ANOVA Model Based Moving Window Approach for RtR Control in High-Mix Semiconductor Manufacturing Industry, pp. 3949-3954.

Ling, Dan Huazhong Univ. of Science and Tech.
 Zheng, Ying Huazhong Univ. of Science and Tech.
 Fang, Huajing Huazhong Univ. of Science and Tech.
 Fan, Huijin Huazhong Univ. of Sci. & Tech.
 Zhao, Jin Huazhong Univ. of Science and Tech.

FrB12 HG D3.2**System Modeling (Regular Session)**

Chair: Abel, Dirk RWTH Aachen Univ.
 Co-Chair: Privara, Samuel CzechTechnicalUniversityinPrague, FacultyofElectricalEngineering

13:40-14:00 FrB12.1

Building Semi-Physical Modeling: On Selection of the Model Complexity, pp. 3955-3960.

Vana, Zdenek Department of Control Engineering, FacultyofElectricalEngineering
 Privara, Samuel CzechTechnicalUniversityinPrague, FacultyofElectricalEngineering
 Zacekova, Eva Department of Control Engineering, FacultyofElectricalEngineering
 Cigler, Jiri Czech Tech. Univ. in Prague, Faculty ofElectricalEngine

14:00-14:20 FrB12.2

Greybox Modeling of the Diesel Combustion by Use of the Scalar Dissipation Rate, pp. 3961-3966.

Zweigle, Rene Inst. of automatic control, RWTH Aachen Univ.
 Albin, Thivaharan RWTH Aachen Univ.
 Hesseler, Frank-Joseph Inst. of automatic control, RWTH Aachen Univ.
 Abel, Dirk RWTH Aachen Univ.

14:20-14:40 FrB12.3

A High-Fidelity Simulation Model for an Asymmetric Nonlinear Electrothermal Actuator, pp. 3967-3972.

Muffato, Leonardo Angelo SAUTER AG

Kunz, Dominique-Stephan	SAUTER AG
14:40-15:00	FrB12.4
<i>Identifying Second-Order Models of Mechanical Structures in Physical Coordinates: An Orthogonal Complement Approach</i> , pp. 3973-3978.	
Ramos, Jose A.	Nova Southeastern Univ.
Mercère, Guillaume	Poitiers Univ.
Prot, Olivier	Univ. de Limoges
15:00-15:20	FrB12.5
<i>Modeling and Online-Identification of Electrically Stimulated Antagonistic Muscles for Horizontal Shoulder Abduction and Adduction</i> , pp. 3979-3984.	
Spagnol, Pierfrancesco	Pol. di Milano
Klauer, Christian	Tech. Univ. Berlin
Previdi, Fabio	Univ. degli Studi di Bergamo
Raisch, Joerg	Tech. Univ. Berlin
Schauer, Thomas	Tech. Univ. Berlin
FrB13	HG D5.2
Fractional Dynamical Systems and Signals - Part 2 – Fractional Differentiation in Automatic Control (Invited Session)	
Chair: Sabatier, Jocelyn	LAPS - Bordeaux 1 Univ.
Co-Chair: Mohajerin Esfahani, Peyman	Swiss Federal Inst. of Tech.
Organizer: Sabatier, Jocelyn	LAPS - Bordeaux 1 Univ.
Organizer: Farges, Christophe	IMS-LAPS
13:40-14:00	FrB13.1
<i>Free Time Fractional Optimal Control Problems (I)</i> , pp. 3985-3990.	
Pooseh, Shakoor	Univ. of Aveiro
Almeida, Ricardo	Univ. of Aveiro
Torres, Delfim F. M.	Univ. of Aveiro
14:00-14:20	FrB13.2
<i>A Comparison of Fractional Smith Predictors (I)</i> , pp. 3991-3996.	
Maamri, Nezha	Ec. Nationale Supérieure d'Ingénieurs de Poitiers
Tenoutit, Mammar	Univ. of Poitiers.
Trigeassou, Jean-claude	Univ. of Poitiers
14:20-14:40	FrB13.3
<i>Fractional Order Control of the Injection System in a CNG Engine (I)</i> , pp. 3997-4002.	
Lino, Paolo	Tech. Univ. of Bari
Maione, Guido	Pol. di Bari
14:40-15:00	FrB13.4
<i>Inversion-Based Feedforward Design for Constrained Fractional Control Systems (I)</i> , pp. 4003-4008.	
Visioli, Antonio	Univ. of Brescia
Padula, Fabrizio	Univ. of Brescia
15:00-15:20	FrB13.5
<i>Computer Algorithms for Solving Optimization Problems for Discrete-Time Fractional Systems (I)</i> , pp. 4009-4014.	
Czyronis, Przemysław, Marcin	Warsaw Univ. of Tech.
Dzielinski, Andrzej	Warsaw Univ. of Tech.
15:20-15:40	FrB13.6
<i>Fractional Order PD Control of a Visual Servoing Manipulator System (I)</i> , pp. 4015-4020.	
Copot, Cosmin	Ghent Univ.
Ionescu, Clara	Ghent Univ.
Lazar, Corneliu	"Gh. Asachi" Tech. Univ. of Iasi
De Keyser, Robin M.C.	Univ. of Gent

FrB14	HG D7.1
Prediction and Control of Freeway Traffic (Invited Session)	

