

Departments of Mathematical Sciences and Mechanical Engineering
The Johns Hopkins University

JOINT SEMINAR

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January 30, 2003
110 Hodson Hall
3:00 p.m.

CONTROL OF MULTIROBOT SYSTEMS

ABSTRACT

This talk will address cooperative control of networked robots equipped with cameras. We will first show how decentralized control policies can be used to achieve desired formations while maintaining constraints arising from communication and sensing. We will derive measures of performance for the networked system and show how the formation can be adapted to maximize performance. These results will be illustrated with our experimental testbed of mobile robots. Time permitting, we will address ongoing work on modeling and controlling biomolecular networks and discuss some similarities with the multirobot control problem.