Basic Research Innovation and Collaboration Center (BRICC)
4100 North Fairfax Drive, Suite 450 | Research Room
Arlington, VA 22203

Agenda Day 1 | September 25, 2018

Time	Topic	Speaker
08:00	**Registration**	
08:00-08:30	INTRODUCTIONS	Frederick Leve, AFOSR
08:30-09:00	Control & Estimation in the Presence of Adversarial Action and Uncertainty	Meir Pachter, AFIT
09:00-09:30	Multi-agent Control for Safety and Defense	David Casbeer, AFRL/RQ
09:30-10:00	Explicit Solvability for Stochastic Control and Differential Games for Systems with Gauss-Volterra and Rosenblatt Noise	Tryrone Duncan, and Bozenna Pasik-Duncan, KU
10:00-10:30	Stochastic HJB Equations and Regular Singular Points	Arthur Krener, NPS
10:30-11:00	**BREAK**	
11:00-11:30	Prescribed-Time Observers for ODEs and PDEs	Miroslav Krstic, UCSD
11:30-12:00	Limited Communication and Communication Complexity in Gradient Methods	Na Li, Harvard
12:00-12:30	Entropy Maximization for Efficient Robotic Surveillance	Francesco Bullo, UCSB
12:30-14:00	**LUNCH**	
14:00-14:30	Cooperative Data-Driven Robust Optimization	Jorge Cortes, UCSD
14:30-15:30	Action-Based Methods in Dynamics and Stability Issues in Networked Systems	Bill Mceneaney, and George Yin, and Yi Li Wang, UCSD and Wayne State
15:30-16:00	Estimating the State of a Linear System Across a Network	Steve Morse, Yale
16:00-16:30	A Compositional Approach to Network Control	Mehran Mesbahi, UW
16:30-17:00	Optimal Control of Action-Dependent Resources: Remote Estimation and Task Scheduling	Nuno Martins, Umaryland
1700	**MEETING ADJOURN**	

Agenda Day 2 | September 26, 2018		
Time	**Topic**	**Speaker**
08:00	**Registration**	
08:00-08:30	INTRODUCTIONS	Frederick Leve, AFOSR
08:30-09:00	A new notion of boundary control for Nonlocal PDEs	Mahamadi Warma, UPR
09:00-09:30	Robustness of Quantum Risk-Sensitive Control	Ian Petersen, and Matthew James, ANU and UNSW
09:30-10:00	Synthesis of Data-Driven Modeling, Global Sensitivity Analysis, and Uncertainty Quantification for Robust Control Design of Adaptive Material Systems	Ralph Smith, NCSU
10:00-10:30	A Switched Systems Approach for Navigation and Control with Intermittent Feedback	Warren Dixon, UFL
10:30-11:00	**BREAK**	
11:00-11:30	Stochastic Hybrid Inclusions Applied to Global Almost Sure Optimization on Manifolds	Andy Teel, UCSB
11:30-12:00	Robust Estimation and Synchronization in Complex Networks	Ricardo Sanfelice, UCSC
12:00-12:30	Optimal Network Resource Allocation for Monitoring Continuous and Hybrid Systems	Sayan Mitra, UIUC
12:30-14:00	**LUNCH**	
14:00-14:30	Time-Varying Semidefinite Programs	Amir Ali Ahmadi, Princeton
14:30-15:30	Theory-Based Engineering of Biomolecular Circuits in Living Cells	Domitilla Del Vecchio, MIT
15:30-16:00	Data Driven Systems and Control Framework for Multiway Dynamical Systems	Indika Rajapakse, Umich
16:00-16:30	Decoding and Control of Spatiotemporal Structures in Dynamic Ensembles	Jr-Shin Li, WashU
16:30-17:00	Using Formal Methods to Find an Error in the “Proof” of a Multi-Agent Protocol	Laura Humphrey, AFRL/RQ
1700	**MEETING ADJOURN**	

Agenda Day 3 | September 27, 2018		
Time	**Topic**	**Speaker**
08:00	**Registration**	
08:00-08:30	INTRODUCTIONS	Frederick Leve, AFOSR
08:30-09:30	Formal Methods in Analysis and Control Theory	Jeremy Avigad, CMU
09:30-10:00	Synthesis and Analysis of Hybrid Systems under Spatial and Temporal Speci cations	Dimitra Panagou, Umich
10:00-10:30	A Conservation-Based Distributed Control Architecture for Asymptotic and Finite Time Semistability and Consensus in Random Networks	Wassim Haddad, GaTech
10:30-11:00	Thermal Management for Aircraft	Michael Oppenheimer, AFRL/RQ
11:00-11:30	**BREAK**	
11:30-12:00	Distributed Control for Spatial Self-organization of Large Multi-agent Swarms	Sonia Martinez-Diaz, UCSD
12:00-12:30	Cooperation and Autonomy in Communication-Limited Environments	Naira Hovakimyan, UIUC
12:30-13:00	Exploiting Characteristics in Approximating Feedback Solutions to Optimal Control Problems	Peter Dower, ANU
13:00-14:30	**LUNCH**	
14:30-15:00	Optimal Sensor and Actuator Selection in Large-scale Dynamical Systems	Mihailo Jovanovic, USC
15:00-15:30	Rapid and Accurate Uncertainty Propagation for Nonlinear Systems using Nonlinear Invariants	Joseph Scott, Clemson
15:30-16:00	Design and Control of Attack-Tolerant Networks	Eduardo Pasilao, and Will Curtis, AFRL/RW
16:00-16:30	Surviving the Data Deluge: A Combined Dynamical Systems / Machine Learning Approach	Mario Sznaier, Northeastern
16:30-17:00	A Higher-order Temporal Logic for Dynamical Systems	David Spivak, MIT
1700	**MEETING ADJOURN**	