Thursday, September 28

8:00     Registration

8:45     Steve Yurkovich and Poras Balsara (UT Dallas)
          Welcome and Opening Remarks

9:00-10:30    Session TM1

  9:00     Brian Anderson (Australian National University)
          Collective Formation Control of Multiple Constant-Speed UAVs with Limited Interactions
  9:30     Elena Valcher (University of Padova)
          On the Consensus of High-Order Multi-Agent Systems with Cooperative/antagonistic Interactions and
          Switching Topologies
  10:00    Soura Dasgupta (University of Iowa)
          Feedback Control for Distributed Massive MIMO Communication

10:30-11:00   Coffee Break

11:00-12:30    Session TM2

  11:00    Rodolphe Sepulchre (University of Cambridge)
          Excitable Behaviors
  11:30    Allen Tannenbaum (State University of New York at Stoneybrook)
          Machine Learning for Joint Classification and Segmentation
  12:00    P.R. Kumar (Texas A&M University)
          Control Systems Under Attack: The Securable and Unsecurable Subspaces of a Linear Stochastic System

12:30-14:00   Lunch Break

14:00-15:30    Session TA1

  14:00    Richard Murray (California Institute of Technology)
          Feedback and Control in Biological Circuit Design
  14:30    Frank Allgower (University of Stuttgart)
          Passivity-based ensemble control for cell cycle synchronization
  15:00    Domitilla Del Vecchio (Massachusetts Institute of Technology)
          The "Power Network" of Genetic Circuits

15:30-16:00   Coffee Break

16:00-17:30    Session TA2

  16:00    Pramod Khargonekar (University of California, Irvine)
          Grid Integration of Renewable Electricity and Distributed Control
  16:30    Shinji Hara (University of Tokyo)
          Hierarchically Decentralized Control for Networked Dynamical Systems with Global and Local Objectives
  17:00    Kirsten Morris (University of Waterloo)
          The Role of Sensor and Actuator Models in Control of Distributed Parameter Systems
**Friday, September 29**

9:00-10:30 Session FM1

9:00  Stephen Boyd (Stanford University)  
*Parameter Selection and Pre-Conditioning for a Graph Form Solver*

9:30  Munther Dahleh (Massachusetts Institute of Technology)  
*Robustness Sensitivities in Large Networks*

10:00  Malcolm Smith (University of Cambridge)  
*Electrical Network Synthesis: A Survey of Recent Work*

10:30-11:00 Coffee Break

11:00-12:30 Session FM2

11:00  Richard Braatz (Massachusetts Institute of Technology)  
*Control and Systems Theory for Advanced Manufacturing*

11:30  Francesco Bullo (University of California, Santa Barbara)  
*Synchronization tests and computational methods for Kuramoto Oscillators*

12:00  Murat Arcak (University of California, Berkeley)  
*Control and Optimization Problems in Hyperpolarized Carbon-13 MRI*

12:30-14:00 Lunch Break

14:00-15:30 Session FA1

14:00  Andrew Heunis (University of Waterloo)  
*Quadratic Hedging with Mixed State and Control Constraints*

14:30  Tryphon Georgiou (University of California, Irvine)  
*Wasserstein Geometry of Quantum States and Optimal Transport of Matrix-Valued Measures*

15:00  Toshiharu Sugie (Kyoto University)  
*Design Theory of Distributed Controllers Via Gradient-Flow Approach*

15:30-16:00 Coffee Break

16:00-17:30 Session FA2

16:00  Frank Doyle (Harvard University)  
*Controlling Biological Time: Nonlinear Model Predictive Control for Populations of Circadian Oscillators*

16:30  Eduardo Sontag (Rutgers University)  
*Dynamic response phenotypes in systems biology: Scale-invariance and monotone I/O systems*

17:00  Brian Ingalls (University of Waterloo)  
*Bioaugmentation Approaches for Suppression of Antibiotic Resistance: Model-Based Design*

18:00-20:00 Reception, followed by Banquet Dinner (invitation only)  
UT Dallas, Founders Building, 2nd Floor Atrium
**Saturday, September 30**

9:00-10:30 Session SM1

9:00 Vince Poor (Princeton University)
*Privacy in Networks of Interacting Agents*

9:30 Yutaka Yamamoto (Kyoto University)
*Hypertracking Beyond the Nyquist Frequency*

10:00 Michel Gevers (Université Catholique de Louvain)
*Identification of Dynamical Networks*

10:30-11:00 Coffee Break

11:00-12:30 Session SM2

11:00 Keith Glover (University of Cambridge)
*Smooth Operators Enhance Robustness*

11:30 Pradeep Misra (Wright State University)
*System Completion Problem: Theory and Applications*

12:00 Mehmet Eren Ahsen (Icahn School of Medicine at Mount Sinai)
*Predicting the performance of classifiers and optimal ensemble learning in the absence of ground truth*