

# **2012 IEEE International Conference on Control Applications**

**(CCA 2012)**

**Dubrovnik, Croatia  
3 – 5 October 2012**

**Pages 1-858**



**IEEE Catalog Number: CFP12CCA-PRT  
ISBN: 978-1-4673-4503-3**

# Content List of 2012 IEEE Multi-conference on Systems and Control

## Technical Program for Wednesday October 3, 2012

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Co-Chair: Velagić, Jasmin	Faculty of Electrical Engineering
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Kim, Sungbok	Hankuk Univ. of Foreign Studies
Kim, Hyunbin	Hankuk Univ. of Foreign Studies
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Kim, Sungbok	Hankuk Univ. of Foreign Studies
Kim, Hyunbin	Hankuk Univ. of Foreign Studies
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Osmanković, Dinko	Faculty of Electrical Engineering Sarajevo
Velagić, Jasmin	Faculty of Electrical Engineering
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Tanoto, Andry	Heinz Nixdorf Inst. Univ. of Paderborn
Li, Hanyi	Bielefeld Univ.
Rückert, Ulrich	CITEC, Bielefeld Univ.
Sitte, Joaquin	Queensland Univ. of Tech.
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Butler, Zack	Rochester Inst. of Tech.
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Ahmad, Waqqas	Univ. of New South Wales, Kensington Campus, Sydney, Australia
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Chair: Simanski, Olaf	Hochschule Wismar Univ. of Applied Sciences: Tech. and Design
Co-Chair: Schauer, Thomas	Tech. Univ. Berlin
Organizer: Simanski, Olaf	Hochschule Wismar Univ. of Applied Sciences: Tech. and Design
Organizer: Schauer, Thomas	Tech. Univ. Berlin
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Misgeld, Berno Johannes Engelbert	MedIT, RWTH Aachen Univ.
Leonhardt, Steffen	RWTH Aachen Univ.
Hexamer, Martin	Chair for Medical Engineering, Ruhr-Univ. Bochum
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Seel, Thomas	Tech. Univ. Berlin
Schauer, Thomas	Tech. Univ. Berlin
Raisch, Joerg	Tech. Univ. Berlin
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Luo, Dongfeng Schauer, Thomas Roth, Michael Raisch, Joerg	Max Planck Inst. for Dynamics of Complex Tech. Systems, Tech. Univ. Berlin Linköping Univ. Tech. Univ. Berlin
09:30-09:50	WeA02.4
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Walter, Marian Heinke, Stefanie Schwandtner, Sebastian Leonhardt, Steffen	RWTH Aachen Univ. RWTH Aachen Univ. Bytec GmbH RWTH Aachen Univ.
09:50-10:10	WeA02.5
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Sievert, Alexander Wiesener, Constantin Arndt, Andreas Drewelow, Wolfgang Simanski, Olaf	Univ. Rostock, Inst. für Automatisierungstechnik Berlin Heart GmbH Berlin Heart GmbH Univ. Rostock, Inst. für Automatisierungstechnik Hochschule Wismar Univ. of Applied Sciences:Tech.
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Brend, Oliver William Freeman, Christopher T. French, Mark	Univ. of Southampton Univ. of Southampton Univ. of Southampton
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Kallapur, Abhijit Boyson, Toby Petersen, Ian R. Harb, Charles	Univ. of New South Wales at the Australian Defence Force Academy Univ. of New South Wales at the Australian Defence Force Academy Univ. of New South Wales at the Australian Defence Force Academy Univ. of New South Wales at the Australian Defence Force Academy
08:50-09:10	WeA03.2
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Patil, Nanasheb S Sharma, Shambhu N	S V National Inst. of Tech. National Inst. of Tech. Surat, India
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Qian, Huijie Grignion, Danny Chen, Xiang Kar, Narayan	Univ. of Windsor Univ. of Windsor Univ. of Windsor Univ. of Windsor
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Pyrkin, Anton Bobtsov, Alexey Kolyubin, Sergey Vedyakov, Alexey	Saint-Petersburg State Univ. of ITMO Saint Petersburg National Res. Univ. of Information Technologies St. Petersburg National Res. Univ. ITMO Saint Petersburg State Univ. of Information Technologies Mec
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Alves, Vitor Alex Oliveira Juliani, Rodrigo C. G.	Maua Inst. of Technology Univ. of Sao Paulo

Garcia, Claudio	Pol. School of The Univ. of Sao Paulo
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Imsland, Lars	Norwegian Univ. of Science and Tech.
Kaasa, Glenn-Ole	Statoil ASA
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Chair: Gaspar, Peter	Computer & Automation Inst. of HAS
Co-Chair: Boukhniher, Moussa	ESTACA of Paris
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Kawabe, Tohru	Univ. of Tsukuba
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Pellegrini, Enrico	Tech. Univ. München
Pletschen, Nils	Tech. Univ. München
Spirk, Sebastian	Tech. Univ.
Rainer, Michael	Student at Tech. Univ. München
Lohmann, Boris	Tech. Univ. München
09:10-09:30	WeA04.3
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Gaspar, Peter	Computer & Automation Inst. of HAS
Nemeth, Balazs	Computer and Automation Res. Inst.
Bokor, Jozsef	MTA SZTAKI Hungarian Acad. of Sciences
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Ferrara, Antonella	Univ. of Pavia
Giani, Paolo	Pol. di Milano
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Boukhniher, Moussa	ESTACA of Paris
Raisemche, Aziz	ESTACA
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Tanelli, Mara	Pol. di Milano
Savaresi, Sergio M.	Pol. Di Milano
Mario, Santucci	Piaggio & C. S.p.A.
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Chair: Petrovic, Ivan	Univ. of Zagreb
Co-Chair: Galkowski, Krzysztof	Univ. of Zielona Gora
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Martinez, Miguel Angel	Inst. de Investigaciones Electricas
Sanchez Parra, Marino	Inst. de Investigaciones Electricas
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Hladowski, Lukasz	Univ. of Zielona Gora

Galkowski, Krzysztof	Univ. of Zielona Gora
Rogers, Eric	Univ. of Southampton
Zhou, Lan	Hunan Univ. of Science and Tech.
He, Yong	Central South Univ.
Kummert, Anton	Univ. of Wuppertal
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Pfeiffer, Sven	DESY
Lichtenberg, Gerwald	Hamburg Univ. of Tech.
Schmidt, Christian	DESY
Schlarb, Holger	DESY
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Martinec, Dan	Czech Tech. Univ. in Prague
Sebek, Michael	Czech Tech. Univ. in Prague
Hurak, Zdenek	Czech Tech. Univ. in Prague
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Kouhi Anbaran, Yashar	Max Planck Inst. for Dynamics of Complex Tech. Systems
Guma, Shaban	TU Berlin
Bajcinca, Naim	Max-Planck Inst. for Dynamics of Complex Tech.
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Petricin, Toni	HEP-ODS d.o.o., Elektroprimorje Rijeka
Petrovic, Ivan	Univ. of Zagreb
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Chair: Rauh, Andreas	Univ. of Rostock
Co-Chair: Kastsian, Darya	Ruhr-Univ. Bochum
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Kastsian, Darya	Ruhr-Univ. Bochum
Monnigmann, Martin	Ruhr-Univ. Bochum
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Rakocevic, Goran	Mathematical Inst. Serbian Acad. of Sciences and Arts
Sustran, Zivojin	School of Electrical Engineering, Univ. of Belgrade
Milutinovic, Veljko	School of Electrical Engineering, Univ. of Belgrade
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Chen, Dulin	Ec. des Mines de Douai
Bako, Laurent	Ec. des Mines de Douai
Lecoecuche, Stéphane	Ec. des Mines de Douai
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Grüning, Tobias	Univ. of Rostock
Aschemann, Harald	Univ. of Rostock
Rauh, Andreas	Univ. of Rostock
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Green, Torben	Danfoss A/S

Razavi-Far, Roozbeh	Pol. di Milano
Izadi-Zamanabadi, Roozbeh	Danfoss A/S
Niemann, Henrik	Tech. Univ. of Denmark
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Rauh, Andreas	Univ. of Rostock
Senkel, Luise	Univ. of Rostock, Chair of Mechatronics
Aschemann, Harald	Univ. of Rostock
Kostin, Georgy V.	Russian Acad. of Sciences, A. Ishlinsky Inst. for Problems
Saurin, Vasily V.	Russian Acad. of Sciences, A. Ishlinsky Inst. for Problems
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Co-Chair: Ito, Atsushi	Toyohashi Univ. of Tech.
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Saleme, Ahmed	Univ. of Wuppertal
Tibken, Bernd	Univ. of Wuppertal
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Spinu, Veaceslav	Eindhoven Univ. of Tech.
Lazar, Mircea	Eindhoven Univ. of Tech.
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Sindicic, Ivica	ABB d.o.o.
Petrovic, Tamara	Univ. of Zagreb
Bogdan, Stjepan	Univ. of Zagreb
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Schoppmeyer, Christian	Process Dynamics and Operations Group, TU Dortmund
Hüfner, Martin	TU Dortmund
Subbiah, Subanatarajan	Process Dynamics and Operations Group, Biochemical and Chemical E
Engell, Sebastian	Tech. Univ. Dortmund
09:50-10:10	WeA07.5
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Ito, Atsushi	Toyohashi Univ. of Tech.
Noda, Yoshiyuki	Univ. of Yamanashi
Terashima, Kazuhiko	Toyohashi Univ. of Tech.
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<i>Matrix Model Based Control of Flexible Manufacturing Systems Using Banker's Algorithm</i> , pp. 252-257.	
Krnjak, Antonio	Faculty of Electrical Engineering and Computing
Petrovic, Tamara	Univ. of Zagreb
Bogdan, Stjepan	Univ. of Zagreb
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Chair: Bogdan, Stjepan	Univ. of Zagreb
Co-Chair: Pasik-Duncan, Bozenna	Univ. of Kansas
11:00-12:00	WePL.1
<i>Adaptive Learning Structures for Real-Time Optimal Control and Graphical Games*</i> .	

<b>WeB01</b>		Room A
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Chair: Kuroe, Yasuaki		Kyoto Inst. of Tech.
Co-Chair: Maquin, Didier		Univ. de Lorraine
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Jennawasin, Tanagorn		National Chung Hsing Univ.
Kawanishi, Michihiro		Toyota Tech. Inst.
Narikiyo, Tatsuo		Toyota Tech. Inst.
Lin, Chun-Liang		National Chung Hsing Univ.
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Ichalal, Dalil		Univ. d'Evry Val d'Essonne, IBISC Lab.
Marx, Benoit		Ctr de Recherche en Automat. de Nancy
Mammar, Said		Univ. d'Evry LSC-CNRS-FRE2494
Maquin, Didier		Univ. de Lorraine
Ragot, Jose		CRAN-INPL
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Schulze Darup, Moritz		Ruhr-Univ. Bochum
Monnigmann, Martin		Ruhr-Univ. Bochum
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Córdova, Juan José		CINVESTAV-IPN
Yu, Wen		CINVESTAV-IPN
Li, Xiaouu		CINVESTAV-IPN
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Kuroe, Yasuaki		Kyoto Inst. of Tech.
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Karami, Nabil		LSIS, Aix-Marseille Univ.
Moubayed, Nazih		Lebanese Univ.
Outbib, Rachid		Univ. Paul Cezanne
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Chair: Deur, Josko		Univ. of Zagreb
Co-Chair: Tseng, Eric		Ford Motor Company
Organizer: Deur, Josko		Univ. of Zagreb
Organizer: Assadian, Francis		Univ. of Cranfield
Organizer: Hrovat, Davor		Ford Motor Company
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Hrovat, Davor		Ford Motor Company
Di Cairano, Stefano		Mitsubishi Electric Res. Lab.
Tseng, Eric		Ford Motor Company
Kolmanovsky, Ilya V.		The Univ. of Michigan
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Fekri, Sajjad	Cranfield Univ.
Assadian, Francis	Cranfield Univ.
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Skugor, Branimir	Faculty of Mechanical Engineering and Naval Architecture
Pavkovic, Danijel	Faculty of Mechanical Engineering And Naval Architecture
Deur, Josko	Univ. of Zagreb
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Fekri, Sajjad	Cranfield Univ.
Assadian, Francis	Cranfield Univ.
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Cipek, Mihael	Univ. of Zagreb, Faculty of Mechanical Engineering and Naval A
Kasac, Josip	Fac. of Mech. Eng. and Naval Arch.
Pavkovic, Danijel	Faculty of Mechanical Engineering And Naval Architecture
Petric, Josko	Univ. of Zagreb, Faculty of Mechanical Engineering and Naval
Deur, Josko	Univ. of Zagreb
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Deur, Josko	Univ. of Zagreb
Kasac, Josip	Fac. of Mech. Eng. and Naval Arch.
Tepes, Bojan	Faculty of Mechanical Engineering and Naval Architecture
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Chair: Zhang, Hui	Zhejiang Univ.
Co-Chair: Tolic, Domagoj	Univ. of New Mexico
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Haugen, Joakim	Norwegian Univ. of Science and Tech.
Grøtli, Esten Ingar	Norwegian Univ. of Science & Tech.
Imslund, Lars	Norwegian Univ. of Science and Tech.
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Gawalwad, Balaji G	S V National Inst. of Tech.
Sharma, Shambhu N	National Inst. of Tech. Surat, India
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Kim, Kwang-Ki	UIUC/MIT
Braatz, Richard D.	Massachusetts Inst. of Tech.
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Hidayat, Egi	Uppsala Univ.
Medvedev, Alexander V.	Uppsala Univ.
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Sun, Zhen	Aalborg Univ.
Yang, Zhenyu	Aalborg Univ. Esbjerg Campus
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On MMSE, Mutual Information and Popov Function in Continuous-Time Multivariable Linear Systems, pp. 370-375.

