10:00-10:20	ThA01.1

Payoff-Based Inhomogeneous Partially Irrational Play for Potential Game Theoretic Cooperative Control: Convergence Analysis.

Goto, Tatsuhiko	Tokyo Inst. of Tech.
Hatanaka, Takeshi	Tokyo Inst. of Tech.
Fujita, Masayuki	Tokyo Inst. of Tech.

11:00-11:20	ThA02.4

Zeno Behavior in Electromechanical Hybrid Systems: From Theory to Experimental Validation.

Nadubettu Yadukumar, Shishir	Texas A&M Univ.
Kothapalli, Bhargav	Texas A&M Univ.
Ames, Aaron	Texas A&M Univ.

11:40-12:00	ThA03.6

Non-Raster Sampling in Atomic Force Microscopy: A Compressed Sensing Approach.

| Andersson, Sean | Boston Univ. |
| Pao, Lucy Y. | Univ. of Colorado Boulder |

11:40-12:00	ThA05.6

Adaptive Glide Slope Control for Autonomous Airdrop Systems.

| Ward, Michael | Georgia Tech. |
| Costello, Mark | Georgia Tech. |

10:20-10:40	ThA06.2

Dynamic Lyapunov Functions: Properties and Applications.

| Sassano, Mario | Imperial Coll. London |
| Astolfi, Alessandro | Imperial Coll. & Univ. of Rome |

11:20-11:40	ThA07.5

A Smoothed GMS Friction Model Suited for Gradient-Based Friction State Estimation.

Boegli, Max	K.U.Leuven
De Laet, Tinne	K.U.Leuven
De Schutter, Joris	Katholieke Univ. Leuven
Swevers, Jan	K. U. Leuven

11:20-11:40	ThA08.5

Mixed Integer Optimal Compensation: Decompositions and Mean-Field Approximations.

Bauso, Dario	Univ. di Palermo
Zhu, Quanyan	Univ. of Illinois, Urbana-Champaign
Basar, Tamer	Univ. of Illinois, Urbana-Champaign

11:00-11:20	ThA09.4

Regularized Spectrum Estimation in Spaces Induced by Stable Spline Kernels.

| Bottegal, Giulio | Univ. OF PADOVA |
| Pillonetto, Gianluigi | Univ. of Padova |

11:40-12:00	ThA10.6

Design Tradeoffs in a Synthetic Gene Control Circuit for Metabolic Networks.

| Oyarzun, Diego A. | Imperial Coll. London |
| Stan, Guy-Bart Vincent | Imperial Coll. London |

10:40-11:00	ThA11.3

A Full Hybrid Electric Bike: How to Increase Human Efficiency.

Spagnol, Pierfrancesco	Pol. di Milano
Alli, Giovanni	Pol. di Milano
Lisanti, Paolo	Univ. di Bergamo
Todeschini, Fabio	Pol. di Milano
Savaresi, Sergio M.	Pol. Di Milano
Spelta, Cristiano	Univ. degli studi di Bergamo
Morelli, Andrea	MAPEI Sport Service

10:00-10:20	ThA12.1

Use of Model Predictive Control to Enhance the Flexibility of Thermal Energy Storage Cooling Systems (I).

Cole, Wesley Joseph	Univ. of Texas - Austin
Edgar, Thomas F.	Univ. of Texas at Austin
Novoselac, Atila	Univ. of Texas at Austin

11:40-12:00	ThA13.6

Compensation-Based Control for Lossy Communication Networks.

Gommans, T.M.P.	Eindhoven Univ. of Tech.
Heemels, W.P.M.H.	Eindhoven Univ. of Tech.
Bauer, Nicolas William	Univ. of Tech. Eindhoven
Van De Wouw, Nathan	Eindhoven Univ. of Tech.

10:00-10:20	ThA15.1

Safe Semi-Autonomous Control with Enhanced Driver Modeling.

