

NORTHEAST NONLINEAR AND HYBRID CONTROL WORKSHOP
TECHNICAL PROGRAM

Friday, April 1, 2005

Location: Heffner Alumni House

08:30	Welcome & Logistics
08:40	<i>Keynote Speech: Naomi Leonard, Princeton</i> <i>Cooperative control and autonomous ocean sampling networks</i>
09:40	Coffee Break
10:00	Coordinated motion control of swarms with dynamic connectivity in potential flows Guohua Ye, BU
10:20	Low observability path planning for an unmanned air vehicle using mixed integer linear programming Atif Chaudhry, Cornell
10:40	Vision-based coordination of multi-agent systems Nima Moshtagh, UPenn
11:00	Cooperative control for sensor networks Wei Li, BU
11:20	Oscillator models and collective motion: Splay state stabilization of self-propelled particles Derek Paley, Princeton
11:40	Symmetry invariance in multiagent formations Joshua Marshall, Toronto
12:00	Lunch Break
01:30	Temporal logic motion planning for mobile robots George Fainekos, UPenn
01:50	Hybrid estimation for control and planning Paul Otanez, Cornell
02:10	Elevator dispatching as a hybrid system control problem Kirk Wesselowski, BU
02:30	Reachable sets of bilinear control systems with drift Haidong Yuan, Harvard
02:50	Dynamics and control of the gyroscopic hopping rover Julia Sohnen, Cornell
03:10	Dynamic high gain scaling techniques for nonlinear systems Prashanth Krishnamurthy, Polytechnic
03:30	Coffee Break
04:00	Recursive identification of switched ARX systems Yasmin Hashambhoy, Johns Hopkins
04:20	Biological clocks (verifying Aschoff's rule for a transcriptional-translational clock model) Henrik Ohlsson, UMass
04:40	System gain and optimal length for signal transduction cascades Madalena Chaves, Rutgers
05:00	Active control of rotating Rayleigh-Benard convection Cheng Wang, UMass
05:20	Output stabilization and transverse feedback linearization Chris Nielsen, Toronto
05:40	Input-output stability of deterministic finite state machines Danielle Tarraf, MIT

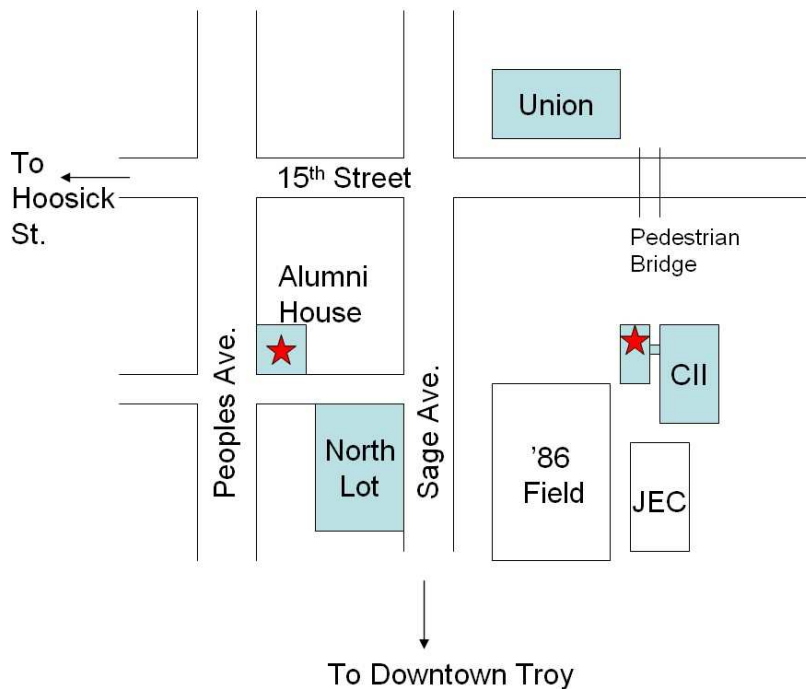
Saturday, April 2, 2005

Low Center for Industrial Innovation (CII) 4050

08:30	<i>Keynote Speech: Eduardo Sontag, Rutgers</i> <i>A survey and discussion of open problems in input to state stability and related notions</i>
09:30	Coffee Break & Discussion on Format for Future Meetings
10:00	On optimizing transmissions and routing in sensor networks Wei Lai, BU
10:20	Nonlinear problems and geometric programming in wireless network power control Chee Wei Tan, Princeton
10:40	A passivity approach to game-theoretic CDMA power control Xingzhe Fan, RPI
11:00	Sizing DropTail queues for heterogeneous TCP sources experiencing periodic loss Huaizhong Han, UMass
11:20	Data-rate problems in linear and nonlinear feedback control Keyong Li, BU
11:40	Information theory and the fundamental limitations of feedback Nuno Martins, MIT

12:00	Meeting Adjourns
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Please note that the location of the meeting on Saturday is different from Friday's.



LIST OF SPEAKERS BY UNIVERSITY

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