Zhang, Hui

Zhejiang Univ.

<b>WeB04</b>		Room D
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Chair: Baba, Atsushi		Keio Univ.
Co-Chair: Gong, Xun		Jilin Univ.
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Gong, Xun		Jilin Univ.
Liu, Qifang		Jilin Univ. PR China
Hu, Yunfeng		Jilin Univ.
Chen, Hong		Jilin Univ. Campus NanLing
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Nemeth, Balazs		Computer and Automation Res. Inst.
Gaspar, Peter		Computer & Automation Inst. of HAS
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Mendoza-Soto, José Luis		Univ. Nacional Autónoma de México
Alvarez-Icaza, Luis		Univ. Nacional Autónoma de México
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Griparic, Karlo		Univ. of Zagreb
Bogdan, Stjepan		Univ. of Zagreb
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Maruyama, Tsugito		Fujitsu Lab. Ltd.
Ejiri, Arata		TRANSTRON Inc.
Ikai, Yoshiaki		Transtron Inc.
Shimotani, Keiji		TRANSTRON INC.
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Baba, Atsushi		Keio Univ.
Adachi, Shuichi		Keio Univ.
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Chair: Lewis, Frank L.		Univ. of Texas at Arlington
Co-Chair: Ghadami, Rasoul		Northeastern Univ.
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Gasparri, Andrea		Univ. of "Roma Tre"
Garone, Emanuele		Univ. Libre de Bruxelles
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Groot, Noortje		Delft Univ. of Tech.
De Schutter, Bart		Delft Univ. of Tech.
Hellendoorn, Hans		Delft Univ. of Tech.
14:10-14:30		WeB05.3

*Reverse Stackelberg Games, Part II: Results and Open Issues*, pp. 427-432.

Groot, Noortje Delft Univ. of Tech.  
De Schutter, Bart Delft Univ. of Tech.  
Hellendoorn, Hans Delft Univ. of Tech.

14:30-14:50 WeB05.4

*Distributed Control of Interconnected Dynamic Systems with Random Link Failures*, pp. 433-438.

Ghadami, Rasoul Northeastern Univ.  
Shafai, Bahram Northeastern Univ.

14:50-15:10 WeB05.5

*Synchronization of Discrete-Time Multi-Agent Systems on Graphs Using H2-Riccati Design*, pp. 439-444.

Hengster-Movric, Kristian Univ. of Texas at Arlington  
You, Keyou Nanyang Tech. Univ.  
Lewis, Frank L. Univ. of Texas at Arlington  
Xie, Lihua Nanyang Tech. Univ.

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*Approximate Consensus in Multi-Agent Stochastic Systems with Switched Topology and Noise*, pp. 445-450.

Amelina, Natalia Saint-Petersburg State Univ.  
Fradkov, Alexander Inst. for Problems of Mech. Eng.  
Amelin, Konstantin Sankt-Petersburg State Univ.

**WeB06** Room F

**Optimization II** (Regular CCA Session)

Chair: Kovacic, Zdenko Univ. of Zagreb  
Co-Chair: Hartmann, Benjamin Univ. of Siegen

13:30-13:50 WeB06.1

*Structure Trade-Off Strategy for Local Model Networks*, pp. 451-456.

Hartmann, Benjamin Univ. of Siegen  
Nelles, Oliver Univ. of Siegen

13:50-14:10 WeB06.2

*Efficient Solution of a Qp Optimization Problem with Zonotopic Constraints*, pp. 457-462.

Stoican, Florin NTNU (Norwegian Univ. of Science and Tech.  
Hovd, Morten Norwegian Univ. of Sci & Tech.

14:10-14:30 WeB06.3

*Optimality Recovery of Feedback Control System Based on Discrete-Time State Dependent Riccati Equation*, pp. 463-469.

Yoshida, Kohei Tokyo Denki Univ.  
Iwase, Masami Tokyo Denki Univ.  
Ohsaki, Hiroshi Tokyo Denki Univ.

14:30-14:50 WeB06.4

*Experiment-Based Approach to Reference Trajectory Tracking*, pp. 470-475.

Radac, Mircea-Bogdan Pol. Univ. of Timisoara  
Precup, Radu-Emil Pol. Univ. of Timisoara  
Petriu, Emil M. Univ. of Ottawa  
Preitl, Stefan Pol. Univ. of Timisoara  
Dragos, Claudia-Adina Pol. Univ. of Timisoara

14:50-15:10 WeB06.5

*Optimal Control of Multivariate Crystallization Processes with Size-Dependent Growth Kinetics*, pp. 476-481.

Bajcinca, Naim Max-Planck Inst. for Dynamics of Complex Tech.  
Hofmann, Steffen TU Berlin

15:10-15:30 WeB06.6

*Gain-Scheduled State Estimation and Optimizing NMPC Applied to a Non-Minimum Phase CSTR*, pp. 482-487.

A. N. Idris, Elrashid Tech. Univ. Dortmund  
Engell, Sebastian Tech. Univ. Dortmund

<b>WeB07</b>		Room G
<b>Mechanical Systems</b> (Regular CCA Session)		
Chair: Baspinar, Cumhur		Applied Univ. of Ostfalia
Co-Chair: Pavkovic, Danijel		Faculty of Mechanical Engineering And Naval Architecture
13:30-13:50		WeB07.1
<i>Normal Force Control for a Pin-On-Disk Tribometer Including Active or Passive Suppression of Vertical Vibrations</i> , pp. 488-493.		
Pavkovic, Danijel	Faculty of Mechanical Engineering And Naval Architecture	
Kranjcevic, Nenad	Faculty of Mechanical Engineering And Naval Architecture	
Kostelac, Milan		Univ. of Zagreb
Herold, Zvonko		Univ. of Zagreb
Deur, Josko		Univ. of Zagreb
13:50-14:10		WeB07.2
<i>Inertia Tensors and Centres of Masses Identification at Semiprogram Precession Motions</i> , pp. 494-497.		
Melnikov, Vitaly	The National Res. Univ. of Information Technologies, Mecha	
14:10-14:30		WeB07.3
<i>A Novel Haptic Display Based on Curvature Estimation and Its Application to a Machining Support Robot</i> , pp. 498-503.		
Mizutani, Naoto		Mie Univ.
Kato, Norihiko		Mie Univ.
Yano, Kenichi		Mie Univ.
14:30-14:50		WeB07.4
<i>Real-Time Finite Element Dynamic Substructuring Using Signal-Based Control Strategies</i> , pp. 504-509.		
Jiang, Jheng-Ying		National Tsing Hua Univ.
Tu, Jia-Ying		National Tsing Hua Univ.
Yang, Hao-Ting		National Tsing Hua Univ.
14:50-15:10		WeB07.5
<i>Swing-Up Control for a Class of Underactuated Mechanical Systems Using Numerical System Solutions</i> , pp. 510-515.		
Baspinar, Cumhur		Applied Univ. of Ostfalia
15:10-15:30		WeB07.6
<i>Investigating the Use of Symbol Timing Recovery for Medium-Derived Feedback in Nanopositioning Controllers</i> , pp. 516-520.		
Kotsopoulos, Andreas		Univ. of Patras
Antonakopoulos, Theodore		Univ. of Patras
<b>WeC02</b>		Room B
<b>Recent Progress on Synthesis of Adaptive Control and Its Practical Applications</b> (Invited CCA Session)		
Chair: Mizumoto, Ikuro		Kumamoto Univ.
Co-Chair: Yanou, Akira		Okayama Univ.
Organizer: Kaneko, Osamu		Kanazawa Univ.
Organizer: Yanou, Akira		Okayama Univ.
16:00-16:20		WeC02.1
<i>Design of a Performance-Adaptive GPC-PI Control System for Controlling a Weigh Feeder (I)</i> , pp. 521-525.		
Sato, Takao		Univ. of Hyogo
Kotani, Tomofumi		Univ. of Hyogo
Yamamoto, Toru		Hiroshima Univ.
Araki, Nozomu		Univ. of Hyogo
Konishi, Yasuo		Univ. of Hyogo
16:20-16:40		WeC02.2
<i>Comparison between First and Second Order Prediction for On-Line Configuration Control of Redundant Manipulator Based on AMSIP (I)</i> , pp. 526-532.		
Hou, Yang		Okayama Univ.
Yanou, Akira		Okayama Univ.
Minami, Mamoru		Univ. of Fukui
Matsuno, Takayuki		Okayama Univ.

Kobayashi, Yosuke	Okayama Univ.
16:40-17:00	WeC02.3
<i>Control of a Flexible Arm with Input Dead Zone by a Passivity Based Adaptive Output Feedback (I)</i> , pp. 533-538.	
Mizumoto, Ikuro	Kumamoto Univ.
Kohzawa, Ryuichi	Kumamoto Univ.
17:00-17:20	WeC02.4
<i>Nonlinear Robust Stage Control of Atomic Force Microscope (I)</i> , pp. 539-544.	
Nakakuki, Takashi	Kogakuin Univ.
Ogawa, Makoto	Kogakuin Univ.
Ishii, Chiharu	Hosei Univ.
17:20-17:40	WeC02.5
<i>On Adaptive Controller Design Based on Many Parametric Models (I)</i> , pp. 545-550.	
Mizuno, Naoki	Nagoya Inst. of Tech.
<b>WeC03</b>	Room C
<b>System Modeling</b> (Regular CCA Session)	
Chair: Masiero, Andrea	Univ. di Padova
Co-Chair: Petrovic, Tamara	Univ. of Zagreb
16:00-16:20	WeC03.1
<i>Nonstationary Turbulence Simulation with an Efficient Multiscale Approach</i> , pp. 551-556.	
Beghi, Alessandro	Univ. di Padova
Cenedese, Angelo	Univ. di Padova
Masiero, Andrea	Univ. di Padova
16:20-16:40	WeC03.2
<i>Discrete-Time Dynamic Modeling for Software and Services Composition As an Extension of the Markov Chain Approach</i> , pp. 557-562.	
Filieri, Antonio	Pol. di Milano, Dipartimento di Elettronica e Informazion
Ghezzi, Carlo	Pol. di Milano, Dipartimento di Elettronica e Informazione
Leva, Alberto	Pol. di Milano
Maggio, Martina	Lund Univ.
16:40-17:00	WeC03.3
<i>Reproduction of Kinematics of Cars Involved in Crash Events Using Nonlinear Autoregressive Models</i> , pp. 563-568.	
Pawlus, Witold	Univ. of Agder
Karimi, Hamid Reza	Univ. of Agder
Robbersmyr, Kjell G.	Univ. of Agder
17:00-17:20	WeC03.4
<i>Observer Based Model Identification of Heat Pumps in a Smart Grid</i> , pp. 569-574.	
Andersen, Palle	Aalborg Univ.
Pedersen, Tom S.	Aalborg Univ.
Nielsen, Kirsten Mølgaard	Aalborg Univ.
<b>WeC04</b>	Room D
<b>Robust Control and Real-Time Systems</b> (Regular CCA Session)	
Chair: Lin, Jonqian	Ching Yun Univ.
Co-Chair: Bonhomme, Patrice	Univ. of Tours
16:00-16:20	WeC04.1
<i>Vibration Control of Rotating Plate by Decomposed Neuro-Fuzzy Control with Genetic Algorithm Tuning</i> , pp. 575-580.	
Lin, Jonqian	Ching Yun Univ.
Zheng, Yong-Bin	Ching Yun Univ.
16:20-16:40	WeC04.2
<i>Experimental Validation of Hinf SISO Control for High Performance Tunneling Current Measurement System and MIMO Extension</i> , pp. 581-586.	
Ahmad, Irfan	Grenoble INP, Univ. of Grenoble