Vasudevan, Ramanarayan	Univ. of California Berkeley
Shia, Victor	UC Berkeley
Gao, Yiqi	Univ. of California, Berkeley
Cervera-Navarro, Ricardo	Univ. of California Berkeley
Bajcsy, Ruzena	Univ. of Pennsylvania
Borrelli, Francesco	Unversity of California at Berkeley

11:40-12:00	ThA15.6

Design and Implementation of an Integrated Multi-Functional Autonomous Parking System with Fuzzy Logic Controller.

Wang, Yu	National Univ. of Singapore
Zhu, Xiaoxi	National Univ. of Singapore

10:00-10:20	ThA16.1

The Reliability Value of Storage in a Volatile Environment.

Parandehgheibi, Ali	MIT
Roozbehani, Mardavij	Massachusetts Inst. of Tech.
Ozdaglar, Asu	MIT
Dahleh, Munther A.	Massachusetts Inst. of Tech.

11:20-11:40	ThA18.5

Backstepping Control of the Plasma Current Profile in the DIII-D Tokamak (I).

Boyer, Mark D.	Lehigh Univ.
Barton, Justin	Lehigh Univ.
Schuster, Eugenio	Lehigh Univ.
Luce, Timothy	General Atomics
Ferron, J. R.	General Atomics
Walker, Michael L.	General Atomics
Humphreys, D.A.	General Atomics
Penaflor, Benjamin P.	General Atomics
Johnson, Robert D.	General Atomics

11:40-12:00	ThA19.6

Impact of Wind Farm Placement on Inter-Area Oscillations in Large Power Systems.

Gayme, Dennice	The Johns Hopkins Univ.
Chakrabortty, Aranya	North Carolina State Univ.

11:40-12:00	ThA20.6

Fast Stochastic Predictive Control for Building Temperature Regulation (I).

Ma, Yudong	UC berkeley CA USA
Borrelli, Francesco	Unversity of California at Berkeley

11:40-12:00	ThA22.4

Control of Floating Wind Turbines (I).

van der Veen, Gijs	Delft Univ. of Tech.
Couchman, Ian	Vestas Tech. R&D
Bowyer, R.O.	Vestas Tech. R&D

15:00-15:20	ThB01.4

Formation Control of Wheeled Robots with Vision-Based Position Measurement.

Poonawala, Hasan	Univ. of Texas at Dallas
Satici, Aykut C	Univ. of Texas at Dallas
Gans, Nicholas	Univ. of Texas at Dallas
Spong, Mark W.	Univ. of Texas at Dallas

15:20-15:40	ThB02.5

Maximizing Transport in Open Loop for Flashing Ratchets.

Roychowdhury, Subhrajit	Univ. of Minnesota
Salapaka, Srinivasa	Univ. of Illinois
Salapaka, Murti V.	Univ. of Minnesota, Minneapolis

14:00-14:20	ThB03.1

Fast Detection Based on Semi-Transient Signals in AFM (I).

Huang, Peng	Boston Univ.
Andersson, Sean	Boston Univ.

15:20-15:40	ThB06.5

On the Difficulty of Deciding Asymptotic Stability of Cubic Homogeneous Vector Fields.

Ahmadi, Amir Ali	MIT

14:40-15:00	ThB07.3

Stability and Asymptotic Observers of Binary Distillation Processes Described by Nonlinear Convection/diffusion Models.

Dudret, Stéphane	Air Liquide
Beauchard, Karine	CNRS, CMLS, Ec. Pol.
Ammouri, Fouad	Air Liquide
Rouchon, Pierre	Mines ParisTech

14:00-14:20	ThB08.1

An Analytic Framework for Decentralized Extremum Seeking Control.

Kvaternik, Karla	Univ. of Toronto
Pavel, Lacra	Univ. of Toronto

15:00-15:20	ThB09.4

Minimal LPV State-Space Realization Driven Set-Membership Identification.

Cerone, Vito	Pol. di Torino
Piga, Dario	Delft Univ. of Tech.
Regruto, Diego	Pol. di Torino
Tóth, Roland	Delft Univ. of Tech.

