



# Final Review of the AFRL/VA and AFOSR

## The Ohio State University

### **Collaborative Center of Control Science**



July 26, 2007

# Thursday, July 26, 2007, Rm. 48 (in basement), Meyers Hall, Building 45 AFRL

9:00am Opening Remarks

Siva Banda

9:15am Welcome and Collaborative Center of Control Science (CCCS)

Program Overview Kevin Passino

### **Aerodynamic Flow Control**

9:45am Reduced-Order Modeling and Experiments for

Feedback Flow Control

Mo Samimy, Edgar Caraballo, Jesse Little, Doug Mitchell, Nathan Kamps, Tim Munther

10:45am Break

11:00am Controller Design for Feedback Flow Control

Andrea Serrani, Cosku Kasnakoglu, Kwiwan Kim

12:00pm Lunch

#### **Cooperative Control for Autonomous Air Vehicles**

1:00pm Cooperative Control Overview

Kevin Passino

1:15pm Distributed Sensor Fusion with Mobile Sensor Agents

Ümit Özgüner, Arda Kurt, Sangil Jwa, Kevin Streib

1:45pm Autonomous Vehicles Experimental Program Overview

Keith Redmill, John Martin, Ümit Özgüner

2:15pm Cooperative Navigation and Path Planning for MAVs

Raúl Ordóñez, Alan Jennings, Boakye Dankwa

2:45pm Break

3:00pm Cooperative Pursuit of Detected and Predicted Threats

Joe Cruz, Dongxu Li

3:30pm Cooperative Surveillance Kevin Passino, Jorge Finke, Brandon Moore

Adjourn

5:30pm

### **Space Access and Hypersonic Vehicle Guidance and Control**

4:00pm	Overview of the Activity of the Space Access Area Andrea Serrani
4:10pm	Robust and Adaptive Model-Based Control Strategies for Air-Breathing Hypersonic Vehicles Andrea Serrani, Steve Yurkovich, David Sigthorsson, Lisa Fiorentini
4:30pm	Robust Trajectory Generation on Approach and Landing for RLVs Using Maneuver Primitives Raúl Ordóñez, Zhesheng Jiang
5:00pm	Final Discussion