Voda, Alina Besancon, Gildas	UJF GIPSA-Lab. Grenoble INP
16:40-17:00	WeC04.3
<i>Minimum Thrust Load Control for Floating Wind Turbine</i> , pp. 587-592.	
Christiansen, Søren Bak, Thomas Knudsen, Torben	Aalborg Univ. Aalborg Univ. Aalborg Univ. Denmark
17:00-17:20	WeC04.4
<i>Multi-Stage Selection Procedure for Investment Portfolio Management</i> , pp. 593-598.	
Marchev, Jr., Angel Marchev, Angel	Univ. of national and world Ec. Univ. of national and world Ec.
17:20-17:40	WeC04.5
<i>Towards a New Schedulability Technique of Real-Time Systems Based on Difference of Constraints System</i> , pp. 599-604.	
Bonhomme, Patrice Hovsépian, Anouch	Univ. of Tours Univ. François Rabelais - Tours
<b>WeC05</b>	Room E
<b>Complex Systems</b> (Regular CCA Session)	
Chair: Ringwood, John V. Co-Chair: Birk, Wolfgang	NUI Maynooth, Ireland Luleå Univ. of Tech.
16:00-16:20	WeC05.1
<i>On Properties of a Particular Class of Directed Graphs Used in Stability Analysis of Flocking Algorithms</i> , pp. 605-608.	
Atrianfar, Hajar Haeri, Mohammad	Sharif Univ. of Tech. Sharif Univ. of Tech.
16:20-16:40	WeC05.2
<i>The Effect of Pulsatile Blood Flow on Blood Pressure Regulatory Mechanisms</i> , pp. 609-614.	
Ringwood, John V. Taussi, Federica Depaor, Annraoi	NUI Maynooth, Ireland CME Società Cooperativa Consortile National Univ. of Ireland, Dublin
16:40-17:00	WeC05.3
<i>Real-Time Optimization of a Fed-Batch Bioreactor with Substrate Inhibition Using Extremum-Seeking</i> , pp. 615-620.	
Dewasme, Laurent Vargas, Alejandro Moreno, Jaime A. Vande Wouwer, Alain	Univ. de Mons Inst. of Engineering, UNAM Univ. Nacional Autonoma de Mexico-UNAM Univ. de Mons
17:00-17:20	WeC05.4
<i>Oscillator Network Synchronization by Distributed Control</i> , pp. 621-626.	
Mozafari, Yasaman Kiani, Arman Hirche, Sandra	Tech. Univ. of Munich Tech. Univ. of Munich Tech. Univ. München
17:20-17:40	WeC05.5
<i>Evaluation of Two Methods for Reconfiguration of Multivariable Controllers in Process Control Systems</i> , pp. 627-633.	
Birk, Wolfgang Dudarenko, Natalia	Luleå Univ. of Tech. The National Res. Univ. of Information Technologies, Mec
<b>WeC06</b>	Room F
<b>Computational Methods and Sensor Networks</b> (Regular CCA Session)	
Chair: Sima, Vasile Co-Chair: Silva, Jorge Estrela	Nat. Inst. f. Res. in Informatics Inst. Superior de Engenharia do Porto
16:00-16:20	WeC06.1
<i>Dynamic Programming Based Feedback Control for Systems with Switching Costs</i> , pp. 634-639.	
Silva, Jorge Estrela	Inst. Superior de Engenharia do Porto

Sousa, Joao Pereira, Fernando Lobo	Univ. Porto - Faculdade Engenharia Porto Univ.
16:20-16:40	WeC06.2
<i>New SLICOT Routines Based on Structured Eigensolvers</i> , pp. 640-645.	
Sima, Vasile Benner, Peter Kressner, Daniel	Nat. Inst. f. Res. in Informatics Max Planck Inst. for Dynamics of Complex Technical Systems EPF Lausanne
16:40-17:00	WeC06.3
<i>Local Condition Monitoring in Integrated Circuits Using a Set of Kolmogorov-Smirnov Tests</i> , pp. 646-651.	
Vincent, Lionel Leseq, Suzanne Maurine, Philippe Beigné, Edith	CEA CEA LIRMM CEA
17:00-17:20	WeC06.4
<i>Adaptive Sensor Networks for Consensus Based Distributed Estimation</i> , pp. 652-657.	
Ilic, Nemanja Stankovic, Milos S. Stankovic, Srdjan S.	Univ. of Belgrade KTH Royal Inst. of Tech. Univ. of Belgrade
17:20-17:40	WeC06.5
<i>Least Angle Regression for Semiconductor Manufacturing Modeling</i> , pp. 658-663.	
Susto, Gian Antonio Beghi, Alessandro	Univ. of Padova Univ. di Padova
<b>WeC07</b>	Room G
<b>Control Architectures and Education</b> (Regular CCA Session)	
Chair: Aubrun, Christophe Co-Chair: Zavari, Keivan	Univ. de Lorraine Katholieke Univ. Leuven
16:00-16:20	WeC07.1
<i>Distributed Measurement and Control System of the Test-Rig of Ram-Compressed Rotor Aero-Engine Based on PLC and PXI Bus</i> , pp. 664-669.	
Zhao, Yang Qiu, Hongzhan Song, Hua	Beijing Univ. of Aeronautics and Astronautics Beijing Univ. of Aeronautics and Astronautics Beijing Univ. of Aeronautics and Astronautics
16:20-16:40	WeC07.2
<i>Multi-Hinf Controller Design and Illustration on an Overhead Crane</i> , pp. 670-674.	
Zavari, Keivan Pipeleers, Goele Swevers, Jan	Katholieke Univ. Leuven Katholieke Univ. Leuven K. U. Leuven
16:40-17:00	WeC07.3
<i>Increased Usability through User Interface Modification of Development and Education Tools for Embedded Systems</i> , pp. 675-680.	
Bönicke, Holger Ament, Christoph	Ilmenau Univ. of Tech. Ilmenau Univ. of Tech.
17:00-17:20	WeC07.4
<i>SOA-Based Platform Implementing a Structural Modelling for Large-Scale System Fault Detection: Application to a Board Machine (I)</i> , pp. 681-685.	
Aubrun, Christophe Sauter, Dominique D.J.	Univ. de Lorraine Lorraine Univ.
17:20-17:40	WeC07.5
<i>Computation of the Value Set of Fractional Order Uncertain Polynomials: A 2q Convex Parpolygonal Approach</i> , pp. 686-691.	
Senol, Bilal Yeroglu, Celaledin	Inonu Univ. Inonu Univ.

**Technical Program for Thursday October 4, 2012**

<b>ThA01</b>	Room A
<b>Agents and Intelligent Methods</b> (Regular ISIC Session)	
Chair: Gazi, Veysel	Istanbul Kemerburgaz Univ.
Co-Chair: Lewis, Frank L.	Univ. of Texas at Arlington
08:30-08:50	ThA01.1
<i>Local Asymptotic Convergence of a Cycle-Free Persistent Formation of Double-Integrators in Three-Dimensional Space, <del>PDE</del></i>	
Oh, Kwang-Kyo	Gwangju Inst. of Science and Tech. (GIST)
Ahn, Hyo-Sung	Gwangju Inst. of Science and Tech. (GIST)
08:50-09:10	ThA01.2
<i>An Online Integral Reinforcement Learning Algorithm to Solve N-Player Nash Games, <del>PDE</del></i>	
Vamvoudakis, Kyriakos	Univ. of California, Santa Barbara
Lewis, Frank L.	Univ. of Texas at Arlington
09:10-09:30	ThA01.3
<i>The Unbalanced Linguistic Aggregation Operator for Evaluations of Alternatives on the Market, <del>PDE</del></i>	
Zou, Li	School of Computer and Information Tech. Liaoning Normal U
Pei, Zheng	School of Mathematic and Computer Engineering, XihuaUniversity
Karimi, Hamid Reza	Univ. of Agder
Shi, Peng	Univ. of Glamorgan
09:30-09:50	ThA01.4
<i>Stochastic Stability Analysis of the Particle Dynamics in the PSO Algorithm, <del>PDE</del></i>	
Gazi, Veysel	Istanbul Kemerburgaz Univ.
09:50-10:10	ThA01.5
<i>Finite-Time Adaptive Distributed Control for Double Integrator Leader-Agent Synchronisation, <del>PDE</del></i>	
Mahyuddin, Muhammad Nasiruddin	Univ. of Bristol
Herrmann, Guido	Univ. of Bristol
Na, Jing	ITER Organization
Lewis, Frank L.	Univ. of Texas at Arlington
10:10-10:30	ThA01.6
<i>A Dynamic T-S Fuzzy Systems Identification Algorithm Based on Sparsity Regularization, <del>PDE</del></i>	
Luo, Minnan	Tsinghua Univ.
Sun, Fuchun	Tsinghua Univ.
Liu, Hua-ping	Tsinghua Univ.
<b>ThA02</b>	Room B
<b>Control Applications I</b> (Regular CCA Session)	
Chair: Miklic, Damjan	Univ. of Zagreb
Co-Chair: Vinther, Kasper	Aalborg Univ.
08:30-08:50	ThA02.1
<i>A Collaborative PID and Intelligent Control Method for a Nonlinear Positioning System in Simulation, pp. 727-732.</i>	
Papoutsidakis, Michail	Tech. Inst. of Piraeus
Alafodimos, Constantinos	Tech. Inst. of Piraeus
Anthony, Pipe	Univ.
08:50-09:10	ThA02.2
<i>Wind Power Dispatch Control with Battery Energy Storage Using Model Predictive Control, pp. 733-738.</i>	
Khatamianfar, Arash	Univ. of New South Wales
Khalid, Muhammad	The Univ. of New South Wales
Savkin, Andrey	Univ. of New South Wales
Vassilios, Agelidis	Univ. of New South Wales
09:10-09:30	ThA02.3
<i>Comparing Control Strategies for EV and PHEV Fleets Providing Regulation Ancillary Services, pp. 739-744.</i>	

Ashouri, Araz	ETH Zurich
Benz, Michael	ETH Zurich
Guzzella, Lino	ETH Zurich
09:30-09:50	ThA02.4
<i>Performance Analysis of Operating Systems Schedulers Realised As Discrete-Time Controllers</i> , pp. 745-750.	
Leva, Alberto	Pol. di Milano
Maggio, Martina	Lund Univ.
Terraneo, Federico	Pol. di Milano, Dipartimento di Elettronica e Informazion
09:50-10:10	ThA02.5
<i>Dynamics Modeling and Hybrid Fuzzy Control for Pneumatic Cart-Pendulum-Seesaw System</i> , pp. 751-756.	
Lin, Jonqlan	Ching Yun Univ.
Chang, Julian	Ching Yun Univ.
Ding, You-Sheng	Ching Yun Univ.
10:10-10:30	ThA02.6
<i>Single Temperature Sensor Based Evaporator Filling Control Using Excitation Signal Harmonics</i> , pp. 757-763.	
Vinther, Kasper	Aalborg Univ.
Rasmussen, Henrik	Aalborg Univ.
Izadi-Zamanabadi, Roozbeh	Danfoss A/S
Stoustrup, Jakob	Aalborg Univ.
<b>ThA03</b>	Room C
<b>System Modeling and Numerical Analysis</b> (Regular CCA Session)	
Chair: Leva, Alberto	Pol. di Milano
Co-Chair: Poussot-Vassal, Charles	ONERA
08:30-08:50	ThA03.1
<i>Object-Oriented Simulation for Primary Reserve Scheduling in a Combined Cycle Power Plant</i> , pp. 764-769.	
Bartolini, Andrea	ACT solutions
Casella, Francesco	Pol. di Milano
Leva, Alberto	Pol. di Milano
Savoldelli, Luca	Former student at the Pol. di Milano
08:50-09:10	ThA03.2
<i>Exploiting Object-Oriented Modelling for Scalable-Detail Studies on Control for Energy Efficiency</i> , pp. 770-775.	
Bonvini, Marco	Pol. di Milano
Leva, Alberto	Pol. di Milano
09:10-09:30	ThA03.3
<i>Introduction to MORE: A MODEL REDUCTION TOOLBOX</i> , pp. 776-781.	
Poussot-Vassal, Charles	ONERA
Vuillemin, Pierre	Onera - The French Aerospace Lab.
09:30-09:50	ThA03.4
<i>Towards Automated Navigation of Deep Brain Stimulating Electrodes: Analyzing Neuronal Activity Near the Target</i> , pp. 782-787.	
Pedoto, Gilda	Univ. of Sannio
Santaniello, Sabato	Johns Hopkins Univ.
Fiengo, Giovanni	Univ. degli Studi del Sannio
Glielmo, Luigi	Univ. of Sannio
Hallett, Mark	JHU
Zhuang, Ping	JHU
Sarma, Sridevi	Johns Hopkins Univ.
09:50-10:10	ThA03.5
<i>Reduction of Discretization Errors of Dynamics with Variable Structure and Its Realization Using FPGA</i> , pp. 788-793.	
Kaneda, Yasuaki	Tokyo Inst. of Tech.
Sadahiro, Teruyoshi	Tokyo Denki Univ.
Yamakita, Masaki	Tokyo Inst. of Tech.