14:00-14:20	ThB10.1

Filtering with Rhythms: Application to Estimation of Gait Cycle.

Tilton, Adam	Univ. of Illinois, Urbana-Champaign
Hsiao-Wecksler, Elizabeth	Univ. of Illinois at Urbana-Champaign
Mehta, Prashant G.	Univ. of Illinois, Urbana-Champaign

15:00-15:20	ThB11.4

A Control Loop Structure Based on Semi-Nonnegative Matrix Factorization for Input-Coupled Systems.

Winck, Ryder	Georgia Inst. of Tech.
Kim, Jingu	Georgia Inst. of Tech.
Book, Wayne J.	Georgia Inst. of Tech.
Park, Haesun	Georgia Inst. of Tech.

15:00-15:20	ThB12.4

Bayesian Methods for Process Identification with Outliers (I).

Khatibisepehr, Shima	Univ. of Alberta
Huang, Biao	Univ. of Alberta

15:20-15:40	ThB14.5

Early Model-Based Verification of Automotive Control System Implementation (I).

Shahbakhti, Mahdi	Univ. of California, Berkeley
Li, Jieming	UC Berkeley
Hedrick, Karl	Univ. of California at Berkeley

14:40-15:00	ThB15.3

Proximate Model Predictive Control Strategy for Autonomous Vehicle Lateral Control.

Lee, Seung Hi	Hanyang Univ.
Lee, Young Ok	Hanyang Univ.
Kim, Bo-Ah	Hanyang Univ.
Chung, Chung Choo	Hanyang Univ.

15:00-15:20	ThB16.4

Real-Time Scheduling of Deferrable Electric Loads.

Subramanian, Anand	Univ. of California at Berkeley
Garcia, Manuel	UC Berkeley
Dominguez-Garcia, Alejandro	Univ. of Illinois at Urbana-Champaign
Callaway, Duncan	Univ. of California, Berkeley
Poolla, Kameshwar	Univ. of California at Berkeley
Varaiya, Pravin P.	Univ. of California at Berkeley

14:00-14:20	ThB20.1

Decentralized Architectures for Thermal Control of Buildings.

Chandan, Vikas	Univ. of Illinois
Alleyne, Andrew G.	Univ. of Illinois, Urbana-Champaign

17:20-17:40	ThC01.5

Adaptive Communication-Constrained Deployment of Mobile Robotic Networks (I).

Le Ny, Jerome	Univ. of Pennsylvania
Ribeiro, Alejandro	Univ. of Pennsylvania
Pappas, George J.	Univ. of Pennsylvania

17:20-17:40	ThC02.5

Feedback Control of Switched Stochastic Systems Using Uniformly Sampled Mode Information.

Cetinkaya, Ahmet	Tokyo Inst. of Tech.
Hayakawa, Tomohisa	Tokyo Inst. of Tech.

16:00-16:20	ThC03.1

Optimal Scan Trajectories for High-Speed Scanning Probe Microscopy (I).

Tuma, Tomas	IBM Res.
Lygeros, John	ETH Zurich
Sebastian, Abu	IBM Res.
Pantazi, Angeliki	IBM

17:40-18:00	ThC04.6

Nonlinear Modeling of a Miniature Fixed-Pitch Coaxial UAV.

Wang, Fei	National Univ. of Singapore
Phang, Swee King	National Univ. of Singapore
Cui, Jinqiang	National Univ. of Singapore
Cai, Guowei	National Univ. of Singapore
Chen, Ben M.	National Univ. of Singapore
Lee, Tong Heng	National Univ. of Singapore

17:00-17:20	ThC07.4

Online Estimation of Model Parameters and State-Of-Charge of Lithium-Ion Battery Using Unscented Kalman Filter.

Partovibakhsh, Maral	Ryerson Univ.
Liu, Guangjun	Ryerson Univ.

17:00-17:20	ThC08.4

Optimising Ferry Routes.

Wilson, David I.	Auckland Univ. of Tech.

