

<b>Wed 4/13, 9:00-10:00</b>	<b>Keynote Address</b>
George J. Pappas	Wireless Control Networks: Modeling, Synthesis, Robustness, Security
<b>Tue 4/12, 10:30-12:00</b>	<b>Hybrid Systems Theory</b>
Aneel Tanwani, Hyungbo Shim, Daniel Liberzon	Observability Implies Observer Design for Switched Linear Systems
Amir Ali Ahmadi, Raphael Jungers, Pablo A. Parrilo, Mardavij Roozbehani	Analysis of the Joint Spectral Radius via Lyapunov Functions on Path-Complete Graphs
Marc Geilen, Stavros Tripakis, Maarten Wiggers	The Earlier the Better: A Theory of Timed Actor Interfaces
<b>Tue 4/12, 13:30-15:00</b>	<b>Stochastic Systems</b>
Tomas Brazdil, Jan Krcal, Jan Kretinsky, Antonin Kucera, Vojtech Rehak	Measuring Performance of Continuous-Time Stochastic Processes using Timed Automata
Martin Fränzle, Ernst Moritz Hahn, Holger Hermanns, Nicolás Wolovick, Lijun Zhang	Measurability and Safety Verification for Stochastic Hybrid Systems
Manuela Luminita Bujorianu, Marius Bujorianu	Stochastic Non Sequitur Behavior Analysis of Fault Tolerant Hybrid Systems
<b>Tue 4/12, 15:30-17:00</b>	<b>Verification</b>
Andre Platzer	Quantified Differential Invariants
Werner Damm, Carsten Ihlemann, Viorica Sofronie-Stokkermans	Decidability and Complexity for the Verification of Safety Properties of Reasonable Linear Hybrid Automata
Alessandro Abate, Joost-Pieter Katoen, Alexandru Mereacre	Quantitative Automata Model Checking of Autonomous Stochastic Hybrid Systems
<b>Wed 4/13, 10:30-12:00</b>	<b>Reachable set computation</b>

Matthias Althoff, Colas Le Guernic, Bruce Krogh	Reachable Set Computation for Uncertain Time-Varying Linear Systems
Ian Mitchell	Scalable Calculation of Reach Sets and Tubes for Nonlinear Systems with Terminal Integrators
Kyoung-Dae Kim, Sayan Mitra, P. R. Kumar	Computing Bounded $\epsilon$ -Reach Set with Finite Precision Computations for a Class of Linear Hybrid Automata
<b>Wed 4/13, 13:30-15:00</b>	<b>Approximation and Abstraction</b>
Thao Dang, Romain Testylier	Hybridization Domain Construction using Curvature Estimation
Pavithra Prabhakar, Mahesh Viswanathan	A Dynamic Algorithm for Approximate Flow Computations
Sriram Sankaranarayanan	Automatic Abstraction of Non-Linear Systems Using Change of Bases Transformations
<b>Wed 4/13, 15:30-17:30</b>	<b>Applications I</b>
Aaron Ames, Ram Vasudevan, Ruzena Bajcsy	Human-Data Based Cost of Bipedal Robotic Walking
Aaron Ames	Characterizing Knee-Bounce in Bipedal Robotic Walking: A Zeno Behavior Approach
Tomas Tuma, Angeliki Pantazi, John Lygeros, Abu Sebastian	Impulsive Control for Nanopositioning: Stability and Performance
Andreea Balau, Mircea Lazar, Stefano Di Cairano, Constantin Caruntu, Paul van Den Bosch	A Predictive Control Solution for Driveline Oscillations Damping
<b>Thu 4/14, 10:30-12:00</b>	<b>Synthesis I</b>
Javier Cámara, Antoine Girard, Gregor Goessler	Synthesis of Switching Controllers using Approximately Bisimilar Multiscale Abstractions
Ji-Woong Lee, Geir Dullerud	Joint Synthesis of Switching and Feedback for Linear Systems in Discrete Time
Rupak Majumdar, Elaine Render, Paulo Tabuada	Robust Discrete Synthesis against Unspecified Disturbances

<b>Thu 4/14, 13:30-15:00</b>	<b>Synthesis II</b>
Krishnendu Chatterjee, Vinayak Prabhu	Synthesis of Memory-Efficient Real-Time Controllers for Safety Objectives
Manuel Robles, Ricardo Sanfelice	Hybrid Controllers for Tracking of Impulsive Reference State Trajectories: A Hybrid Exosystem Approach
Kathrin Flaßkamp, Sina Ober-Blöbaum	Variational Formulation and Optimal Control of Hybrid Lagrangian Systems
<b>Thu 4/14, 15:30-17:00</b>	<b>Applications II</b>
Sean Summers, Maryam Kamgarpour, Claire Tomlin, John Lygeros	A Stochastic Reach-Avoid Problem with Random Obstacles
Matthew Travers, Todd Murphey, Lucy Pao	Impulsive Data Association with an Unknown Number of Targets
Jerome Le Ny, Eric Feron, George Pappas	Resource Constrained LQR Control Under Fast Sampling
<b>Thu 4/14, 17:15-18:45</b>	<b>Networked Systems</b>
Heath Leblanc, Xenofon Koutsoukos	Consensus in Networked Multi-Agent Systems with Adversaries
Shreyas Sundaram, Jian Chang, Krishna Venkatasubramanian, Chinwendu Enyioha, Insup Lee, George Pappas	Reputation-Based Networked Control with Data-Corrupting Channels
Michael Lemmon, Xiaobo "Sharon" Hu	Almost Sure Stability of Networked Control Systems under Exponentially Bounded Bursts of Dropouts
<b>Tue 4/12, 17:00-18:30</b>	<b>Tool Presentation Papers (Poster and Demo session)</b>
Maksim Lapin, Linar Mikeev, Verena Wolf	SHAVE - Stochastic Hybrid Analysis of Markov Population Models Quantified Differential Invariants

Tichakorn Wongpiromsarn, Ufuk Topcu, Necmiye Ozay, Huan Xu, Richard Murray	TuLiP: A Software Toolbox for Receding Horizon Temporal Logic Planning
Pritam Roy, Paulo Tabuada, Rupak Majumdar	Pessoa 2.0: A Controller Synthesis Tool for Cyber-Physical Systems
Karthik Manamcheri, Sayan Mitra, Stanley Bak, Marco Caccamo	A step towards verification and synthesis from Simulink/Stateflow models