10:10-10:30	ThA03.6
<i>Digital Locking of a Three-Mirror Ring Cavity</i> , pp. 794-799.	
Kallapur, Abhijit	Univ. of New South Wales at the Australian Defence Force Academy
Schutte, Dirk	Leibniz Univ.
Petersen, Ian R.	Univ. of New South Wales at the Australian Defence Force Academy
Boyson, Toby	Univ. of New South Wales at the Australian Defence Force Academy
Huntington, Elanor	Univ. of New South Wales
Sayed Hassen, Sayed Z.	Univ. of New South Wales @ ADFA
Song, Hongbin	Univ. of New South Wales at the Australian Defence Force Academy
Heurs, Michele	Univ. of New South Wales

<b>ThA04</b>	Room D
<b>Aerospace Applications</b> (Regular CCA Session)	

Chair: Fechner, Uwe	Delft Univ. of Tech.
Co-Chair: Bishop, Adrian	Royal Inst. of Tech. (KTH)

08:30-08:50	ThA04.1
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<i>Design of a Distributed Kite Power Control System</i> , pp. 800-805.	
Fechner, Uwe	Delft Univ. of Tech.
Schmehl, Roland	Delft Univ. of Tech.

08:50-09:10	ThA04.2
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<i>Numerical Optimization Algorithm for Maximum Power Point Tracking in Wind Energy Conversion System</i> , pp. 806-811.	
Elnaggar, Mahmoud	Cairo Univ.
Abdel Fattah, Hossam A.	Cairo Univ.
Elshafei, Abdel Latif	Faculty of Engineering

09:10-09:30	ThA04.3
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<i>Robust Control and Limit Protection in Aircraft Gas Turbine Engines</i> , pp. 812-819.	
Kolmanovsky, Ilya V.	The Univ. of Michigan
Jaw, Link C.	Scientific Monitoring, Inc.
Merrill, Walt	Scientific Monitoring, Inc.
Tran Van, Hoang	Scientific Monitoring, Inc.

09:30-09:50	ThA04.4
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<i>Attitude Control of the Spacecraft with Unknown Inertia Tensor</i> , pp. 820-824.	
Surov, Maxim	Saint-Petersburg National Res. Univ. of Information Tech.
Pyrkin, Anton	Saint-Petersburg State Univ. of ITMO
Bobtsov, Alexey	Saint Petersburg National Res. Univ. of Information Tech.

09:50-10:10	ThA04.5
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<i>Control of Triangle Formations with a Mix of Angle and Distance Constraints</i> , pp. 825-830.	
Bishop, Adrian	Royal Inst. of Tech. (KTH)
Summers, Tyler	ETH Zurich
Anderson, Brian D.O.	Australian National Univ.

<b>ThA05</b>	Room E
<b>Linear Systems I</b> (Regular CCA Session)	

Chair: Matcovschi, Mihaela-Hanako	Tech. Univ. "Gheorghe Asachi" of Iasi
Co-Chair: Kuroiwa, Yohei	5972, 5972

08:30-08:50	ThA05.1
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<i>LPV Gray Box Identification of Industrial Robots for Control</i> , pp. 831-836.	
Knobloch, Andreas	German Aerospace Center
Saupe, Florian	German Aerospace Center (DLR)

08:50-09:10	ThA05.2
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<i>Fixed-Order LPV Controller Design for Rejection of a Sinusoidal Disturbance with Time-Varying Frequency</i> , pp. 837-842.	
Emedi, Zlatko	Ec. Pol. Federale de Lausanne
Karimi, Alireza	EPFL

09:10-09:30	ThA05.3
<i>Searching the Optimal Order for High Order Models - SISO Case</i> , pp. 843-848.	
Alves, Vitor Alex Oliveira	Maua Inst. of Technology
Juliani, Rodrigo C. G.	Univ. of Sao Paulo
Garcia, Claudio	Pol. School of The Univ. of Sao Paulo
09:30-09:50	ThA05.4
<i>A Nagumo Type Result for Linear Dynamical Systems</i> , pp. 849-854.	
Pastravanu, Octavian C.	Tech. Univ.
Matcovschi, Mihaela-Hanako	Tech. Univ. "Gheorghe Asachi" of Iasi
09:50-10:10	ThA05.5
<i>CRA Based Control of Non-Minimum Phase Fractional Order Systems</i> , pp. 855-858.	
Tabatabaei, Mohammad	Department of Electrical Engineering, Khomeinishahr Branch, Islamic
Haeri, Mohammad	Sharif Univ. of Tech.
<b>ThA06</b>	Room F
<b>Networked Control Systems</b> (Regular CCA Session)	
Chair: Fradkov, Alexander	Inst. for Problems of Mech. Eng.
Co-Chair: Taylor, James H.	Univ. of New Brunswick
08:30-08:50	ThA06.1
<i>Implementing Force-Feedback in a Telesurgery Environment, Using Parameter Estimation</i> , pp. 859-864.	
Hansen, Thomas	Aalborg Univ.
Henningsen, Claus Thy	Aalborg Univ.
Jens, Nielsen	Aalborg Univ.
Pedersen, Rasmus	Aalborg Univ.
Schwensen, John	Aalborg Univ.
Sivabalan, Senthuran	Aalborg Univ.
Larsen, Jesper Abildgaard	Aalborg Univ.
Leth, John	Aalborg Univ.
08:50-09:10	ThA06.2
<i>State Estimation of Complex Oscillatory System with Uniform Quantization under Data Rate Constraints</i> , pp. 865-870.	
Andrievsky, Boris	Inst. for Problems of Mechanical Engineering of RAS
Fradkov, Alexander	Inst. for Problems of Mech. Eng.
09:10-09:30	ThA06.3
<i>Safe and Secure Wireless Networked Control Systems</i> , pp. 871-878.	
Taylor, James H.	Univ. of New Brunswick
Akerberg, Johan	ABB AB Res. & Development
Ibrahim, Hazem Mohamed Saad	Enterasys Networks
Gidlund, Mikael	ABB AB Res. & Development
09:30-09:50	ThA06.4
<i>Optimal Self-Triggering for Nonlinear Systems Via Approximate Dynamic Programming</i> , pp. 879-884.	
Tolic, Domagoj	Univ. of New Mexico
Fierro, Rafael	Univ. of New Mexico
Ferrari, Silvia	Duke Univ.
09:50-10:10	ThA06.5
<i>Stability Analysis and Control Synthesis for a Network Control System Using a Nonlinear Network Transmission Model - a Switched System Approach</i> , pp. 885-890.	
Stefan, Octavian	"Pol. Univ. of Timisoara, Faculty of Automation and C
Codrean, Alexandru	"Pol. Univ. of Timisoara, Faculty of Automation and C
Dragomir, Toma-Leonida	"Pol. Univ. of Timisoara, Faculty of Automation and
10:10-10:30	ThA06.6
<i>Networked Control Strategies for a 3 Dimensional Crane</i> , pp. 891-896.	
Hanchevici, Adrian-Bogdan	Univ. Pol. of Bucharest
Necoara, Ion	Univ. Pol. Bucharest

<b>ThA07</b>	Room G
<b>Observer Design</b> (Regular CCA Session)	
Chair: Shafai, Bahram	Northeastern Univ.
Co-Chair: Murao, Toshiyuki	Advanced Inst. of Industrial Tech.
08:30-08:50	ThA07.1
<i>Piecewise Continuous Observer Design Used for Networked or Visual Servoing Control Systems</i> , pp. 897-902.	
Wang, Haoping	Nanjing Univ. of Science and Tech.
Christov, Nicolai	Lille Univ. of Science and Tech.
Vasseur, Christian	Univ. des Sciences et Tech. de Lille
08:50-09:10	ThA07.2
<i>Visual Motion Observer-Based Stabilizing Receding Horizon Control Via Obstacle Avoidance Navigation Function</i> , pp. 903-909.	
Murao, Toshiyuki	Advanced Inst. of Industrial Tech.
Kawai, Hiroyuki	Kanazawa Inst. of Tech.
Fujita, Masayuki	Tokyo Inst. of Tech.
09:10-09:30	ThA07.3
<i>Design of PI Observer for Bilinear Systems with Unknown Input Disturbance</i> , pp. 910-915.	
Shafai, Bahram	Northeastern Univ.
Cheng, Yongfang	Northeastern Univ.
09:30-09:50	ThA07.4
<i>Multi-Model Observer for Position Estimation and Object Contact Detection of a Flexible Robotic Actuator</i> , pp. 916-921.	
Huard, Benoit	CEA, LIST
Grossard, Mathieu	CEA LIST Interactive Robotics Lab.
Moreau, Sandrine	LAI-ESIP
Poinot, Thierry	Ec. Nationale Supérieure d'Ingénieurs de Poitiers
09:50-10:10	ThA07.5
<i>Observer Design for a Class of Wave Equation Driven by an Unknown Periodic Input</i> , pp. 922-926.	
Chauvin, Jonathan	IFP
<b>ThPL</b>	
<b>Bio-Inspired Flying Robots</b> (Plenary Session)	
Chair: Kovacic, Zdenko	Univ. of Zagreb
Co-Chair: Gazi, Veysel	Istanbul Kemerburgaz Univ.
11:00-12:00	ThPL.1
<i>Bio-Inspired Flying Robots*</i> .	
Floreano, Dario	
<b>ThB01</b>	Room A
<b>Coordination and Sensor Networks</b> (Regular ISIC Session)	
Chair: Ahn, Hyo-Sung	Gwangju Inst. of Science and Tech. (GIST)
Co-Chair: Anderson, Brian D.O.	Australian National Univ.
13:30-13:50	ThB01.1
<i>Dynamical Behavior, Cost and Magic Number in Average Consensus</i> , <del>pp. 927-932</del>	
Ji, Yiming	The Australian National Univ. Australia
Yu, CHANGBIN (Brad)	The Australian National Univ.
Anderson, Brian D.O.	Australian National Univ.
13:50-14:10	ThB01.2
<i>Managing Interference for Stabilization Over Wireless Channels</i> , <del>pp. 933-938</del>	
Bilal, Ibrahim	Royal Inst. of Tech. (KTH), Sweden
Zaidi, Ali Abbas	Royal Inst. of Tech. (KTH), Sweden
Oechtering, Tobias J.	Royal Inst. of Tech. (KTH)
Skoglund, Mikael	Royal Inst. of Tech.
14:10-14:30	ThB01.3

*Output Synchronization of Multi-Machine Power System Using Dissipative Hamiltonian Realization*, ~~10~~<sup>10</sup>

Lee, Seung-Ju GIST  
Ahn, Hyo-Sung Gwangju Inst. of Science and Tech. (GIST)

14:30-14:50 ThB01.4

*Kalman Filtering in Mobile Consensus Networks*, ~~10~~<sup>10</sup>

Haumann, Dominik Tech. Univ. Darmstadt  
Willert, Volker TU Darmstadt  
Wahrburg, Arne Tech. Univ. Darmstadt

14:50-15:10 ThB01.5

*Control of Inter-Agent Distances in Cyclic Polygon Formations*, ~~10~~<sup>10</sup>

Park, Myoung-Chul GIST  
Kim, Byeong-Yeon Gwangju Inst. of Science and Tech. (GIST)  
Oh, Kwang-Kyo Gwangju Inst. of Science and Tech. (GIST)  
Ahn, Hyo-Sung Gwangju Inst. of Science and Tech. (GIST)

**ThB02** Room B

**Control Applications II** (Regular CCA Session)

Chair: Jugo, Josu Univ. del Pais Vasco  
Co-Chair: Mercorelli, Paolo Leuphana Univ. of Lüneburg

13:30-13:50 ThB02.1

*Analyzing Control Challenges for Thermal Energy Storage in Foodstuffs*, pp. 956-961.

