# Program

All talks are in Chernoff Hall, Room 202. See the local page for location information.

## Thursday, May 13

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
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<tbody>
<tr>
<td>8:30-9:30</td>
<td>Feimin Huang</td>
<td>Virtual Homogeneous Control of Euler-Lagrange Systems</td>
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<tr>
<td>9:30-9:50</td>
<td>Maria Barbero-Liñán</td>
<td>How to Describe Infinitesimally the Symmetric Product</td>
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<td>9:50-10:10</td>
<td>Dmitry Gromov</td>
<td>Hybrid Thermodynamic Control Systems with Phase Transitions</td>
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<td>10:10-10:50</td>
<td>Peter Caines</td>
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<td>10:50-11:30</td>
<td>Mojtaba Nourian</td>
<td>Adaptive Mean Field (NCE) Methods in Leader-Follower Stochastic Dynamic Games</td>
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<td>11:30-12:10</td>
<td>Arman Kizilkale</td>
<td>Mean-Field Social Dynamics with Egilistic and Anilistic Agents: A Mean-Field Formulation</td>
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<td>12:50-2:00</td>
<td>Lunch</td>
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<tr>
<td>2:00-3:00</td>
<td>Lacra Pavel</td>
<td>Global Classical Solvability of Initial-Bounded Day Problems for Hyperbolic Loops-Variable Systems and Lyapunov-Bounday Properties</td>
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<tr>
<td>3:00-4:00</td>
<td>Kirsten Morris</td>
<td>Second-Order Systems with Acceleration Measurements</td>
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<tr>
<td>4:00-4:20</td>
<td>Minyi Huang</td>
<td>Stochastic Approximation of Consensus: Asynchronous Algorithms and Mean Square Convergence</td>
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<td>Manfredi Maggiore</td>
<td>Virtual Holonomic Constraints for Euler-Lagrange Systems</td>
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<td>Farzin Taringoo</td>
<td>Analytic of Two Classes of Decentralized Decision Systems: Quantized Single and Double-Sided Auctions in Competitive Markets</td>
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Saturday, May 15

8:30-9:30 Roland Malhamé
Complex Systems: The Case of Unreliable Manufacturing Transfer Lines

9:30-10:30 Shreyas Sundaram
Structured System Theory and its Application to Information Dissemination in Distributed Systems

10:30-11:30 Serdar Yuksel
On Optimization of Information Channels in Stochastic Control

10:00-10:30 Cesar Aguilar
Small-Time Local Controllability of Homogeneous Control-Affine Systems

10:30-10:50 Coffee Break

10:50-11:50 Mireille Broucke
Reach Control Problem

11:50-12:20 Bruce Francis
Switched-Mode Systems: Problems Motivated by Power Converters, Part II

12:20-12:50 Ben Tsai
Switched-Mode Systems: Problems Motivated by Power Converters, Part I

12:50-2:00 Lunch

2:00-3:00 Brian Ingalls
Negative Feedback and Robustness Trade-offs in Systems Biology

3:00-4:00 Andrew D. Lewis
A Connection Between Feedforward Feedback and Local Controllability

4:00-4:30 Jordan Ang
Constructive Decomposition of the Design Parameters in IDA-PBC

4:30-4:50 Nick Khandak
A Connection Between Feedforward Feedback and Local Controllability

4:50-5:20 Kai Kreitner
Flexible Manipulator Control Accommodating Passivity Violations: Theory and Experiments

5:20-5:40 James Forbes
Conjugate Decomposition and Local Stabilization of Control Affine Systems

5:40-6:20 Pantelis Paschalides
Flexible Manipulator Control Accommodating Passivity Violations: Theory and Experiments

6:20-6:40 Nick Khandak
Conjugate Decomposition and Local Stabilization of Control Affine Systems

6:40-7:00 James Forbes
Flexible Manipulator Control Accommodating Passivity Violations: Theory and Experiments

7:00-7:20 Pantelis Paschalides
Flexible Manipulator Control Accommodating Passivity Violations: Theory and Experiments

7:20-7:40 Nick Khandak
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7:40-8:00 James Forbes
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8:00-8:20 Pantelis Paschalides
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11:00-11:20 Michelle Bridge
Reach Control Problem

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Switched-Mode Systems: Problems Motivated by Power Converters, Part I

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Reach Control Problem

12:00-12:20 Pantelis Paschalides
Flexible Manipulator Control Accommodating Passivity Violations: Theory and Experiments

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Conjugate Decomposition and Local Stabilization of Control Affine Systems