Chair: Canudas de Wit, Carlos	CNRS-LAG-Grenoble
Co-Chair: Bianchi, Domenico	Univ. of L'Aquila
Organizer: Pisarski, Dominik	Inria Rhone-Alpes
Organizer: Ferrara, Antonella	Univ. of Pavia
Organizer: Sacone, Simona	Univ. of Genova
13:40-14:00	FrB14.1
<i>Optimal Balancing of Freeway Traffic Density: Application to the Grenoble South Ring (I)</i> , pp. 4021-4026.	
Pisarski, Dominik	Inria Rhone-Alpes
Canudas de Wit, Carlos	CNRS-LAG-Grenoble
14:00-14:20	FrB14.2
<i>Case-Study Based Performance Assessment of an Event-Triggered MPC Scheme for Freeway Systems (I)</i> , pp. 4027-4032.	
Ferrara, Antonella	Univ. of Pavia
Nai Oleari, Alberto	Univ. of Pavia
Sacone, Simona	Univ. of Genova
Siri, Silvia	Univ. of Genova
14:20-14:40	FrB14.3
<i>Model Predictive Control for Freeway Traffic Using Discrete Speed Limit Signals (I)</i> , pp. 4033-4038.	
D. Frejo, José Ramón	Univ. de Sevilla
Nuñez, Alfredo	Delft Univ. of Tech.
De Schutter, Bart	Delft Univ. of Tech.
Camacho, Eduardo F.	Univ. of Sevilla
14:40-15:00	FrB14.4
<i>Networked Model Predictive Traffic Control with Time Varying Optimization Horizon: The Grenoble South Ring Case Study (I)</i> , pp. 4039-4044.	
Bianchi, Domenico	Univ. of L'Aquila
Ferrara, Antonella	Univ. of Pavia
Di Benedetto, M. Domenica	Univ. of L'Aquila
15:00-15:20	FrB14.5
<i>Online Dynamic Travel Time Prediction Using Speed and Flow Measurements (I)</i> , pp. 4045-4050.	
Leon ojeda, Luis Ramon	INRIA, Grenoble. Univ. de Grenoble
Kibangou, Alain Yuwa	GIPSA-Lab. Joseph Fourier/CNRS
Canudas de Wit, Carlos	CNRS-LAG-Grenoble

FrB15	HG D7.2
Optimization for Energy Systems (Regular Session)	
Chair: Sandberg, Henrik	Royal Inst. of Tech. (KTH)
Co-Chair: Borrelli, Francesco	Univ. of California, Berkeley
13:40-14:00	FrB15.1
<i>Energy and CO2 Efficient Scheduling of Smart Home Appliances</i> , pp. 4051-4058.	
Sou, Kin Cheong	Chalmers Univ. of Tech.
Kordel, Mikael	KTH Royal Inst. of Tech.
Wu, Jonas	KTH Royal Inst. of Tech.
Sandberg, Henrik	Royal Inst. of Tech. (KTH)
Johansson, Karl Henrik	Royal Inst. of Tech.
14:00-14:20	FrB15.2
<i>Load Sharing Optimization of Parallel Compressors</i> , pp. 4059-4064.	
Paparella, Francesco	Pol. di Milano
Domínguez, Luis F.	ABB Schweiz
Cortinovia, Andrea	ABB Corp. Res.
Mercangöz, Mehmet	ABB Corp. Res.
Pareschi, Diego	ABB
Bittanti, Sergio	Pol. di Milano
14:20-14:40	FrB15.3
<i>Performance Evaluation of Battery Balancing Hardware</i> , pp. 4065-4070.	

Preindl, Matthias	Univ. of Padua
Danielson, Claus	Univ. of California, Berkeley
Borrelli, Francesco	Univ. of California, Berkeley
14:40-15:00	FrB15.4
<i>MPC for Wind Power Gradients - Utilizing Forecasts, Rotor Inertia, and Central Energy Storage</i> , pp. 4071-4076.	
Hovgaard, Tobias Gybel	Vestas Tech. R&D
Larsen, Lars Finn Sloth	Vestas A/S
Jørgensen, John Bagterp	Tech. Univ. of Denmark
Boyd, Stephen P.	Stanford Univ.
15:00-15:20	FrB15.5
<i>Dynamic Optimization of a Campus Cooling System with Thermal Storage</i> , pp. 4077-4082.	
Powell, Kody	Univ. of Texas at Austin
Cole, Wesley	Univ. of Texas at Austin
Ekarika, Udememfon	Univ. of Texas at Austin
Edgar, Thomas F.	Univ. of Texas at Austin
FrC1	HG F1
Emerging Control Applications II (Regular Session)	
Chair: Kugi, Andreas	Vienna Univ. of Tech. (VUT)
Co-Chair: Haidar, Ihab	L2S, Supelec-CNRS-Univ. Paris Sud
16:00-16:20	FrC1.1
<i>Basal Ganglia Oscillations: The Role of Delays and External Excitatory Nuclei</i> , pp. 4083-4088.	
Haidar, Ihab	L2S, Supelec-CNRS-Univ. Paris Sud
Pasillas Lepine, William	CNRS
Panteley, Elena V.	CNRS
Chaillet, Antoine	Univ. Paris Sud
16:20-16:40	FrC1.2
<i>Control of Temperature to Suppress the Population of Rhyzopertha Dominica (F.) (Coleoptera, Bostrichidae) in a Grain Silo Prototype</i> , pp. 4089-4093.	
W. F. De Souza, Denis	PID BRASIL Automacao Industrial Ltda
Vargas, Alessandro N	Univ. Tec Federal do Parana, UTFPR
Do Val, Joao B.R.	UNICAMP - FEEC
M. Freitas, Adriana	Embrapa Soja
Lorini, Irineu	Embrapa Soja
16:40-17:00	FrC1.3
<i>Subsea Solution for Anti-Slug Control of Multiphase Risers</i> , pp. 4094-4099.	
Jahanshahi, Esmail	Norwegian Univ. of Science & Tech.
Skogestad, Sigurd	Norwegian Univ. of Science & Tech.
Lieungh, Mats	Siemens Energy
17:00-17:20	FrC1.4
<i>Radar Resource Management: Dynamic Programming and Dynamic Finite State Machines</i> , pp. 4100-4105.	
Seok, Jinwoo	Univ. of Michigan
Zhao, Jinxin	Univ. of Michigan
Selvakumar, Jhanani	Univ. of Michigan
Sanjaya, Edwin	Univ. of Michigan
Kabamba, Pierre T.	Univ. of Michigan
Girard, Anouck	Univ. of Michigan at Ann Arbor
17:20-17:40	FrC1.5
<i>Control of Radiant Tubes in an Indirect-Fired Strip Annealing Furnace for Improved Efficiency</i> , pp. 4106-4111.	
Niederer, Martin	Vienna Univ. of Tech.
Steinboeck, Andreas	Vienna Univ. of Tech.
Strommer, Stephan	Vienna Univ. of Tech.
Kugi, Andreas	Vienna Univ. of Tech. (VUT)
17:40-18:00	FrC1.6

