

Workshop Program

Saturday, April 26, 2014 — Pfahl 140, The Blackwell Inn

7:30 - 16:00	Registration
8:15 - 8:30	Opening Remarks
8:30 - 10:20	Session I: Nonlinear and Multiagent Systems (Chair: Andrea Serrani)
8:30 - 9:00	<i>Coupled Oscillator Models in Estimation and Control</i> , Prashant Mehta (University of Illinois at Urbana Champaign)
9:00 - 9:30	<i>A Distributed Algorithm for Network Localization Using Angle-Of-Arrival Information</i> , Jianghai Hu (Purdue University)
9:30 - 10:00	<i>Resilience in Networked Cyber-Robotic Systems</i> , Sourabh Bhattacharya (Iowa State University)
10:00 - 10:20	<i>Cooperative Aircraft Defense from an Attacking Missile</i> , Eloy Garcia (Air Force Research Laboratory)
10:20 - 10:35	Coffee Break
10:35 - 12:00	Session II: Energy Systems (Chair: Wei Zhang)
10:35 - 11:05	<i>Generation Investment Equilibria with Strategic Producers</i> , Antonio J. Conejo (Ohio State University)
11:05 - 11:35	<i>Modelling and Control of Highly Distributed Loads</i> , Ian Hiskens (University of Michigan)
11:35 - 12:00	<i>Control of Thermostatic Loads Using Moving Horizon Estimation of Individual Load States</i> , Johanna Mathieu (University of Michigan)
12:00 - 13:30	Lunch/Poster Session (Chair: Chin-Yao Chang) Pfahl Hall-2nd Floor Foyer and Pfahl 240
	<i>Real-Time Energy Market Price Volatility Analysis and Control</i> , Zhao Wang (University of Notre Dame)
	<i>On Passivity Analysis and Passivation of Feedback Interconnected Systems Using Passivity Indices</i> , Feng Zhu (University of Notre Dame)
	<i>Linear-Quadratic Risk-Sensitive Mean Field Games</i> , Jun Moon (University of Illinois at Urbana Champaign)
	<i>Electricity Pooling Markets with Strategic Producers Possessing Asymmetric Information</i> , Mohammad Rasouli (University of Michigan)
	<i>Sliding Mode Boundary Control of Uncertain Distributed Parameter Dynamic Systems</i> , Meng-Bi Cheng (Ohio State University)
	<i>Optimal Velocity Profile using Model Predictive Control Based on V2V Technology</i> , Junbo Jing (Ohio State University)
	<i>Scaled Down Testing and Autonomous Parking</i> , Guchan Ozbilgin (Ohio State University)
	<i>On Market-Based Coordination of Thermostatically Controlled Loads With User Preference</i> , Sen Li (Ohio State University)
	<i>Hierarchical Design for Demand-Side Primary Frequency Control</i> , Christian Moya (Ohio State University)
	<i>Control of Over-Actuated Constrained Systems with Application to High-efficiency Internal Combustion Engines</i> , Junqiang Zhou (Ohio State University)