Hovgaard, Tobias Gybel Vestas Tech. R&D  
Larsen, Lars Finn Sloth Vestas A/S  
Skovrup, Morten Juel IPU Tech. Development  
Jorgensen, John Bagterp Tech. Univ. of Denmark

13:50-14:10 ThB02.2

*Control and Room Temperature Optimization of Energy Efficient Buildings*, pp. 962-967.

Sahyoun, Samir Univ. of Tennessee  
Nelson, Cale Univ. of Tennessee  
Djouadi, Seddik, M. Univ. of Tennessee  
Kurugunti, Teja Oak Ridge National Lab.

14:10-14:30 ThB02.3

*Event-Based Temperature Control System in a Penning-Type Ion Source*, pp. 968-973.

Eguiraun, Mikel ESSBilbao  
Jugo, Josu Univ. Basque Country, UPV/EHU

14:30-14:50 ThB02.4

*Nonlinear Control of an Electro-Magnetic Actuator under Highly Dynamic Disturbances*, pp. 974-979.

Schwarzgruber, Thomas Johannes Kepler Univ. Linz  
Trogmann, Hannes Johannes Kepler Univ. Linz  
Passenbrunner, Thomas Ernst Johannes Kepler Univ. Linz  
Fizek, Sebastian JKU Linz  
Dolovai, Peter Tech. Univ. of Vienna

14:50-15:10 ThB02.5

*A Switching Kalman Filter for Sensorless Control of a Hybrid Hydraulic Piezo Actuator Using MPC for Camless Internal Combustion Engines*, pp. 980-985.

Mercorelli, Paolo Leuphana Univ. of Lüneburg

15:10-15:30 ThB02.6

*An Optimal Control Scheme to Minimize Loads in Wind Farms*, pp. 986-990.

Soleimanzadeh, Maryam Aalborg Univ.  
Wisniewski, Rafal Aalborg Univ.

**ThB03** Room C

**System Identification** (Regular CCA Session)

Chair: Petrovic, Tamara Co-Chair: Rapaic, Milan R.	Univ. of Zagreb Univ. of Novi Sad
13:30-13:50	ThB03.1
<i>Closed-Loop Frequency-Based Identification Method for Wiener Type Plants with a Transport Delay Using a Relay Feedback</i> , pp. 991-995. Hanjalić, Selma Jurić, Željko	Univ. of sarajevo Faculty of Science, Univ. of sarajevo
13:50-14:10	ThB03.2
<i>Sequential Matrix Rank Minimization Approach to Signal Recovery Based on Subspace System Identification</i> , pp. 996-1001. Konishi, Katsumi Kawaguchi, Ryo	Kogakuin Univ. Kogakuin Univ.
14:10-14:30	ThB03.3
<i>An Adaptive Approximation Method for Hammerstein Systems Identification</i> , pp. 1002-1007. Cornoiu, Mihai Necoara, Ion	"Pol. Univ. of Bucharest Univ. Pol. Bucharest
14:30-14:50	ThB03.4
<i>Trapezoidal Rule for Numerical Evaluation of Fractional Order Integrals with Applications to Simulation and Identification of Fractional Order Systems</i> , pp. 1008-1013. Rapaic, Milan R. Pisano, Alessandro Jelicic, Zoran D.	Univ. of Novi Sad Univ. of Cagliari Univ. of Novi Sad
14:50-15:10	ThB03.5
<i>Identification of Distributed-Parameter Systems with Missing Data</i> , pp. 1014-1019. Hidayat, Zulkifli Nuñez, Alfredo Babuska, R. De Schutter, Bart	Delft Univ. of Tech. Delft Univ. of Tech. Delft Univ. of Tech. Delft Univ. of Tech.
<b>ThB04</b>	Room D
<b>Robotics II (Regular CCA Session)</b>	
Chair: Asano, Fumihiko Co-Chair: Kovacic, Zdenko	Japan Advanced Inst. of Science and Tech. Univ. of Zagreb
13:30-13:50	ThB04.1
<i>Active Damping Strategy for Robust Control of a Flexible-Joint Lightweight Robot</i> , pp. 1020-1025. Makarov, Maria Grossard, Mathieu Rodriguez-Ayerbe, Pedro Dumur, Didier	CEA LIST CEA LIST Interactive Robotics Lab. Supelec Ec. Superieure d'Electricite
13:50-14:10	ThB04.2
<i>Asymmetric Gait for Rimless Wheel with Knee Joints</i> , pp. 1026-1031. Harata, Yuji Asano, Fumihiko Ikeda, Takashi	Hiroshima Univ. Japan Advanced Inst. of Science and Tech. Hiroshima Univ.
14:10-14:30	ThB04.3
<i>Elliptical Motion Method for Robust Quadrupedal Locomotion</i> , pp. 1032-1038. Mutka, Alan Petric, Frano Reichenbach, Tomislav Kovacic, Zdenko	Faculty of EE&C Univ. of Zagreb, Faculty of EE&C Faculty of Electrical Engineering and Computing Univ. of Zagreb
14:30-14:50	ThB04.4
<i>Stability Principle Underlying Passive Dynamic Walking of Rimless Wheel</i> , pp. 1039-1044. Asano, Fumihiko	Japan Advanced Inst. of Science and Tech.
14:50-15:10	ThB04.5

<i>Emergence of Measurable Period of Double-Limb Support in Limit Cycle Walking with Knees</i> , pp. 1045-1050.		
Asano, Fumihiko	Japan Advanced Inst. of Science and Tech.	
Ohshima, Masataka		JAIST
15:10-15:30		ThB04.6
<i>Ycontrol - Open Architecture Controller for Yaskawa Motoman MH5 Robot</i> , pp. 1051-1056.		
Mihelj, Matjaz		Univ. of Ljubljana
Šlajpah, Sebastjan		Univ. of Ljubljana
Čepon, Peter		Univ. of Ljubljana
Munih, Marko		Univ. of Ljubljana
<b>ThB05</b>		Room E
<b>Nonlinear Systems I</b> (Regular CCA Session)		
Chair: Chesi, Graziano		Univ. of Hong Kong
Co-Chair: Purwar, Shubhi		M.N.National Inst. of Tech.
13:30-13:50		ThB05.1
<i>A New Robust Nonlinear Control Algorithm for the Regulation of Blood Glucose in Diabetic Patients</i> , pp. 1057-1061.		
Ozyetkin, Munevver Mine		Inonu Univ.
Nath, Nitendra		Takata
Tatlcioglu, Enver		Izmir Inst. of Tech.
Dawson, Darren M.		Clemson Univ.
13:50-14:10		ThB05.2
<i>Nonlinear Optimal Muscular Control of Human Posture</i> , pp. 1062-1067.		
Li, Yao		Univ. of Southern California
Levine, William S.		Univ. of Maryland
14:10-14:30		ThB05.3
<i>Robust Backstepping Control of Variable Speed Wind Turbines with Permanent Magnet Synchronous Generators</i> , pp. 1068-1073.		
Seker, Murat		Gebze Inst. of Tech.
Zergeroglu, Erkan		Gebze Inst. of Tech.
Tatlcioglu, Enver		Izmir Inst. of Tech.
14:30-14:50		ThB05.4
<i>State Observer Based Robust Feedback Linearization Controller for Twin Rotor MIMO System</i> , pp. 1074-1079.		
Pratap, Bhanu		M. N. National Inst. of Tech. Allahabad
Purwar, Shubhi		M.N.National Inst. of Tech.
14:50-15:10		ThB05.5
<i>The Finite-Time Stability of Perturbed Systems</i> , pp. 1080-1085.		
Zoghiami, Naim		Univ. of Evry
Beji, Lotfi		Univ. of Evry
Mlayeh, Rhouma		Pol. School of Tunisia
Abichou, Azgal		Ec. Pol. De Tunis
15:10-15:30		ThB05.6
<i>Robust Domain of Attraction: Computing and Controlling Estimates with Non-Polynomial Lyapunov Functions</i> , pp. 1086-1091.		
Chesi, Graziano		Univ. of Hong Kong

<b>ThB06</b>		Room F
<b>Power Systems</b> (Regular CCA Session)		
Chair: Chauvin, Jonathan		IFP
Co-Chair: Kapoor, Dhruv		Indian Inst. of Tech. Guwahati
13:30-13:50		ThB06.1
<i>A Feasibility Study into Prognostics for the Main Bearing of a Wind Turbine</i> , pp. 1092-1097.		
Butler, Shane		NUI Maynooth
O'Connor, Frank		ServusNet Informatics Ltd.
Farran, Des		ServusNet Informatics Ltd.

Ringwood, John V.	NUI Maynooth, Ireland
13:50-14:10	ThB06.2
<i>Building a Knowledge Base to Obtain the Maximum Power Point for a PV Panel</i> , pp. 1098-1103.	
Korodi, Adrian	"Pol. Univ. of Timisoara, Faculty of Automation and
14:10-14:30	ThB06.3
<i>Drivetrain Control Strategy for Wind Turbines</i> , pp. 1104-1110.	
Chauvin, Jonathan	IFP
14:30-14:50	ThB06.4
<i>Wind Speed Estimation for Wind Turbine Control</i> , pp. 1111-1117.	
Hafidi, Hafidi	IFP Energies Nouvelles
Chauvin, Jonathan	IFP
14:50-15:10	ThB06.5
<i>Coordinated Control of Multiple HVDC Links Using Backstepping</i> , pp. 1118-1123.	
Ersdal, Anne Mai	Norwegian Univ. of Science and Tech.
Imslund, Lars	Norwegian Univ. of Science and Tech.
Uhlen, Kjetil	Department of Electric Power Engineering, Norwegian Univ. o
15:10-15:30	ThB06.6
<i>Solar Panel Simulation Using Adaptive Control</i> , pp. 1124-1130.	
Kapoor, Dhruv	Indian Inst. of Tech. Guwahati
Sodhi, Paloma	Indian Inst. of Tech. Guwahati
Deb, Dipankar	Indian Inst. of Tech. Guwahati
<b>ThB07</b>	Room G
<b>Robust Control (Regular CCA Session)</b>	
Chair: Cockburn, Juan C.	Rochester Inst. of Tech.
Co-Chair: Azhmyakov, Vadim	CINVESTAV
13:30-13:50	ThB07.1
<i>LPV Tracking Control for Economic Management of Ecosystems</i> , pp. 1131-1135.	
Macksamie, Kevin	Rochester Inst. of Tech.
Cockburn, Juan C.	Rochester Inst. of Tech.
Wagner, Jeffrey	Rochester Inst. of Tech.
13:50-14:10	ThB07.2
<i>Robust Discrete-Time Consensus of Multi-Agent Systems with Uncertain Interaction</i> , pp. 1136-1141.	
Han, Dongkun	Univ. of Hong Kong
Chesi, Graziano	Univ. of Hong Kong
14:10-14:30	ThB07.3
<i>Robust Stability and <math>H_\infty</math> Control of Uncertain Piecewise Linear Switched Systems with Filippov Solutions</i> , pp. 1142-1147.	
Ahmadi, Mohamadreza	Univ. of Guilan
Mojallali, Hamed	Univ. of Guilan
Wisniewski, Rafal	Aalborg Univ.
Izadi-Zamanabadi, Roozbeh	Danfoss A/S
14:30-14:50	ThB07.4
<i>Robot PD Control with Parallel/serial Neural Network and Sliding Mode Compensations</i> , pp. 1148-1153.	
Hernandez, Debbie	CINVESTAV-IPN
Yu, Wen	CINVESTAV-IPN
Li, Xiaoou	CINVESTAV-IPN
14:50-15:10	ThB07.5
<i>A General Approach to Optimal Control Processes Associated with a Class of Discontinuous Control Systems: Applications to the Sliding Mode Dynamics</i> , pp. 1154-1159.	
Azhmyakov, Vadim	CINVESTAV
Basin, Michael V.	Autonomous Univ. of Nuevo Leon
Gil, Arturo	CINVESTAV

15:10-15:30	ThB07.6
<i>VSS Strategy in Energy Grid Control</i> , pp. 1160-1165.	
Jezernik, Karel	Univ. of Maribor

<b>ThC01</b>	Room A
<b>Intelligent and Networked Control Architectures</b> (Regular ISIC Session)	

Chair: Ahn, Hyo-Sung	Gwangju Inst. of Science and Tech. (GIST)
Co-Chair: Basin, Michael V.	Autonomous Univ. of Nuevo Leon