On the Use of the Inclinometers in the PnP Problem, pp. 4112-4117.

D'Alfonso, Luigi
Garone, Emanuele
Muraca, Pietro
Pugliese, Paolo

Univ. della Calabria
Univ. degli Studi della Calabria
Univ. della Calabria
Univ. della Calabria

FrC2 HG F3
Embedded Optimization for Control and Estimation III – Applications (Invited Session)

Chair: Zeilinger, Melanie N. Ec. Pol. Fédéral de Lausanne (EPFL)
Co-Chair: Lucia, Sergio TU Dortmund
Organizer: Zeilinger, Melanie N. UC Berkeley

16:00-16:20 FrC2.1

Mixed-Integer NMPC for Predictive Cruise Control of Heavy-Duty Trucks (I), pp. 4118-4123.

Kirches, Christian Heidelberg Univ.
Bock, Hans Georg Univ. of Heidelberg
Schlöder, Johannes Ruprecht-Karls-Univ. Heidelberg
Sager, Sebastian OVGU Magdeburg

16:20-16:40 FrC2.2

Robust Nonlinear Model Predictive Control of a Batch Bioreactor Using Multi-Stage Stochastic Programming (I), pp. 4124-4129.

Lucia, Sergio TU Dortmund
Engell, Sebastian TU Dortmund

16:40-17:00 FrC2.3

Nonlinear Moving Horizon Estimation for Combined State and Friction Coefficient Estimation in Autonomous Driving (I), pp. 4130-4135.

Zanon, Mario KU Leuven
Frasch, Janick Univ. of Heidelberg, Germany
Diehl, Moritz KU Leuven

17:00-17:20 FrC2.4

An Auto-Generated Nonlinear MPC Algorithm for Real-Time Obstacle Avoidance of Ground Vehicles (I), pp. 4136-4141.

Frasch, Janick Univ. of Heidelberg, Germany
Gray, Andrew Univ. of California, Berkeley
Zanon, Mario KU Leuven
Ferreau, Hans Joachim ABB Schweiz AG
Sager, Sebastian OVGU Magdeburg
Borrelli, Francesco Univ. of California, Berkeley
Diehl, Moritz KU Leuven

17:20-17:40 FrC2.5

Moving Horizon for Friction State and Parameter Estimation (I), pp. 4142-4147.

Boegli, Max KU Leuven
De Laet, Tinne KU Leuven
De Schutter, Joris KU Leuven
Swevers, Jan KU Leuven

17:40-18:00 FrC2.6

Moving Horizon Observation for Autonomous Operation of Agricultural Vehicles (I), pp. 4148-4153.

Frasch, Janick Univ. of Heidelberg, Germany
Saeyns, Wouter KU Leuven
Diehl, Moritz KU Leuven
Kraus, Tom KU Leuven

FrC3 HG F5
Biological Systems (Regular Session)

Chair: Khammash, Mustafa H. Univ. of California at Sta. Barbara
Co-Chair: Bernard, Olivier Inria

