

Schedule

Submitted by [admin](#) on Wed, 10/31/2012 - 6:54pm

[Printable Schedule](#)

Friday, October 19

Reception: 6:30-8:00pm

Saturday, October 20

Session 1: 8:30-9:00, Introduction and Welcome

- Introduction, presented by Panos Antsaklis ([slides](#))
- Alkis Konstantelos presentation ([slides](#))

Session 2: 9:00-11:00, Fundamentals

- Xenofon Koutsoukos, [Resilient Cooperative Control of Cyber-Physical Systems](#) ([slides](#))
- Panos Antsaklis, Bill Goodwine and Vijay Gupta, [Passivity and Symmetry in the Control of Cyber-Physical Systems](#) ([slides](#))
- Karl-Erik Arzen, [Simulation of Cyber-Physical Control Systems](#) ([slides](#))
- Stefan Kowalewski, [Architectural Support for Agile Control Design in CPS](#)
- John S. Baras, [Components, Compositionality and Architectures for Networked CPS](#) ([slides](#))

Coffee Break: 11:00-11:20

Session 3: 11:20-1:00, Applications

- Carlos Canudas-de-Wit, [CPS in Intelligent Transportation Systems: The Grenoble South Ring Show Case](#)
- Eduardo F. Camacho, [Control of Solar Thermal Plants](#) ([slides](#))
- Joao Sousa, [Coordination Challenges in Networked Vehicle Systems: Are We Missing Something?](#) ([slides](#))
- Malcolm Smith, [Classical Network Synthesis Revisited](#)

Lunch Break: 1:00-2:00

Session 4: 2:00-4:00, Panel Discussion

Moderator: Panos Antsaklis

Tentative Panel List:

- Alessandro Astolfi ([abstract](#))
- John S. Baras
- Sandra Hirche ([paper](#), [slides](#))
- Karl Erik Johansson ([slides](#))
- Alkis Konstantelos
- Francoise Lamnabhi-Lagarrigue ([slides](#))

Coffee Break: 4:00-4:30

Session 5: 4:30-6:30, Control I

- Thomas Parisini and Marios Polycarpou, [Towards Safe and Reliable CPS: A Learning-Based Distributed Fault-Diagnosis Approach](#)
- Joerg Raisch, [Control Hierarchies and Tropical Algebras](#) ([slides](#))
- Jan Maciejowski, [Some New Developments in Model Predictive Control](#) ([slides](#))
- Kostas Kyriakopoulos, [A Framework for Aperiodic Model Predictive Control](#) ([slides](#))
- Antonio Bicchi, [Trading off Feedforward and Feedback, Remote and Local in the Control of Complex Interconnected Plants](#)([slides](#))

Reception: 6:30-8:00

Sunday, October 21

Session 6: 9:00-11:00, Control II

- Arjan van der Schaft, [Bisimulation Theory for Multi-Modal Physical Systems](#) ([slides](#))
- Claudio De Persis, [Coordination Control in a Cyberphysical Environment](#) ([slides](#))
- Marika Di Benedetto, [Analysis and Control of Networked Embedded Systems](#)
- Eric Kerrigan, [Number Representations for Embedding Optimization Algorithms in Cyber-Physical Systems](#) ([slides](#))
- Maurice Heemels, [Event-Triggered and Self-Triggered Control Design with Guaranteed Performance](#) ([slides](#))

Closing Remarks and Discussion: 11:00-12:00

Participants

- Karl-Erik Arzen, [Simulation of Cyber-Physical Control Systems \(slides\)](#)
- Alessandro Astolfi, [Model Reduction of Nonlinear Systems](#)
- John S. Baras, [Components, Compositionality and Architectures for Networked CPS \(slides\)](#)
- Antonio Bicchi, [Trading off Feedforward and Feedback, Remote and Local in the Control of Complex Interconnected Plants\(slides\)](#)
- Eduardo F. Camacho, [Control of Solar Thermal Plants \(slides\)](#)
- Carlos Canudas-de-Wit, [CPS in Intelligent Transportation Systems: The Grenoble South Ring Show Case](#)
- Claudio De Persis, [Coordination Control in a Cyberphysical Environment \(slides\)](#)
- Marika Di Benedetto, [Analysis and Control of Networked Embedded Systems](#)
- Maurice Heemels, [Event-Triggered and Self-Triggered Control Design with Guaranteed Performance \(slides\)](#)
- Sandra Hirche, [Resource-Aware Control for Cyber-Physical Systems \(slides\)](#)
- Eric Kerrigan, [Number Representations for Embedding Optimization Algorithms in Cyber-Physical Systems \(slides\)](#)
- Xenofon Koutsoukos, [Resilient Cooperative Control of Cyber-Physical Systems \(slides\)](#)
- Stefan Kowalewski, [Architectural Support for Agile Control Design in CPS](#)
- Kostas Kyriakopoulos, [A Framework for Aperiodic Model Predictive Control \(slides\)](#)
- Jan Maciejowski, [Some New Developments in Model Predictive Control \(slides\)](#)
- Thomas Parisini and Marios Polycarpou, [Towards Safe and Reliable CPS: A Learning-Based Distributed Fault-Diagnosis Approach](#)
- Joerg Raisch, [Control Hierarchies and Tropical Algebras \(slides\)](#)
- Malcolm Smith, [Classical Network Synthesis Revisited](#)
- Joao Sousa, [Coordination Challenges in Networked Vehicle Systems: Are We Missing Something? \(slides\)](#)
- Arjan van der Schaft, [Bisimulation Theory for Multi-Modal Physical Systems \(slides\)](#)

Additional participants: Duarte Antunes, Tom Gommans, Alkis Konstantelos ([slides](#)), Françoise Lamnabhi-Lagarrigue ([slides](#)), Anthony Tzes, Richard Vinter and Zoran Vukic.