16:00-16:20	ThC01.1
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<i>Predictive Control of Networked Systems with Communication Delays</i> , <del>P</del> <del>E</del>	
Shi, Peng	Univ. of Glamorgan
Yang, Rongni	Univ. of Glamorgan
Basin, Michael V.	Autonomous Univ. of Nuevo Leon
Karimi, Hamid Reza	Univ. of Agder

16:20-16:40	ThC01.2
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<i>Multiresolution Wavelet-Based Approach to Identification of Modal Parameters of a Vehicle Full-Scale Crash Test</i> , <del>P</del> <del>E</del>	
Pawlus, Witold	Univ. of Agder
Karimi, Hamid Reza	Univ. of Agder
Robbersmyr, Kjell G.	Univ. of Agder

16:40-17:00	ThC01.3
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<i>Smart Valve Actuation for Dynamic Fluid Flow Control with Constraints in the Power Unit</i> , <del>P</del> <del>E</del>	
Zanardo, Gabriele	Johannes Kepler Univ. Linz
Passenbrunner, Thomas Ernst	Johannes Kepler Univ. Linz
Farrokhzad, Babak	HOERBIGER Automatisierungstechnik Holding GmbH
Martínez, Carlos	Hoerbiger Automatisierungstechnik
Groedl, Markus	HOERBIGER Automatisierungstechnik Holding GmbH
Del Re, Luigi	Johannes Kepler Univ. Linz

17:00-17:20	ThC01.4
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<i>Gesture Ontology for Informing Service-Oriented Architectures</i> , <del>P</del> <del>E</del>	
Chera, Catalin Marian	Pol. Univ. of Bucharest
Tsai, Wei-Tek	Arizona State Univ.
Vatavu, Radu-Daniel	Univ. Stefan cel Mare of Suceava

17:20-17:40	ThC01.5
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<i>Bio-Insect and Artificial Robot Interaction Using Cooperative Reinforcement Learning</i> , <del>P</del> <del>E</del>	
Son, Ji-Hwan	GIST
Ahn, Hyo-Sung	Gwangju Inst. of Science and Tech. (GIST)

17:40-18:00	ThC01.6
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<i>Towards a Semantically Enhanced Control Architecture</i> , <del>P</del> <del>E</del>	
M. Milis, Georgios	Univ. of Cyprus
Panayiotou, Christos	Univ. of Cyprus
Polycarpou, Marios M.	Univ. of Cyprus

<b>ThC02</b>	Room B
<b>Linear Systems II</b> (Regular ISIC Session)	

Chair: Wahrburg, Arne	Tech. Univ. Darmstadt
Co-Chair: Freeman, Christopher T.	Univ. of Southampton

16:00-16:20	ThC02.1
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<i>Robust Fault Isolation Using Dynamically Extended Observers</i> , <del>P</del> <del>E</del>	
Wahrburg, Arne	Tech. Univ. Darmstadt
Adamy, Jürgen	Tech. Univ. Darmstadt

16:20-16:40	ThC02.2
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<i>Observer-Based Fault Isolation for Statically Non-Isolable Linear Systems</i> , <del>P</del> <del>E</del>	
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Wahrburg, Arne	Tech. Univ. Darmstadt
Adamy, Jürgen	Tech. Univ. Darmstadt
16:40-17:00	ThC02.3
<i>Robust Higher Order Repetitive Control Applied to Human Tremor Suppression, PDE</i>	
Verstappen, Ron	Eindhoven Univ. of Tech.
Freeman, Christopher T.	Univ. of Southampton
Rogers, Eric	Univ. of Southampton
Sampson, Trish	Univ. of Southampton
Burridge, Jane	Univ. of Southampton
17:00-17:20	ThC02.4
<i>Assessment of Gradient-Based Point-To-Point ILC for MIMO Systems with Varying Interaction, PDE</i>	
Dinh, Thanh	Southampton Univ.
Freeman, Christopher T.	Univ. of Southampton
Lewin, Paul L.	Univ. of Southampton
Tan, Ying	The Univ. of Melbourne
17:20-17:40	ThC02.5
<i>Two Procedures with Randomized Controls for the Parameters' Confidence Region of Linear Plant under External Arbitrary Noise, PDE</i>	
Amelin, Konstantin	Sankt-Petersburg State Univ.
Amelina, Natalia	Saint-Petersburg State Univ.
Granichin, Oleg N.	Sankt-Petersburg State Univ.
Granichina, Olga	Saint Petersburg State Univ.
17:40-18:00	ThC02.6
<i>Indirect M-MRAC for Systems with Time Varying Parameters and Bounded Disturbances, PDE</i>	
Stepanyan, Vahram	NASA Ames Res. Center
Krishnakumar, Kalmanje	NASA Ames Res. Center

**Technical Program for Friday October 5, 2012**

<b>FrA01</b>	Room A
<b>Advances in the Theory and Application of Repetitive Processes and Iterative Learning Control (Invited ISIC Session)</b>	
Chair: Moore, Kevin L.	Colorado School of Mines
Co-Chair: Ahn, Hyo-Sung	Gwangju Inst. of Science and Tech. (GIST)
Organizer: Moore, Kevin L.	Colorado School of Mines
Organizer: Ahn, Hyo-Sung	Gwangju Inst. of Science and Tech. (GIST)
08:30-08:50	FrA01.1
<i>Adaptive Reduced-Order Control of Discrete Repetitive Processes with Iteration-Varying Reference Signals (I),</i> <del>PDE</del>	
Omer, El-Sharif	Colorado School of Mines
Moore, Kevin L.	Colorado School of Mines
08:50-09:10	FrA01.2
<i>Optimal Iterative Learning Control with Uncertain Reference Points (I),</i> <del>PDE</del>	
Son, Tong Duy	KULeuven
Ahn, Hyo-Sung	Gwangju Inst. of Science and Tech. (GIST)
09:10-09:30	FrA01.3
<i>Iterative Learning Control under Parameter Uncertainty and Failures (I),</i> <del>PDE</del>	
Pakshin, Pavel	Nizhny Novgorod State Tech. Univ.
Emelianova, Julia	Arzamas Pol. Inst. of R.E. Alekseev Nizhny Novgorod S
Galkowski, Krzysztof	Univ. of Zielona Gora
Rogers, Eric	Univ. of Southampton
09:30-09:50	FrA01.4
<i>Iterative Learning Control with Basis Functions for Media Positioning in Scanning Inkjet Printers (I),</i> <del>PDE</del>	
Bolder, Joost	Eindhoven Univ. of Tech.
Lemmen, Bas Pieter	Tech. Univ. of Eindhoven
Koekebakker, Sjik Holger	Océ Tech. B.V.
Oomen, Tom	Eindhoven Univ. of Tech.
Bosgra, Okko H.	Delft Univ. of Tech.
Steinbuch, Maarten	Eindhoven Univ. of Tech.
09:50-10:10	FrA01.5
<i>A New Robust Delay-Variable Repetitive Controller with Application to Media Transport in a Printer (I),</i> <del>PDE</del>	
Bajonero Canonico, Ezequiel	Eindhoven Univ. of Tech.
van der Laan, Ewout	Tech. Univ. Eindhoven
Koekebakker, Sjik Holger	Océ Tech. B.V.
Steinbuch, Maarten	Eindhoven Univ. of Tech.
10:10-10:30	FrA01.6
<i>ILC for FES-Based Stroke Rehabilitation of Hand and Wrist (I),</i> <del>PDE</del>	
Soska, Anna	Univ. of Southampton
Freeman, Christopher T.	Univ. of Southampton
Rogers, Eric	Univ. of Southampton
<b>FrA02</b>	Room B
<b>Control Applications III (Regular CCA Session)</b>	
Chair: Pavkovic, Danijel	Faculty of Mechanical Engineering And Naval Architecture
Co-Chair: Tu, Jia-Ying	National Tsing Hua Univ.
08:30-08:50	FrA02.1
<i>Closed-Loop Evaluation and Redesign of Decentralized PI Controllers Satisfying Classical Robustness Measures, pp. 1273-1278.</i>	
Acioli Junior, George	Univ. Federal de Campina Grande
Rezende Barros, Pericles	UFPB
08:50-09:10	FrA02.2

<i>Performance Improvement of Servo Drives with Mechanical Elasticity Via Extended Acceleration Feedback</i> , pp. 1279-1284.		
Makkapati, Vamsi Prakash		Univ. of Klagenfurt
Reichhartinger, Markus		Klagenfurt Univ.
Horn, Martin		Klagenfurt Univ.
09:10-09:30		FrA02.3
<i>The Averaging Method for Control Design and Stability Analysis of Practical Switched Systems</i> , pp. 1285-1290.		
Pedicini, Carmen		Univ. of Sannio
Iannelli, Luigi		Univ. of Sannio in Benevento
Vasca, Francesco		Univ. of Sannio
09:30-09:50		FrA02.4
<i>A Numerical-Substructure-Based Approach for the Synthesis and Control of Isolated Structure Dynamically Substructured Systems</i> , pp. 1291-1296.		
Tu, Jia-Ying		National Tsing Hua Univ.
Yang, Hao-Ting		National Tsing Hua Univ.
Lin, Pei-Yang	Natinal Center for Res. on Earthquake Engineering	
Jiang, Jheng-Ying		National Tsing Hua Univ.
09:50-10:10		FrA02.5
<i>PD Control with Gain-Scheduling Depending on the Distance for a 3-Dof Network Based Haptic System</i> , pp. 1297-1303.		
Liacu, Bogdan		Supélec
Andriot, Claude		CEA
Dumur, Didier		Ec. Supérieure d'Electricité
Niculescu, Silviu-Iulian		CNRS-Supélec
Colledani, Frédéric		CEA, LIST
Boucher, Patrick		Ec. Supérieure d'Electricité
10:10-10:30		FrA02.6
<i>Locating Leaks &amp; Dumps in Open Channels with Minimal Sensing</i> , pp. 1304-1309.		
Nasir, Hasan		LUMS School of Science & Engineering
Muhammad, Abubakr		Lahore Univ. of Management Sciences
<b>FrA03</b>		Room C
<b>Adaptive Control</b> (Regular CCA Session)		
Chair: Cho, Kwanghyun		Korea Advanced Inst. of Science and Tech.
Co-Chair: Wu, Hansheng		Prefectural Univ. of Hiroshima
08:30-08:50		FrA03.1
<i>Adaptive Asymptotic Tracking Control of Strict-Feedback Nonlinear Discrete-Time System with Periodic Time Delay</i> , pp. 1310-1315.		
Yang, Chenguang		Univ. of Plymouth
Xu, Bin		Northwestern Pol. Univ.
Ma, Hongbin		Beijing Inst. of Tech.
Culverhouse, Phil		Plymouth Univ.
08:50-09:10		FrA03.2
<i>A Class of Adaptive Robust Controllers with Simpler Structure and Its Application to Uncertain Ecological Systems with Time-Delay</i> , pp. 1316-1321.		
Wu, Hansheng		Prefectural Univ. of Hiroshima
09:10-09:30		FrA03.3
<i>The Integrated Vehicle Longitudinal Control System for ABS and TCS</i> , pp. 1322-1327.		
Cho, Kwanghyun		Korea Advanced Inst. of Science and Tech.
Kim, Jinsung		KAIST
Choi, Seibum Ben		KAIST
09:30-09:50		FrA03.4
<i>Time Varying Attitude Control Strategies for the Myriade Satellites</i> , pp. 1328-1333.		
Luzi, Alexandru-Razvan		ONERA, The French Aerospace Lab.
Biannic, Jean-Marc		ONERA
Peaucelle, Dimitri		LAAS-CNRS, Univ. de Toulouse