16:00-16:20	FrC3.1
<i>Efficient Parameter Identification for Stochastic Biochemical Networks Using a Reduced-Order Realization</i> , pp. 4154-4159.	
Hori, Yutaka	The Univ. of Tokyo
Khammash, Mustafa H.	Univ. of California at Sta. Barbara
Hara, Shinji	The Univ. of Tokyo
16:20-16:40	FrC3.2
<i>A Mathematical Model of Fractone-Controlled Morphogenesis</i> , pp. 4160-4165.	
Chyba, Monique	Univ. of Hawai'i at Manoa
Mercier, Frederic	Univ. of Hawaii
Tamura-sato, Aaron	Univ. of Hawai'i at Manoa
Zou, Rong	Kyushu Univ.
16:40-17:00	FrC3.3
<i>Single Event Molecular Signalling for Estimation and Control</i> , pp. 4166-4171.	
Parag, Kris	Univ. of Cambridge
Vinnicombe, Glenn	Univ. of Cambridge
17:00-17:20	FrC3.4
<i>Approximate Model Reductions for Combinatorial Reaction Systems</i> , pp. 4172-4177.	
Petrov, Tatjana	ETHZ
Koepl, Heinz	ETH Zurich
17:20-17:40	FrC3.5
<i>A Dynamic Model Coupling Photoacclimation and Photoinhibition in Microalgae</i> , pp. 4178-4183.	
Hartmann, Philipp	INRIA
Nikolaou, Andreas	Imperial Coll. London
Chachuat, Benoît	Imperial Coll. London
Bernard, Olivier	Inria
17:40-18:00	FrC3.6
<i>Driving Microalgal Production in Raceway Systems to Near Optimal Productivities</i> , pp. 4184-4189.	
Muñoz-Tamayo, Rafael	INRIA
Mairet, Francis	Univ. Técnica Federico Santa María
Bernard, Olivier	Inria
FrC4	HG F7
Applications of State Estimation (Regular Session)	
Chair: Cenedese, Angelo	Univ. of Padova
Co-Chair: Lemos, Joao M.	Inesc-id
16:00-16:20	FrC4.1
<i>Robust Nonlinear Estimation of Varying Optical Phase</i> , pp. 4190-4195.	
Rehman, Obaid Ur	UNSW at ADFA
Petersen, Ian R.	Australian Defence Force Acad.
Song, Hongbin	The Univ. of New South Wales Canberra
Huntington, Elanor H.	Univ. of New South Wales, Canberra
16:20-16:40	FrC4.2
<i>On the Estimation of Atmospheric Turbulence Layers for AO Systems</i> , pp. 4196-4201.	
Beghi, Alessandro	Univ. di Padova
Cenedese, Angelo	Univ. of Padova
Masiero, Andrea	Univ. di Padova
16:40-17:00	FrC4.3
<i>Multiple-Model Adaptive State Estimation of the HIV-1 Infection Using a Moving Horizon Approach</i> , pp. 4202-4207.	
Casal, Filipe R.	ISR-IST
Aguiar, A. Pedro	Faculty of Engineering, Univ. of Porto (FEUP)
Lemos, Joao M.	Inesc-id
17:00-17:20	FrC4.4
<i>Position Estimation Approach by Complementary Filter-Aided IMU for Indoor Environment</i> , pp. 4208-4213.	

Fourati, Hassen	Univ. Joseph Fourier, GIPSA-Lab.
Manamanni, Nouredine	Univ. of Reims- Champagne
Afilal, Lissan-eddine	CReSTIC, Reims
Handrich, Yves	Univ. de Strasbourg, DEPE/IPHC
17:20-17:40	FrC4.5
<i>3-D Inertial Trajectory and Map Online Estimation: Building on a GAS Sensor-Based SLAM Filter</i> , pp. 4214-4219.	
Lourenço, Pedro	Inst. for Systems and Robotics / Inst. Superior Técnico
Guerreiro, Bruno J. N.	Inst. Superior Técnico
Batista, Pedro	Inst. Superior Técnico
Oliveira, Paulo Jorge	Inst. Superior Técnico
Silvestre, Carlos	Univ. of Macau
17:40-18:00	FrC4.6
<i>Robustness Analysis of Feedback Linearisation with Robust State Estimation for a Nonlinear Missile Model</i> , pp. 4220-4225.	
Norton, Peter	Univ. of Leicester
Prempain, Emmanuel	Univ. Leicester
FrC5	HG E1.1
Formal Verification and Design of Hybrid Systems (Invited Session)	
Chair: Prabhakar, Pavithra	IMDEA
Co-Chair: Liu, Jun	Univ. of Sheffield
Organizer: Prabhakar, Pavithra	IMDEA
Organizer: Liu, Jun	Univ. of Sheffield
16:00-16:20	FrC5.1
<i>An Approximate Abstraction Approach to Safety Control of Differentially Flat Systems (I)</i> , pp. 4226-4231.	
Colombo, Alessandro	Pol. di Milano
Girard, Antoine	Univ. Joseph Fourier
16:20-16:40	FrC5.2
<i>Aggregation of Thermostatically Controlled Loads by Formal Abstractions (I)</i> , pp. 4232-4237.	
Esmail Zadeh Soudjani, Sadegh	TU Delft - Delft Univ. of Tech.
Abate, Alessandro	TU Delft - Delft Univ. of Tech.
16:40-17:00	FrC5.3
<i>Modeling and Verification of a Robotic Surgical System Using Hybrid Input/Output Automata</i> , pp. 4238-4243.	
Capiluppi, Marta	Univ. of Verona
Schreiter, Luzie	Karlsruhe Inst. of Tech. (KIT)
Fiorini, Paolo	Univ. of Verona
Woern, Heinz	Karlsruhe Inst. for Tech. (KIT)
Raczkowsky, Jörg	Karlsruhe Inst. of Tech. - KIT
17:00-17:20	FrC5.4
<i>Modular Modeling of Control Systems in SpaceX (I)</i> , pp. 4244-4251.	
Donze, Alexandre	UC Berkeley, EECS Department
Frehse, Goran	Univ. Joseph Fourier Grenoble 1
17:20-17:40	FrC5.5
<i>Verification of Embedded Control Programs (I)</i> , pp. 4252-4256.	
Dang, Thao	VERIMAG
Jeannet, Bertrand	IRISA/INRIA
Testylier, Romain	VERIMAG
17:40-18:00	FrC5.6
<i>Symbolic Models for Stochastic Control Systems without Stability Assumptions (I)</i> , pp. 4257-4262.	
Zamani, Majid	Delft Univ. of Tech.
Mohajerin Esfahani, Peyman	Automatic Control Lab. Swiss Federal Inst. of Technolo
Abate, Alessandro	TU Delft - Delft Univ. of Tech.
Lygeros, John	ETH Zurich