13:30 - 15:00	Session III: Nonlinear Control (Chair: Umit Ozguner)
13:30 - 14:00	<i>The Geometry of Over-Actuated Systems: Application to Dynamic Control Allocation</i> , Andrea Serrani (Ohio State University)
14:00 - 14:30	<i>New Results on Global Stabilization of a Class of Nonminimum-Phase Nonlinear Systems by Output Feedback</i> , Wei Lin (Case Western Reserve University)
14:30 - 15:00	<i>Stability of Sparse Systems: Theory and Algorithms</i> , Mohamed Ali Belabbas (University of Illinois at Urbana-Champaign)
15:00 - 15:15	Coffee Break
15:15 - 16:15	Student Session I: Economics and Game Theory (Chair: Tavafighi Hamidreza)
15:15 - 15:30	<i>Complexity of Equilibrium for Diffusion Game Over Social Networks</i> , Seyed Rasoul Etesami (University of Illinois at Urbana-Champaign)
15:30 - 15:45	<i>Can Carriers Make More Profit While Users Save Money</i> , John Tadrous (Ohio State University)
15:45 - 16:00	<i>Robust Toll Design: Influencing Selfish Behavior in Congestion Games with Unknown Price-Sensitive Users</i> , Philip Brown (University of Colorado - Boulder)
16:00 - 16:15	<i>User Participation in Monopolistic Cyber-Insurance Markets</i> , Parinaz Naghizadeh (University of Michigan)
16:15 - 16:25	Coffee Break
16:25 - 17:25	Student Session II: Nonlinear and Stochastic Systems (Chair: Arda Kurt)
16:25 - 16:40	<i>Stability and Control of Infection Diffusion Dynamics Over Arbitrary Networks</i> , Ali Khanafer (University of Illinois at Urbana-Champaign)
16:40 - 16:55	<i>Passivity and Dissipativity Analysis of a System and its Approximation</i> , Meng Xia (University of Notre Dame)
16:55 - 17:10	<i>Bayesian Traffic Light Parameter Tracking Based on Semi Hidden Markov Models</i> , Engin Ozatay (Ohio State University)
17:10 - 17:25	<i>Large-Scale Dissipative and Passive Control Systems and the Role of Symmetry</i> , Vahideh Ghanbari (University of Notre Dame)
18:45 - 21:00	Dinner (by special registration) Hunan House: 2305 E Dublin Granville Rd Columbus, OH 43229

Workshop Program

Sunday, April 27, 2014 — Pfahl 140, The Blackwell Inn

8:30 - 9:50	Session IV: Networked Control Systems (Chair: Panos Antsaklis)
8:30 - 9:00	<i>Forecasting Regime Shifts in Networked Dynamical Systems with Applications to the Development of Sustainable Infrastructure</i> , Michael Lemmon (University of Notre Dame)
9:00 - 9:30	<i>On the Security of Cyber-Physical Systems</i> , Bruno Sinopoli (Carnegie Mellon University)
9:30 - 9:50	<i>Networked Control over Non-Deterministic Channels</i> , Vincenzo Liberatore (Case Western Reserve University)
9:50 - 10:00	Coffee Break

10:00 - 11:10	Session V: Optimization and Optimal Control (Chair: Jianghai Hu)
10:00 - 10:30	<i>Distributed Optimization over Directed Graphs</i> , Angelia Nedich (University of Illinois at Urbana-Champaign)
10:30 - 10:50	<i>Decision Making Algorithms for Unmanned Vehicles with Resource Constraints</i> , Sivakumar Rathinam (Texas A&M University, College Station)
10:50 - 11:10	<i>A Duality Framework for Stochastic Optimal Control of Complex Systems</i> , Andreas Malikopoulos (Oak Ridge National Laboratory)
11:10 - 11:55	Student Session III: Game Theory and Applications (Chair: Ali Khanafer)
11:10 - 11:25	<i>Common Information based Markov Perfect Equilibria for Linear-Quadratic-Gaussian (LQG) Games with Asymmetric Information</i> , Abhishek Gupta (University of Illinois at Urbana-Champaign)
11:25 - 11:40	<i>Learning Efficient Correlated Equilibria</i> , Holly Borowski (University of Colorado - Boulder)
11:40 - 11:55	<i>Optimal Energy Procurement from a Strategic Seller with Private Renewable and Conventional Generation</i> , Tavafoghi Hamidreza (University of Michigan)
11:55 - 12:00	Closing Remarks

Social Program
Saturday, April 26, 2014

10:20 - 10:35	Coffee Break
15:00 - 15:15	Coffee Break
12:00 - 13:30	Lunch (Pfahl Hall-2nd Floor Foyer)
16:15 - 16:25	Coffee Break
18:45 - 21:00	Dinner -(by special registration) Hunan House: 2305 E Dublin Granville Rd Columbus, OH 43229

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