16:20-16:40	ThC09.2

Nonlinear Identification for Control of Low Pressure Die Casting.

Shi, Xinmei	UBC
Maijer, Daan	The Univ. of British Columbia
Dumont, Guy A.	Univ. of British Columbia

17:40-18:00	ThC10.6

Controlling AIDS Progression in Patients with Rapid HIV Dynamics.

Hadjiandreou, Marios Michael	Univ. OF CYPRUS

17:40-18:00	ThC12.6

A Hierarchical Distributed Economic NMPC Architecture Based on Neighboring-Extremal Updates.

Wolf, Inga Janina	RWTH Aachen Univ.
Scheu, Holger	RWTH Aachen Univ.
Marquardt, Wolfgang	RWTH Aachen Univ.

16:00-16:20	ThC13.1

Securing Multiagent Systems against a Sequence of Intruder Attacks.

Abbas, Waseem	Georgia Inst. of Tech.
Egerstedt, Magnus	Georgia Inst. of Tech.

17:40-18:00	ThC14.6

Optimal Experimental Design for Mechanistic Nonlinear Dynamic Models Using Multisine Inputs: Application to a Diesel Engine (I).

Stamati, Ioanna	Katholieke Univ. Leuven
Telen, Dries	K.U. Leuven
Logist, Filip	Katholieke Univ. Leuven
Van Derlinden, Eva	K.U. Leuven
Hirsch, Markus	Johannes Kepler Univ.
Passenbrunner, Thomas Ernst	Johannes Kepler Univ. Linz
Van Impe, Jan F.M.	Katholieke Univ. Leuven

16:20-16:40	ThC15.2

Predictive Control for Agile Semi-Autonomous Ground Vehicles Using Motion Primitives.

Gray, Andrew	Univ. of California, Berkeley
Gao, Yiqi	Univ. of California, Berkeley
Lin, Theresa	Univ. of California - Berkeley
Hedrick, Karl	Univ. of California at Berkeley
Tseng, Eric	Ford Motor Company
Borrelli, Francesco	Unversity of California at Berkeley

16:00-16:20	ThC16.1

Mathematical Modeling and Steady-State Analysis of a Co-Ionic-Conducting Solid Oxide Fuel Cell (I).

Bavarian, Mona	Drexel Univ.
Soroush, Masoud	Drexel Univ.
Kevrekidis, Yannis	Princeton Univ.
Benziger, Jay	Princeton Univ.

16:00-16:20	ThC17.1

Visual Tracking of Human Visitors under Variable-Lighting Conditions for a Responsive Audio Art Installation (I).

Godbehere, Andrew	Univ. of California at Berkeley
Matsukawa, Akihiro	Univ. of California, Berkeley
Goldberg, Ken	UC Berkeley

16:20-16:40	ThC18.2

Generic 3D Swimmers in a Perfect Fluid Are Controllable.

Chambrion, Thomas	Univ. of Nancy
Munnier, Alexandre	The Univ. of British Columbia

17:20-17:40	ThC19.5

An Experimental Test Set-Up for Launch/recovery of an Airborne Wind Energy (AWE) System.

Geebelen, Kurt	KU Leuven
Ahmad, Hammad	K.U.Leuven
Vukov, Milan	KULeuven
Gros, Sebastien	KU Leuven
Swevers, Jan	K. U. Leuven
Diehl, Moritz	Katholieke Univ. Leuven

16:00-16:20	ThC20.1

Risk Limiting Dispatch of Wind Power (I).

Rajagopal, Ram	Stanford Univ.
Bitar, Eilyan	Cornell Univ.

Wu, Felix F.   the Univ. of Hong Kong

Varaiya, Pravin P.   Univ. of California at Berkeley

17:00-17:20   ThC21.4

A Low-Cost Microcontroller-In-The-Loop Platform for Controls Education.

Krauss, Ryan   Southern Illinois Univ. Edwardsville

Croxell, Jeffrey   Southern Illinois Univ. Edwardsville