FrC6	HG E1.2
Oscillations and Synchronization (Regular Session)	
Chair: Boiko, Igor	Petroleum Inst.
Co-Chair: Zechner, Christoph	ETH Zurich
16:00-16:20	FrC6.1
<i>Synchronization in a Heterogeneous Network of Discrete-Time Introspective Right-Invertible Agents</i> , pp. 4263-4268.	
Wang, Xu	New York Univ.
Saberi, Ali	Washington State Univ.
Yang, Tao	Royal Inst. of Tech.
16:20-16:40	FrC6.2
<i>Marginal Dynamics of Stochastic Biochemical Networks in Random Environments</i> , pp. 4269-4274.	
Zechner, Christoph	ETH Zurich
Deb, Soudeep	ETH Zurich
Koepl, Heinz	ETH Zurich
16:40-17:00	FrC6.3
<i>Synchronization Behaviors in Goodwin Oscillator Networks Driven by External Periodic Signals</i> , pp. 4275-4280.	
Nguyen, Dinh Hoa	Graduate School of Information Science and Tech. Univ.
Hara, Shinji	The Univ. of Tokyo
17:00-17:20	FrC6.4
<i>Observer-Based Approach for Fractional-Order Chaotic Synchronization and Communication</i> , pp. 4281-4286.	
N'Doye, Ibrahima	Univ. of Luxembourg
Darouach, Mohamed	CRAN CNRS UMR 7039, Nancy Univ.
Voos, Holger	Univ. of Luxembourg
17:20-17:40	FrC6.5
<i>Frequency-Domain Analysis of Self-Excited Oscillations for a Class of Multivariable Relay Systems</i> , pp. 4287-4292.	
Boiko, Igor	Petroleum Inst.
Pisano, Alessandro	Univ. di Cagliari
Usai, Elio	Univ. degli Studi di Cagliari
17:40-18:00	FrC6.6
<i>A Non-Quadratic Criterion for Stability of Forced Oscillations and Its Application to Flight Control</i> , pp. 4293-4298.	
Pogromsky, A. Yu.	Eindhoven Univ. of Tech.
Matveev, Alexey S.	St.Petersburg Univ.
Andrievsky, Boris R.	Inst. for Problems of Mechanical Engin.
Leonov, Gennady	Saint Peterburg satate Univ.
Kuznetsov, Nikolay	Saint Petersburg State Univ. Univ. of Jyvaskyla
FrC7	HG E3
Fuzzy Control (Regular Session)	
Chair: Oliveira, Vilma A.	Univ. de Sao Paulo
Co-Chair: Chadli, Mohammed	Univ. de Picardie-Jules Verne
16:00-16:20	FrC7.1
<i>Actuator Faults Reconstruction Using Reduced-Order Fuzzy Observer Structures</i> , pp. 4299-4304.	
Krokavec, Dusan	Tech. Univ. of Kosice
Filasova, Anna	Tech. Univ. of Kosice
16:20-16:40	FrC7.2
<i>Stabilizing Switched T-S Fuzzy Systems Using a Fuzzy Lyapunov Function Approach</i> , pp. 4305-4310.	
Faria, Flavio Andrade	Univ. de Sao Paulo
Valentino, Michele Cristina	Univ. de Sao Paulo
Oliveira, Vilma A.	Univ. de Sao Paulo
16:40-17:00	FrC7.3
<i>Synthesis of a Unknown Inputs Proportional Integral Observer for TS Fuzzy Models</i> , pp. 4311-4315.	
Youssef, Tewfik	M'hamed Bougara Univ. of Boumerdes (UMBB)
Chadli, Mohammed	Univ. de Picardie-Jules Verne

17:00-17:20 FrC7.4

Advanced Control Solutions to Increase Efficiency of a Furnace Combustion Process, pp. 4316-4321.

Zanoli, Silvia Maria	Univ. Pol. delle Marche
Barchiesi, David	Univ. Pol. delle Marche
Astolfi, Giacomo	Univ. Pol. marche
Barboni, Luca	api raffineria di Ancona

17:20-17:40 FrC7.5

An Extension of the Invariance Principle for Switched T-S Fuzzy Systems, pp. 4322-4327.

Valentino, Michele Cristina	Univ. de Sao Paulo
Faria, Flavio Andrade	Univ. de Sao Paulo
Oliveira, Vilma A.	Univ. de Sao Paulo

17:40-18:00 FrC7.6

Model Predictive Control of a HVAC System Based on the LoLiMoT Algorithm, pp. 4328-4333.

Schwingshackl, Daniel	Alpen-Adria-Univ. Klagenfurt
Rehr, Jakob	Alpen-Adria-Univ. Klagenfurt
Horn, Martin	Klagenfurt Univ.

FrC8 HG E5

Distributed Control of Large-Scale Systems (Regular Session)

Chair: Farina, Marcello	Pol. di Milano
Co-Chair: Stursberg, Olaf	Univ. of Kassel

16:00-16:20 FrC8.1

Building Temperature Distributed Control Via Explicit MPC and "Trim and Respond" Methods, pp. 4334-4339.

Koehler, Sarah	Univ. of California, Berkeley
Borrelli, Francesco	Univ. of California, Berkeley

16:20-16:40 FrC8.2

Optimized Distributed Control and Topology Design for Hierarchically Interconnected Systems, pp. 4340-4346.

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

16:40-17:00 FrC8.3

A Solution to the Tracking Problem Using Distributed Predictive Control, pp. 4347-4352.

Farina, Marcello	Pol. di Milano
Scattolini, Riccardo	Pol. di Milano
Betti, Giulio	Pol. di Milano

17:00-17:20 FrC8.4

Distributed Estimation and Control for Large Population Stochastic Multi-Agent Systems with Coupling in the Measurements, pp. 4353-4358.

Abedinpour Fallah, Mehdi	École Pol. de Montréal
Malhame, Roland P.	Ec. Pol. de Montreal
Martinelli, Francesco	Univ. di Roma Tor Vergata

17:20-17:40 FrC8.5

Stability Analysis of Networked Systems with Similar Dynamics, pp. 4359-4364.

