

## 33<sup>rd</sup> Southern California Control Workshop

October 20, 2017, UCSB, Loma Pelona Center, 8:30am-5:30pm

8:30-9:00am Continental breakfast

### Session 1

9:00-9:20am	Henrique Ferraz (UCSB, Hespanha)	Node Localization Based on Distributed Constrained Optimization
9:20-9:40am	Sepideh Hassan-Moghaddam (USC, Jovanovic)	A primal-dual algorithm for distributed non-smooth composite optimization
9:40-10:00am	Tor Anderson (UCSD, Martinez)	Weight Design of Distributed Approximate Newton Methods for Constrained Optimization
10:00-10:20am	Mishel George (UCSB, Bullo)	Markov chains with Maximum Entropy for Robotic Surveillance
10:20-10:40am	Zahra Askarzadeh (UCI, Georgiou)	ell_1 stability theory for nonlinear Markov chains

Coffee Break (30 minutes)

### Session 2

11:10-11:30am	Yifu Zhang (UCSD, Cortes)	Transient frequency control of power networks ---a set invariance approach
11:30-11:50am	Samantha Samuelson (USC, Yang)	Data-Driven Distributionally Robust Control of Energy Storage to Manage Wind Power Fluctuations
11:50-12:10pm	Edward Sanchez (CSULB, Nazari)	Model Predictive Energy Scheduling in Building Microgrid
12:10-12:30pm	Qin Ba (USC, Savla)	Robustness of DC Networks with Controllable Link Weights

Lunch (hour)

### Session 3

1:30-1:50pm	Anh Tran (UCLA, Christofides)	CFD Modeling and Balancing of a Steam Methane Reforming Furnace
1:50-2:10pm	Philip Brown (UCSB, Marden)	Are Multiagent Systems Resilient to Communication Failures?
2:10-2:30pm	Xinying Ren (Caltech, Murray)	Population Regulation in Microbial Consortia Using Dual Feedback Control
2:30-2:50pm	Xun Tang (UCR, Franco)	RNA-based feedback to regulate gene expression

Coffee Break (30 minutes)

### Session 4

3:20-3:40pm	Ahmed Hassan (UCI, Taha)	Vibrational stabilization in insect flight
3:40-4:00pm	Petter Nilsson (Caltech, Ames)	Mitigating the Curse of Dimensionality in Correct-by-Construction Control Synthesis
4:00-4:20pm	Hiteshi Sharma (USC, Jain)	An Empirical Dynamic Programming Algorithm for Continuous MDPs
4:20-4:40pm	Salar Rahili (Caltech, Chung)	Optimal Decision Making of Transportation Companies for Urban Mobility Using Air Vehicles
4:40-5:00pm	Leobardo Camacho (UCSD, Krstic)	Boundary Observer Design for Radial Diffusion-Reaction Equations in the Presence of Measurement Noise
5:00-5:20pm	Joshua Morales (UCR, Kassas)	Distributed Signals of Opportunity Aided Inertial Navigation with Intermittent Communication