



Agenda for the 2004  
Six Month Review of the  
**AFRL/VA and AFOSR**



**Collaborative Center of Control Science (CCCS)**

**The Ohio State University**

Tuesday, April 13, 2004

Rooms 259, 260, 267 Dreese Laboratories  
(For directions, maps, and accommodations see web site:  
<http://www.ece.osu.edu/~passino/cccs.html>)

## Agenda for the 2004 Six-Month Review

Tuesday, April 13, 2003

### Cooperative Control for UAVs and Microsatellites:

#### Rm. 260 Dreese Laboratories

- 9:00am Coping with Information Delays in the Assignment of Mobile Agents to Stationary Targets  
Brandon Moore and Kevin Passino
- 9:30am Networked Vehicles for Cooperative Search  
Yong Liu and Kevin Passino
- 10:00am Break
- 10:15am Cooperative Tracking of Mobile Targets in a Noisy Environment  
Raúl Ordóñez
- 11:15am Cooperative Search and Predictive Task Allocation in UAV Teams  
Ali Minai, Yan Jin, Yan Liao, and Marios Polycarpou
- 12:15pm Lunch (catered, on-site)**
- 1:00pm Markov Chain Models for Persistent Area Denial Problems  
Yong Liu and Joe Cruz
- 1:30pm Cooperative Control and Symbolic Model Checking  
Chris Bohn and Bruce Weide
- 2:00pm Formation Control for Microsatellites  
Trevor Williams
- 2:30pm Distributed Sensor Fusion  
Ümit Özgüner
- 3:00pm Break
- 3:15pm Cooperative Control Experimental Program  
Ümit Özgüner and Keith Redmill
- 4:00pm Cooperative Electronic Deception  
Scott Waun and Ümit Özgüner
- 4:30pm Discussion

**Aerodynamic Flow Control:  
Rm. 267 Dreese Laboratories**

- 9:00am Introduction  
Mo Samimy
- 9:15am Simulation of Cavity Flows  
Jim DeBonis, Jim Malone, and Mo Samimy
- 9:45am Low Dimensional Modeling of Cavity Flows  
Edgar Caraballo and Mo Samimy
- 10:15 Cavity Flow Experiments  
Marco Debiasi, Jim Malone, Jesse Little, and Mo Samimy
- 10:30am Break
- 10:45 Control of Cavity Flows  
Hitay Ozbay, Peng Yan, Xin Yuan, and Önder Efe
- 11:30am An LQR Boundary Feedback Control Method for Reduced  
Order POD Models  
R. Chris Camphouse
- 12:00pm Lunch (catered, on-site)**
- 1:00pm Discussion: Challenges/Directions in Flow Control
- 2:00pm Laboratory tour

**Control of Reusable Launch Vehicles:  
Rm. 259 Dreese Laboratories**

- 9:00am Optimal Trajectory Generation on Entry/Reentry for RLVs  
Raúl Ordóñez
- 9:45am Directions and Challenges in Modeling and Control of Air-Breathing  
RLVs  
Kevin Groves, David Orn Sigthorsson, Andrea Serrani, Steve Yurkovich
- 10:30am Break
- 10:45am Stability Domain and Robustness Analysis of DIESDRE Controllers for  
RLVs  
Rama Yedavalli

- 11:30am Reconfigurable Control of RLVs via Model-Predictive Dynamic Control Allocation  
Yu Luo, Andrea Serrani, Steve Yurkovich
- 12:15pm Lunch (catered, on-site)**
- 1:00pm Discussion: Challenges/Directions in RLVs  
(Rm. 405 DL since Rm. 259 is reserved by someone else at 1:30pm)