Schuh, René	Ruhr-Univ. Bochum
Lunze, Jan	Ruhr-Univ. Bochum

17:40-18:00 FrC8.6

A Class of Mean-Risk Decisions for Noncooperative Games and Distributed Controls, pp. 4365-4370.

Pham, Khanh	U. S. Air Force Res. Lab.
Gubar, Elena	St. Petersburg State Univ.

FrC9 HG E7

Autonomous Robots and Vehicles (Regular Session)

Chair: Kyriakopoulos, Kostas J.	National Tech. Univ. of Athens
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Co-Chair: Conte, Christian	ETH Zurich
16:00-16:20	FrC9.1
<i>Reactive Navigation of a Mobile Robot to the Moving Extremum of a Dynamic Unknown Environmental Field without Derivative Estimation</i> , pp. 4371-4376.	
Matveev, Alexey S.	St.Petersburg Univ.
Hoy, Michael C.	Univ. of New South Wales
Savkin, Andrey V.	Univ. of New South Wales
16:20-16:40	FrC9.2
<i>Region Reaching Controller for Autonomous Underwater Vehicle without Velocity Measurement</i> , pp. 4377-4381.	
Mukherjee, Koena	IIT Delhi
Kar, Indra Narayan	Indian Inst. of Tech. Delhi
Bhatt, R. K. P.	Indian Inst. of Tech. Delhi
16:40-17:00	FrC9.3
<i>A Collision Avoidance Strategy for Safe Autonomous Navigation of an Intelligent Electric-Powered Wheelchair in Dynamic Uncertain Environments with Moving Obstacles</i> , pp. 4382-4387.	
Wang, Chao	Univ. of New South Wales
Matveev, Alexey S.	St.Petersburg Univ.
Savkin, Andrey V.	Univ. of New South Wales
Nguyen, Tuan Nghia	Univ. of Tech. Sydney, Australia
Nguyen, Hung T.	Univ. of Tech. Sydney
17:00-17:20	FrC9.4
<i>Robust Prescribed Performance Tracking Control for Unknown Underactuated Torpedo-Like AUVs</i> , pp. 4388-4393.	
Bechlioulis, Charalampos	Aristotle Univ. of Thessaloniki
Kyriakopoulos, Kostas J.	National Tech. Univ. of Athens
17:20-17:40	FrC9.5
<i>AUV Range-Only Localization and Mapping: Observer Design and Experimental Results</i> , pp. 4394-4399.	
Bayat, Behzad (Mohammadreza)	IST (Inst. Superior Tecnico)
Aguiar, A. Pedro	Faculty of Engineering, Univ. of Porto (FEUP)
17:40-18:00	FrC9.6
<i>Capturing a Target with Range Only Measurement</i> , pp. 4400-4405.	
Chaudhary, Gaurav	KPIT Cummins Infosystems Limited
Sinha, Arpita	Indian Inst. of Tech. Bombay
FrC10	HG D1.1
Delay Systems (Regular Session)	
Chair: Efimov, Denis	INRIA - LNE
Co-Chair: Sipahi, Rifat	Northeastern Univ.
16:00-16:20	FrC10.1
<i>On Controller Design for Delay-Independent Stability of Linear Time-Invariant Systems with Multiple Delays</i> , pp. 4406-4411.	
Nia, Payam M.	Northeastern Univ.
Sipahi, Rifat	Northeastern Univ.
Shafai, Bahram	Northeastern Univ.
16:20-16:40	FrC10.2
<i>Interval Observer Approach to Output Stabilization of Time-Varying Input Delay System</i> , pp. 4412-4417.	
Polyakov, Andrey	INRIA Lille Nord-Europe
Efimov, Denis	INRIA - LNE
Perruquetti, Wilfrid	Ec. Centrale de Lille
Richard, Jean-Pierre	Ec. Centrale de Lille
16:40-17:00	FrC10.3
<i>Inverse Signal Shapers in Effective Feedback Architecture</i> , pp. 4418-4423.	
Hromcik, Martin	Czech Tech. Univ.
Vyhldal, Tomas	Czech Tech. Univ. in Prague
Kucera, Vladimir	Czech Tech. Univ. in Prague, Faculty of Mechanical Engi

