

Control of interconnected systems: from theory to industrial applications

Mihailo Jovanović

www.umn.edu/~mihailo

Cédric Langbort

www.ist.caltech.edu/~clangbort/

A FULL DAY WORKSHOP FOR CDC-ECC'05

Seville, Spain – December 11, 2005

Overview

- LOTS OF ACTIVITIES IN THE LAST $\approx$ 8 YEARS
(Bamieh, D'Andrea, Dullerud, Gorinevsky, Lall, Paganini, Stewart, Voulgaris, etc.)
- ORGANIZERS
 - Mihailo Jovanović**, UMN
 - Cédric Langbort**, Caltech
- INVITED SPEAKERS
 - Bassam Bamieh**, UCSB
 - Raffaello D'Andrea**, Cornell
 - Geir Dullerud**, UIUC
 - Dimitry Gorinevsky**, Honeywell/Stanford
 - Sanjay Lall**, Stanford
 - Fernando Paganini**, UCLA
 - Greg Stewart**, Honeywell/UBC

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 - Bassam Bamieh**, UCSB
 - Cédric Langbort** (for **Raffaello D'Andrea**)
 - Geir Dullerud, UIUC
 - Dimitry Gorinevsky, Honeywell/Stanford
 - Sanjay Lall**, Stanford
 - Fernando Paganini, UCLA
 - Guy Dumont** (for **Greg Stewart**)
 - Michael Rotkowitz**, KTH

Final schedule: morning

- 08:45 - 10:15 **Bassam Bamieh**
Distributed control: optimality and architecture
- 10:15 - 10:30 **Break**
- 10:30 - 11:15 **Guy Dumont** (for **Greg Stewart**)
Recent developments in spatially distributed control systems on the paper machine
- 11:15 - 12:00 **Cédric Langbort** (for **Raffaello D'Andrea**)
A state-space approach to control of interconnected systems
- 12:00 - 01:00 **Lunch break**

Final schedule: afternoon

- 01:00 - 01:45 **Mihailo Jovanović**
Control of vehicular platoons: limitations and tradeoffs
- 01:45 - 02:30 **Sanjay Lall**
Algorithms for decentralized control problems
- 02:30 - 02:45 **Break**
- 02:45 - 03:30 **Cédric Langbort**
From distributed control to distributed algorithms and back
- 03:30 - 04:15 **Michael Rotkowitz**
Parameterization of stabilizing controllers for interconnected systems
- 04:15 - 04:30 **Break**
- 04:30 - 05:00 **Mihailo Jovanović**
On the optimality of localized distributed controllers
- 05:00 - 05:30 **All participants**
Questions, comments, discussion

Additional info (after the conference)

Workshop web-page

www.umn.edu/~mihailo/cdc-ecc05.html