Mignot, Jean	CNES
09:50-10:10	FrA03.5
<i>Position Funnel Control with Linear Internal Model</i> , pp. 1334-1339.	
Hackl, Christoph M.	Tech. Univ. of Munich
Kennel, Ralph	Tech. Univ. München
10:10-10:30	FrA03.6
<i>Predictive Adaptive Temperature Control in a Solar Furnace for Material Stress Tests</i> , pp. 1340-1345.	
Costa, B.Andrade	Inst. Superior Tecnico - Tech. Univ. of Lisbon
Lemos, Joao M.	Inesc-id
<b>FrA04</b>	Room D
<b>Robotics III (Regular CCA Session)</b>	
Chair: Kawai, Hiroyuki	Kanazawa Inst. of Tech.
Co-Chair: Ahmad, Waqqas	Univ. of New South Wales, Kensington Campus
08:30-08:50	FrA04.1
<i>Open-Loop Control for 2DOF Robot Manipulators with Antagonistic Bi-Articular Muscles</i> , pp. 1346-1351.	
Sano, Keisuke	Kanazawa Inst. of Tech.
Kawai, Hiroyuki	Kanazawa Inst. of Tech.
Murao, Toshiyuki	Advanced Inst. of Industrial Tech.
Fujita, Masayuki	Tokyo Inst. of Tech.
08:50-09:10	FrA04.2
<i>A Simple Asymptotically Optimal Randomized Algorithm for Decentralized Blanket Coverage Self-Deployment of Mobile Robotic Sensor Networks</i> , pp. 1352-1355.	
Savkin, Andrey	Univ. of New South Wales
Javed, Faizan	Res. LTD
Matveev, Alexey S.	St.Petersburg Univ.
Xi, Zhiyu	Univ. of New South Wales
09:10-09:30	FrA04.3
<i>Force Controlled Knife-Grinding with Industrial Robot</i> , pp. 1356-1361.	
Sornmo, Olof	Lund Univ.
Robertsson, Anders	LTH, Lund Univ.
Wanner, Anders	HTW
09:30-09:50	FrA04.4
<i>Gait Generation on Periodically Unlevel Grounds for the Compass-Type Biped Robot Via Discrete Mechanics</i> , pp. 1362-1368.	
Kai, Tatsuya	Tokyo Univ. of Science
Shintani, Takeshi	Kyocera Corp.
<b>FrA05</b>	Room E
<b>Nonlinear Systems II (Regular CCA Session)</b>	
Chair: Lin, Chun-Liang	National Chung Hsing Univ.
Co-Chair: Palunko, Ivana	Univ. of New Mexico
08:30-08:50	FrA05.1
<i>A Class of Globally Stabilising Controllers for the Control of Wave Energy Devices for Potable Water Production</i> , pp. 1369-1373.	
Lekka, Angeliki	Univ. of Leicester
Turner, Matthew C.	Univ. of Leicester
Ringwood, John V.	NUI Maynooth, Ireland
08:50-09:10	FrA05.2
<i>New Hamiltonian Formulation of Rheonomous Affine Constraints Based on the Rheonomous Bracket</i> , pp. 1374-1381.	
Kai, Tatsuya	Tokyo Univ. of Science
09:10-09:30	FrA05.3
<i>Output Regulation of Nonlinear Systems Using LPV Error Systems</i> , pp. 1382-1387.	
Yashiro, Yusuke	Tokyo Inst. of Tech.

Limkul, Suthira Yamakita, Masaki	Tokyo Inst. of Tech. Tokyo Inst. of Tech.
09:30-09:50	FrA05.4
<i>Explicit Formulas for the State Coordinates in Nonlinear MIMO Realization Problem on Homogeneous Time Scales</i> , pp. 1388-1393.	
Belikov, Juri Kotta, Ülle Tonso, Maris	Tallinn Univ. of Tech. Inst. of Cybernetics at TUT Inst. of Cybernetics at Tallinn Univ. of
09:50-10:10	FrA05.5
<i>Controller Structure for Plants with Combined Saturation and Deadzone/backlash</i> , pp. 1394-1399.	
Rodriguez Liñan, Maria del Carmen Heath, William Paul	Univ. of Manchester Univ. of Manchester
10:10-10:30	FrA05.6
<i>Time-Delay Compensation Using Nonlinear Extended Network Disturbance</i> , pp. 1400-1404.	
Lin, Chun-Liang Ping-Min, Hsu	National Chung Hsing Univ. National Chung Hsing Univ.
<b>FrA06</b>	Room F
<b>Predictive Control I (Regular CCA Session)</b>	
Chair: Spinu, Veaceslav Co-Chair: Tabatabaei, Mohammad	Eindhoven Univ. of Tech. Department of Electrical Engineering, Khomeinishahr Branch, Islamic Azad Univ.
08:30-08:50	FrA06.1
<i>A Parallel Algorithm for Implicit Model Predictive Control with Barrier Function</i> , pp. 1405-1410.	
Baccari, Silvio Iannelli, Luigi Vasca, Francesco	Univ. of Sannio Univ. of Sannio in Benevento Univ. of Sannio
08:50-09:10	FrA06.2
<i>A Differential Flatness Based Model Predictive Control Approach</i> , pp. 1411-1416.	
Kandler, Christoph Ding, Steven X. Koenings, Tim Weinhold, Nick Schultalbers, Matthias	Univ. of Duisburg-Essen Univ. of Duisburg-Essen Univ. of Duisburg-Essen IAV GmbH IAV GmbH, Ingenieurgesellschaft Auto und Verkehr
09:10-09:30	FrA06.3
<i>FPGA Implementation of Optimal and Approximate Model Predictive Control for a Buck-Boost DC-DC Converter</i> , pp. 1417-1423.	
Spinu, Veaceslav Oliveri, Alberto Lazar, Mircea Storace, Marco	Eindhoven Univ. of Tech. Univ. of Genoa Eindhoven Univ. of Tech. Univ. of Genoa
09:30-09:50	FrA06.4
<i>Preview-Based Asymmetric Load Reduction of Wind Turbines</i> , pp. 1424-1429.	
Madsen, Mathias Bækdal Filsø, Jakob Soltani, Mohsen	Aalborg Univ. Aalborg Univ. Aalborg Univ.
09:50-10:10	FrA06.5
<i>Control of Gas Metal Arc Welding by an Extended DMC</i> , pp. 1430-1434.	
Sartipzadeh, Hossein Haeri, Mohammad	Department of Electrical Engineering, Sharif Univ. of Techno Sharif Univ. of Tech.
10:10-10:30	FrA06.6
<i>Parallel Model Predictive Control with Feedback Compensation</i> , pp. 1435-1440.	
Sumioka, Tadashi Yamakita, Masaki	tokyo Inst. of Tech. Tokyo Inst. of Tech.

<b>FrA07</b>	Room G
<b>Stochastic and Uncertain Systems</b> (Regular CCA Session)	
Chair: Duncan, Tyrone E.	Univ. of Kansas
Co-Chair: Petersen, Ian	Univ. of New South Wales at the Australian Defence Force Acad.
08:30-08:50	FrA07.1
<i>A Stochastic Control Problem in the Two-Sphere</i> , pp. 1441-1444.	
Duncan, Tyrone E.	Univ. of Kansas
Pasik-Duncan, Bozena	Univ. of Kansas
08:50-09:10	FrA07.2
<i>Quantum Robust Stability of a Small Josephson Junction in a Resonant Cavity</i> , pp. 1445-1448.	
Petersen, Ian R.	Univ. of New South Wales at the Australian Defence Force Acad.
09:10-09:30	FrA07.3
<i>Uncertainty Quantification for Stochastic Nonlinear Systems Using Perron-Frobenius Operator and Karhunen-Loeve Expansion</i> , pp. 1449-1454.	
Dutta, Parikshit	INRIA Rhone Alpes
Halder, Abhishek	Texas A&M Univ.
Bhattacharya, Raktim	Texas A&M
09:30-09:50	FrA07.4
<i>LMI-Based Design of Multichannel Anisotropic Suboptimal Controllers with Application to Control of Gyrostabilized Platform</i> , pp. 1455-1460.	
Tchaikovsky, Michael	Inst. of Control Sciences of Russian Acad. of Sciences
Kurdyukov, A.P.	Russian Acad. of Sciences
Nikiforov, Vitaliy M.	Federal State Unitary Acad. Pilyugin Scientific-Production
09:50-10:10	FrA07.5
<i>The Tracking Control for a Kind of Hybrid Systems Based on the Double Regulation Control Mechanism</i> , pp. 1461-1466.	
Wang, Wei	Information School, Renmin Univ. of China
<b>FrMPL</b>	
<b>Predicting Epileptic Episodes? a Systems &amp; Information Theoretic Approach</b> (Plenary Session)	
Chair: Rogers, Eric	Univ. of Southampton
Co-Chair: Chesi, Graziano	Univ. of Hong Kong
11:00-12:00	FrMPL.1
<i>Predicting Epileptic Episodes? a Systems &amp; Information Theoretic Approach*</i> .	
Mareels, Iven	The Univ. of Melbourne
<b>FrAPL</b>	
<b>Control of Molecular Purity, Crystal Structure, and Particle Size Distribution in Pharmaceutical Crystallization</b> (Plenary Session)	
Chair: Zhang, Ji-Feng	Chinese Acad. of Sciences
Co-Chair: Sauter, Dominique D.J.	Lorraine Univ.
13:30-14:30	FrAPL.1
<i>Control of Molecular Purity, Crystal Structure, and Particle Size Distribution in Pharmaceutical Crystallization*</i> .	
Braatz, Richard D.	Massachusetts Inst. of Tech.
<b>FrB01</b>	
<b>Controller Design</b> (Regular CCA Session)	
Chair: Paszke, Wojciech	Univ. of Zielona Gora
Co-Chair: Szabo, Zoltan	Hungarian Acad. of Sciences
15:00-15:20	FrB01.1
<i>Robust Output Feedback Hinf Control Synthesis with Pole Placement for Offshore Wind Turbine Systems: An LMI Approach</i> , pp. 1467-1472.	
Bakka, Tore	Univ. of Agder

Karimi, Hamid Reza	Univ. of Agder
15:20-15:40	FrB01.2
<i>Design of a Robust Internal-Loop Compensator of Clutch Positioning Systems</i> , pp. 1473-1478.	
Kim, Jinsung	KAIST
Choi, Seibum Ben	KAIST
Lee, Heerak	Valeo Pyeong Hwa
Koh, Jaeuk	Valeo Pyeong Hwa
15:40-16:00	FrB01.3
<i>Repetitive Process Based Iterative Learning Control Design Using Frequency Domain Analysis</i> , pp. 1479-1484.	
Paszke, Wojciech	Univ. of Zielona Gora
Galkowski, Krzysztof	Univ. of Zielona Gora
Rogers, Eric	Univ. of Southampton
16:00-16:20	FrB01.4
<i>Qlpv Design Method for Multi-Objective Vehicle Control</i> , pp. 1485-1490.	
Szabo, Zoltan	Hungarian Acad. of Sciences
Gaspar, Peter	Computer & Automation Inst. of HAS
Bokor, Jozsef	MTA SZTAKI Hungarian Acad. of Sciences
<b>FrB02</b>	Room B
<b>Control Applications IV</b> (Regular CCA Session)	
Chair: Fekih, Afef	Univ. of Louisiana at Lafayette
Co-Chair: Mutka, Alan	Faculty of EE&C
15:00-15:20	FrB02.1
<i>A Fault Tolerant Control Design for Automatic Steering Control of Ground Vehicles</i> , pp. 1491-1496.	
Fekih, Afef	Univ. of Louisiana at Lafayette
15:20-15:40	FrB02.2
<i>A Swarm Aggregation Algorithm for Multi-Robot Systems Based on Local Interaction</i> , pp. 1497-1502.	
Priolo, Attilio	Univ. degli Studi Roma Tre
Gasparri, Andrea	Univ. of "Roma Tre"
Ulivi, Giovanni	Univ. di Roma Tre
15:40-16:00	FrB02.3
<i>A Strategy for Target Capturing with Collision Avoidance for Non-Holonomic Robots with Sector Vision and Range-Only Measurements</i> , pp. 1503-1508.	
Zakhar'eva, Asay	Department of Mathematics and Mechanics, Saint Petersburg Univ.
Matveev, Alexey S.	St.Petersburg Univ.
Hoy, Michael	Univ. of New South Wales
Savkin, Andrey	Univ. of New South Wales
16:00-16:20	FrB02.4
<i>Exact Air Charge Feed Forward Control of a Turbocharged SI Engine</i> , pp. 1509-1515.	
Beckmann, Robert	Univ. of Rostock
Drewelow, Wolfgang	Univ. Rostock, Inst. für Automatisierungstechnik
Lampe, Bernhard P.	Univ. of Rostock
Dünow, Peter	Univ. of Wismar
Weinhold, Nick	IAV GmbH
Schultalbers, Matthias	IAV GmbH, Ingenieurgesellschaft Auto und Verkehr
16:20-16:40	FrB02.5
<i>Decentralized Control of Heavy Haul Trains with Input Constraints and Communication Delays</i> , pp. 1516-1521.	
Gao, Kai	Central south Univ. China
Huang, Zhiwu	Central South Univ.
Wang, Jing	Bethune-Cookman Univ.
Peng, Jun	Central South Univ.
Liu, Weirong	Central South Univ.
16:40-17:00	FrB02.6

*Efficient Control of Vehicles in Congested Traffic Using Model Predictive Control*, pp. 1522-1527.