17:00-17:20	FrC10.4
<i>Stability Analysis of Time-Delay Systems Based on a Power of the Monodromy Operator</i> , pp. 4424-4429.	
Saito, Yuki	Kyoto Univ.
Hagiwara, Tomomichi	Kyoto Univ.
17:20-17:40	FrC10.5
<i>Stochastic H_{∞} Control and Estimation of State-Multiplicative Discrete-Time Systems with Delay</i> , pp. 4430-4435.	
Gershon, Eli	Tel Aviv Univ.
Shaked, Uri	Tel-Aviv Univ.
17:40-18:00	FrC10.6
<i>State Feedback H_{∞} Control of Time-Delay Switched Linear Systems: A Descriptor Approach</i> , pp. 4436-4441.	
Galbusera, Luca	CNR
Bolzern, Paolo	Pol. di Milano
FrC11	HG D1.2
Optimization for Process Control (Regular Session)	
Chair: Celikovsky, Sergej	Acad. of Sci. of Czech Republic
Co-Chair: Baramov, Lubomir	Honeywell Prague Lab.
16:00-16:20	FrC11.1
<i>On Nonlinear Continuous-Time Optimal Control of Penicillin Cultivation</i> , pp. 4442-4447.	
Pcolka, Matej	Czech Tech. Univ. in Prague
Celikovsky, Sergej	Acad. of Sci. of Czech Republic
16:20-16:40	FrC11.2
<i>Robust Optimization on Receding Horizon of Processes with Storages and Periodic Production and Consumption Contracts</i> , pp. 4448-4453.	
Baramov, Lubomir	Honeywell Prague Lab.
Havlena, Vladimir	Honeywell ACS AT Lab.
16:40-17:00	FrC11.3
<i>Optimized Pacing of Continuous Reheating Furnaces</i> , pp. 4454-4459.	
Steinboeck, Andreas	Vienna Univ. of Tech.
Kugi, Andreas	Vienna Univ. of Tech. (VUT)
17:00-17:20	FrC11.4
<i>PID Design by Convex-Concave Optimization</i> , pp. 4460-4465.	
Hast, Martin	LTH, Lund Univ.
Astrom, Karl J	Lund Inst. of Tech.
Bernhardsson, Bo M.	Lund Inst. of Tech.
Boyd, Stephen P.	Stanford Univ.
17:20-17:40	FrC11.5
<i>On the Links between Real-Time Optimization, Neighboring-Extremal Control, and Self-Optimizing Control</i> , pp. 4466-4471.	
Marchetti, Alejandro Gabriel	CIFASIS-CONICET
Zumoffen, David Alejandro	French-Argentine International Center for Information and System
17:40-18:00	FrC11.6
<i>Optimal Selection of Sensor Network and Backed-Off Operating Point Based on Economics</i> , pp. 4472-4477.	
Magbool Jan, Nabil	Indian Inst. of Tech. Madras
Skogestad, Sigurd	Norwegian Univ. of Science & Tech.
Narasimhan, Sridharakumar	IIT Madras
FrC12	HG D3.2
Model Reduction (Regular Session)	
Chair: Poussot-Vassal, Charles	Onera
Co-Chair: Jayawardhana, Bayu	Univ. of Groningen
16:00-16:20	FrC12.1
<i>Model Reduction in Bio-Chemical Reaction Networks with Michaelis-Menten Kinetics</i> , pp. 4478-4483.	

Hangos, Katalin M. Gábor, Attila Szederkényi, Gábor	Computer & Automation Rsrch. Inst. of the Hungarian Academy of Sci IIM-CSIC Computer and Automation Res. Inst.
16:20-16:40	FrC12.2
<i>H₂ and H_∞ Error Bounds for Model Order Reduction of Second Order Systems by Krylov Subspace Methods</i> , pp. 4484-4489.	
Panzer, Heiko K. F. Wolf, Thomas Lohmann, Boris	Tech. Univ. München Tech. Univ. München Tech. Univ. Muenchen
16:40-17:00	FrC12.3
<i>An Iterative Eigenvector Tangential Interpolation Algorithm for Large-Scale LTI and a Class of LPV Model Approximation</i> , pp. 4490-4495.	
Poussot-Vassal, Charles Vuillemin, Pierre	Onera Onera - The French Aerospace Lab.
17:00-17:20	FrC12.4
<i>Method of Characteristics Based Model Reduction for Control of a Counter-Current Reactor Using Approximate Dynamic Programming</i> , pp. 4496-4501.	
M, Sudhakar Narasimhan, Sridharakumar Kaisare, Niket	INDIAN Inst. OF Tech. MADRAS IIT Madras ABB Global Industries and Services Ltd.
17:20-17:40	FrC12.5
<i>Model-Order Reduction of Biochemical Reaction Networks</i> , pp. 4502-4507.	
Rao, Shodhan van der Schaft, Arjan J. van Eunen, Karen Bakker, Barbara M. Jayawardhana, Bayu	Univ. of Groningen Univ. of Groningen Univ. Medical Center Groningen Univ. Medical Center Groningen Univ. of Groningen
17:40-18:00	FrC12.6
<i>Singular Perturbation Approximation of Semistable Linear Systems</i> , pp. 4508-4513.	
Ishizaki, Takayuki Sandberg, Henrik Johansson, Karl Henrik Kashima, Kenji Imura, Jun-ichi Aihara, Kazuyuki	Tokyo Inst. of Tech. Royal Inst. of Tech. (KTH) Royal Inst. of Tech. Osaka Univ. Tokyo Inst. of Tech. The Univ. of Tokyo
FrC13	HG D5.2
Robust Control and Estimation (Regular Session)	
Chair: Rovithakis, George A. Co-Chair: Fikar, Miroslav	Aristotle Univ. of Thessaloniki Slovak Univ. of Tech.
16:00-16:20	FrC13.1
<i>Guaranteed Parameter Estimation in Nonlinear Dynamic Systems Using Improved Bounding Techniques</i> , pp. 4514-4519.	
Paulen, Radoslav Villanueva, Mario Fikar, Miroslav Chachuat, Benoît	Slovak Univ. of Tech. Imperial Coll. London Slovak Univ. of Tech. Imperial Coll. London
16:20-16:40	FrC13.2
<i>Robust Filtering and Fixed-Lag Smoothing for Uncertain Discrete-Time Systems</i> , pp. 4520-4525.	
Neveux, Philippe Blanco, Eric	Univ. d'Avignon et des Pays de Vaucluse Ec. Centrale de Lyon, Ampere Lab.
16:40-17:00	FrC13.3
<i>An Intuitive Design for the Dual Mode Adaptive Robust Controller Based on Indirect Control</i> , pp. 4526-4531.	
Teixeira, Leonardo Barbosa, Oliveira, Josenalde	Federal Inst. of Education, Science and Tech. of Rio Gr Agricultural School of Jundiá

