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BAYREUTH, DEN 28.10.2022

VORTRAGSANKÜNDIGUNG

Im Rahmen unseres gemeinsamen Oberseminars

„Numerische Mathematik, Optimierung und Dynamische Systeme“

spricht

Herr **Matthias Köhler**

Institut für Systemtheorie und Regelungstechnik, Universität Stuttgart

am Donnerstag, 03.11.2022, 10 Uhr s.t.

über das Thema

"Transient performance estimates for distributed economic MPC"

Abstract:

This talk considers the problem of coordinating self-interested dynamical systems by means of a distributed economic MPC framework using asymptotic average constraints.

The self-interest is reflected by an individual local objective function, while cooperation is required with respect to an asymptotic cooperative goal, which is represented by a particular steady state of the overall system.

In simulations, it is observed that individual subsystems operate at their local optimal steady state during a transient phase, before finally converging to the cooperative goal.

However, transient performance estimates have yet to be established. This talk will present and outline the steps needed to arrive at these estimates.

Das Oberseminar findet im S 137, Gebäude NWIII statt.

gez. Lars Grüne