Kamal, Md. Abdus Samad	The Univ. of Tokyo
Imura, Jun-ichi	Tokyo Inst. of Tech.
Ohata, Akira	Toyota Motor Corp.
Hayakawa, Tomohisa	Tokyo Inst. of Tech.
Aihara, Kazuyuki	Univ. of Tokyo

<b>FrB03</b>	Room C
<b>Adaptive Control and Identification (Regular CCA Session)</b>	

Chair: Zhao, Yanlong	Acad. of Mathematics and Systems Science, Chinese Academy of Sciences
Co-Chair: Pyrkin, Anton	Saint-Petersburg State Univ. of ITMO

15:00-15:20	FrB03.1
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*Output Controller for Uncertain Nonlinear Systems with Structural, Parametric, and Signal Disturbances*, pp. 1528-1533.

Pyrkin, Anton	Saint-Petersburg State Univ. of ITMO
Bobtsov, Alexey	Saint Petersburg National Res. Univ. of Information Tec
Kolyubin, Sergey	St. Petersburg National Res. Univ. ITMO
Faronov, Maxim	Saint Petersburg State Univ. of Information Technologies Mec

15:20-15:40	FrB03.2
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*Adaptive LFT Control of a Transport Aircraft on the Lateral Axis*, pp. 1534-1540.

Oudin, Simon	AIRBUS Toulouse
Ferreres, Gilles	ONERA-CERT / DCSD
Puyou, Guilhem	Airbus France
Mouyon, Philippe	ONERA- Toulouse

15:40-16:00	FrB03.3
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*Recursive Model Free Control of Variable Speed Wind Turbine Systems*, pp. 1541-1546.

Wang, Haoping	Nanjing Univ. of Science and Tech.
Pintea, Andreea	Univ. "Pol. of Bucharest
Christov, Nicolai	Lille Univ. of Science and Tech.
Borne, Pierre	Ec.
Popescu, Dumitru	Univ. "Pol. of Bucharest

16:00-16:20	FrB03.4
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*A Comparative Evaluation of Adaptive and Non-Adaptive Sliding Mode, LQR and PID Control for Platform Stabilization*, pp. 1547-1552.

Akgül, Emre	Middle East Tech. Univ.
Mutlu, Mehmet	Middle East Tech. Univ.
Saranlı, Afşar	METU
Yiğit, Yazıcıoğlu	METU

16:20-16:40	FrB03.5
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*Design of Excitation Signals for the Closed Loop Identification of Industrial Robots*, pp. 1553-1560.

Saupe, Florian	German Aerospace Center (DLR)
Knoblach, Andreas	German Aerospace Center

16:40-17:00	FrB03.6
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*System Identification with Multi-Threshold Quantization Observations and Bounded Persistent Excitation*, pp. 1561-1566.

Guo, Jin	Chinese Acad. of Sciences
Zhao, Yanlong	Acad. of Mathematics and Systems Science, Chinese Academy of Scienc
Zhang, Ji-Feng	Chinese Acad. of Sciences

<b>FrB04</b>	Room D
<b>Mobile Robots (Regular CCA Session)</b>	

Chair: Michalek, Maciej	Poznan Univ. of Tech.
Co-Chair: Bascarevic, Nenad	Univ. of Belgrade, Faculty of Electrical Engineering, Signals & Systems Department



15:00-15:20	FrB04.1
<i>A Reactive Algorithm for Safe Navigation of a Wheeled Mobile Robot among Moving Obstacles</i> , pp. 1567-1571.	
Savkin, Andrey	Univ. of New South Wales
Wang, Chao	Univ. of New South Wales
15:20-15:40	FrB04.2
<i>Active and Passive Straightening Control Strategies for Non-Standard N-Trailer Vehicles</i> , pp. 1572-1577.	
Michalek, Maciej	Poznan Univ. of Tech.
15:40-16:00	FrB04.3
<i>Control Law for Multiple Obstacle Avoidance of Four-Wheeled Vehicle with Limited Steering Angle by Multilayer Minimum Projection Method</i> , pp. 1578-1583.	
Nonaka, Ryo	Hokkaido Univ.
Yamashita, Yuh	Hokkaido Univ.
Tsubakino, Daisuke	Hokkaido Univ.
16:00-16:20	FrB04.4
<i>Tip-Over Stability Examination of a Compliant Anthropomimetic Mobile Robot</i> , pp. 1584-1589.	
Bascarevic, Nenad	Univ. of Belgrade, Faculty of Electrical Engineering
Jovanovic, Kosta	Univ. of Belgrade, Faculty of Electrical Engineering
Milosavljevic, Predrag	Univ. of Belgrade, Faculty of Electrical Engineering, Signal
Potkonjak, Veljko	Univ. of Belgrade, Faculty of Electrical Engineering, Signal
Holland, Owen	Univ. of Sussex, School of Informatics
16:20-16:40	FrB04.5
<i>Navigation Function of Mobile Robots for Formation Driving</i> , pp. 1590-1595.	
Yamada, Masahiro	Hokkaido Univ.
Yamashita, Yuh	Hokkaido Univ.
Tsubakino, Daisuke	Hokkaido Univ.
16:40-17:00	FrB04.6
<i>Mobile Manipulation with a Kinematically Redundant Manipulator for a Pick-And-Place Scenario</i> , pp. 1596-1602.	
Berntorp, Karl	Lund Univ.
Robertsson, Anders	LTH, Lund Univ.
Arzen, Karl-Erik	Lund Inst. of Tech.
<b>FrB05</b>	Room E
<b>Nonlinear Systems III</b> (Regular CCA Session)	
Chair: De Keyser, Robin M.C.	Univ. of Gent
Co-Chair: Gomma, H. W.	Univ. of Helwan
15:00-15:20	FrB05.1
<i>Digital PID Type-III Control Loop Design Via the Symmetrical Optimum Criterion</i> , pp. 1603-1608.	
Papadopoulos, Konstantinos G.	ABB Ltd. Switzerland, Department of Medium Voltage Drives
Tselepis, Nikolaos D.	Aristotle Univ. of Thessaloniki, Department of Electrical &
Margaris, Nikolaos	Aristotle Univ. of Thessaloniki
15:20-15:40	FrB05.2
<i>Analysis of the Limit Cycles in the PI Control of IPD Processes with Send-On-Delta Sampling</i> , pp. 1609-1614.	
Chacón Sombria, Jesús	UNED
Sánchez Moreno, José	UNED
Visioli, Antonio	Univ. of Brescia
Dormido, Sebastián	UNED
15:40-16:00	FrB05.3
<i>Spread Spectrum and Noise Rejection with Application to ILC Controlled Systems</i> , pp. 1615-1620.	
Gomma, H. W.	Univ. of Helwan
Allam, Aly	Helwan Univ.
16:00-16:20	FrB05.4
<i>A Specifications Based PID Autotuner</i> , pp. 1621-1626.	
De Keyser, Robin M.C.	Univ. of Gent

Dutta, Abhishek	Ghent Univ.
Hernandez, Andres	Ghent Univ.
Ionescu, Clara	Ghent Univ.
16:20-16:40	FrB05.5
<i>Utilization of Excitation Signal Harmonics for Control of Nonlinear Systems</i> , pp. 1627-1632.	
Vinther, Kasper	Aalborg Univ.
Rasmussen, Henrik	Aalborg Univ.
Izadi-Zamanabadi, Roozbeh	Danfoss A/S
Stoustrup, Jakob	Aalborg Univ.
16:40-17:00	FrB05.6
<i>Outline of a Fault Diagnosis System for a Large-Scale Board Machine (I)</i> , pp. 1633-1639.	
Jamsa-jounela, Sirkka-liisa	Aalto Univ.
Tikkala, Vesa-Matti	Aalto Univ.
Zakharov, Alexey	Aalto Univ.
Pozo Garcia, Octavio	Aalto Univ.
<b>FrB06</b>	Room F
<b>Predictive Control II (Regular CCA Session)</b>	
Chair: Rauh, Andreas	Univ. of Rostock
Co-Chair: Laszczyk, Piotr	Institute of Automatic Control, Silesian Univ.
15:00-15:20	FrB06.1
<i>Sensitivity Analysis for Systems of Differential-Algebraic Equations with Applications to Predictive Control and Parameter Estimation</i> , pp. 1640-1645.	
Rauh, Andreas	Univ. of Rostock
Senkel, Luise	Univ. of Rostock, Chair of Mechatronics
Aschemann, Harald	Univ. of Rostock
Nedialkov, Nedialko	McMaster Univ.
Pryce, John D.	Cardiff Univ. Cardiff School of Mathematics
15:20-15:40	FrB06.2
<i>Individual Pitch Control Using LIDAR Measurements</i> , pp. 1646-1651.	
Mirzaei, Mahmood	Tech. Univ. of Denmark
Henriksen, Lars Christian	Tech. Univ. of Denmark
Poulsen, Niels Kjølstad	Tech. Univ. of Denmark
Niemann, Henrik	Tech. Univ. of Denmark
Hansen, Morten Hartvig	Tech. Univ. of Denmark
15:40-16:00	FrB06.3
<i>Nonminimum-Phase Process Control with Controllers Based on Simplified Modeling</i> , pp. 1652-1657.	
Laszczyk, Piotr	Silesian Univ. of Tech.
Czeczot, Jacek	Silesian Univ. of Technology
16:00-16:20	FrB06.4
<i>Real-Time Virtual Metrology and Control of Etch Rate in an Industrial Plasma Chamber</i> , pp. 1658-1663.	
Lynn, Shane A.	National Univ. of Ireland, Maynooth
MacGearailt, Niall	Intel Ireland Ltd, Leixlip, Co. Kildare
Ringwood, John V.	NUI Maynooth, Ireland
16:20-16:40	FrB06.5
<i>Adaptive-Fine Tuning of Building Energy Management Systems Using Co-Simulation</i> , pp. 1664-1669.	
Kontes, Giorgos	Tech. Univ. of Crete
Giannakis, Georgios	Tech. Univ. of Crete
Kosmatopoulos, Elias	ITI/CERTH
Rovas, Dimitrios	Tech. Univ. of Crete, Greece
<b>FrB07</b>	Room G
<b>Fault Detection and Accommodation (Regular CCA Session)</b>	

Chair: Marjanovic, Aleksandra  
Co-Chair: Matic, Dragan

School of Electrical Engineering  
Univ. Novi Sad, Faculty of Tech. science

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15:00-15:20 FrB07.1

*Design of Support Vector Machine Classifier for Broken Bar Detection*, pp. 1670-1673.

Matic, Dragan Univ. Novi Sad, Faculty of Tech. science

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15:20-15:40 FrB07.2

*Fault Detection Scheme for Discrete-Time Markov Jump Linear Systems with Mode-Independent Residual*, pp. 1674-1679.

Saijai, Jedsada Univ. of Duisburg - Essen

Abdo, Ali Univ. of Duisburg - Essen

Damlakhi, Waseem Duisburg-Essen Univ.

Ding, Steven X. Univ. of Duisburg-Essen

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15:40-16:00 FrB07.3

*H Infinity Integrated Fault Estimation and Fault Tolerant Control of Discrete-Time Piecewise Linear Systems*, pp. 1680-1685.

Tabatabaeipour, Seyed Mojtaba Aalborg Univ.

Bak, Thomas Aalborg Univ.

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16:00-16:20 FrB07.4

*Induction Motor Broken Bar Detection Using Vibration Signal Analysis, Principal Component Analysis and Linear Discriminant Analysis*, pp. 1686-1690.

Jakovljević, Boris Faculty of Tech. Sciences, Univ. of Novi Sad

Kanović, Željko Faculty of Tech. Sciences, Univ. of Novi Sad

Jelicic, Zoran D. Univ. of Novi Sad

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16:20-16:40 FrB07.5

*Fault Isolation Filter and Sensors Scheduling Co-Design for Networked Control Systems*, pp. 1691-1696.

Sid, Mohamed Amine Lorraine Univ. CRAN

Aberkane, Samir UHP, NANCY 1

Sauter, Dominique D.J. Lorraine Univ.

Maquin, Didier Univ. de Lorraine

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16:40-17:00 FrB07.6

*Comparison of Identification Procedures in the Frame of Fault Detection and Isolation*, pp. 1697-1702.

Marjanovic, Aleksandra School of Electrical Engineering

Kvascev, Goran School of Electrical Engineering

Djurovic, Zeljko School of Electrical Engineering, Univ. of Belgrade, Serbia

[[ [ \ Á - Á a d a s o B ] B i e E i i ]