Araujo, Aldayr Dantas de	Federal Univ. of Rio Grande do Norte
17:00-17:20	FrC13.4
<i>On the Numerical Optimization Design of Continuous-Time Quantizer: A Matrix Uncertainty Approach</i> , pp. 4532-4537.	
Sawada, Kenji	The Univ. of Electro-Communications
Shin, Seiichi	the Univ. of Electro-Communications
17:20-17:40	FrC13.5
<i>H-Infinity Output Feedback Control of Commensurate Fractional Order Systems</i> , pp. 4538-4543.	
Fadiga, Lamine	Univ. de Bordeaux 1
Farges, Christophe	IMS-LAPS
Sabatier, Jocelyn	LAPS - Bordeaux 1 Univ.
Santugini, Kevin	Univ. de Bordeaux 1, Inst. de Mathématiques de Bordeaux
17:40-18:00	FrC13.6
<i>Approximation-Free Prescribed Performance Control for Unknown SISO Pure Feedback Systems</i> , pp. 4544-4549.	
Bechlioulis, Charalampos	Aristotle Univ. of Thessaloniki
Rovithakis, George A.	Aristotle Univ. of Thessaloniki
FrC14	HG D7.1
Railway Control (Regular Session)	
Chair: Pendharkar, Ishan	Bombardier Transportation Switzerland
Co-Chair: Aschemann, Harald	Univ. of Rostock
16:00-16:20	FrC14.1
<i>Optimal Trajectory Planning for Standard and Hybrid Railway Vehicles with a Hydro-Mechanic Transmission</i> , pp. 4550-4555.	
Leska, Maik	Univ. of Rostock
Grüning, Tobias	Univ. of Rostock
Aschemann, Harald	Univ. of Rostock
Rauh, Andreas	Univ. of Rostock
16:20-16:40	FrC14.2
<i>Optimal Trajectory Planning for Trains under a Moving Block Signaling System</i> , pp. 4556-4561.	
Wang, Yihui	Delft Univ. of Tech.
De Schutter, Bart	Delft Univ. of Tech.
van den Boom, Ton J. J.	Delft Univ. of Tech.
Ning, Bin	Beijing Jiaotong Univ.
16:40-17:00	FrC14.3
<i>Performance Analysis of MILP Based Model Predictive Control Algorithms for Dynamic Railway Scheduling</i> , pp. 4562-4567.	
Rudan, János	Péter Pázmány Catholic Univ.
Kersbergen, Bart	Tech. Univ. Delft
van den Boom, Ton J. J.	Delft Univ. of Tech.
Hangos, Katalin M.	Computer & Automation Rsrch. Inst. of the Hungarian Academy of Sci
17:00-17:20	FrC14.4
<i>A Robust Control of Contact Force of Pantograph-Catenary for the High-Speed Train</i> , pp. 4568-4573.	
Mokrani, Nassim	Univ. of Picardie Jules Verne
Rachid, Ahmed	Univ. de Picardie Jules Verne
17:20-17:40	FrC14.5
<i>Resonance Stability in Electrical Railway Systems – a Dissipativity Approach</i> , pp. 4574-4579.	
Pendharkar, Ishan	Bombardier Transportation Switzerland
FrC15	HG D7.2
Control of Electrical Motors (Regular Session)	
Chair: Maciejowski, Jan M.	Univ. of Cambridge
Co-Chair: Marinkov, Sava	Eindhoven Univ. of Tech.
16:00-16:20	FrC15.1
<i>Reference Frame Re-Alignment for Vector Control of the Brushless Doubly-Fed Machine</i> , pp. 4580-4585.	

Broekhof, Alexander	Univ. of Cambridge
McMahon, Richard	Cambridge Univ. Engineering Department
Maciejowski, Jan M.	Univ. of Cambridge
16:20-16:40	FrC15.2
<i>Robust Adaptive Control of Switched-Reluctance Motors without Velocity Measurements</i> , pp. 4586-4591.	
Chumacero, Erik	Univ. Paris Sud
Loria, Antonio	CNRS
Espinosa-Perez, Gerardo	Univ. Nacional Autonoma de Mexico
16:40-17:00	FrC15.3
<i>Model Predictive Control of a High Speed Switched Reluctance Generator System</i> , pp. 4592-4597.	
Marinkov, Sava	Eindhoven Univ. of Tech.
de Jager, Bram	Tech. Univ. Eindhoven
Steinbuch, Maarten	Eindhoven Univ. of Tech.
17:00-17:20	FrC15.4
<i>Robust Observer with Higher-Order Sliding Mode for Sensorless Speed Estimation of a PMSM</i> , pp. 4598-4603.	
Kommuri, Suneel Kumar	Kyungpook National Univ. South Korea
Veluvolu, Kalyana C	Kyungpook National Univ.
Defoort, Michael	Valenciennes Univ.
17:20-17:40	FrC15.5
<i>Global Identification of Mechanical and Electrical Parameters of Synchronous Motor Driven Joint with a Fast CLOE Method</i> , pp. 4604-4609.	
Robet, Pierre-Philippe	Univ. of Nantes
Gautier, Maxime	Univ. of Nantes
17:40-18:00	FrC15.6
<i>Online Identification for Auto-Tuning PID Based on Wavelet Neural Networks: An Experimental Validation on an AC Motor</i> , pp. 4610-4615.	
Ramos Velasco, Luis Enrique	Univ. Pol. de Pachuca
Julio Cesar, Ramos Fernández	Univ. Pol. de Pachuca
Domínguez Ramírez, Omar Arturo	Univ. Autónoma del Estado de Hidalgo
Parra Vega, Vicente	Centro de Investigación y de Estudios Avanzados del IPN(Unidad S
Marquez Vera, Marco Antonio	Univ. Poitécnica de Pachuca
Carrillo Santos, Carlos Alberto	Univ. Autónoma del Estado de Hidalgo
Sanchez, Anand	CINVESTAV