

GAMM Activity Group Dynamics and Control

Workshop – 07 & 08 September 2023

Agenda

The workshop is scheduled in the **Seminarraumbäude 1 – Room 1.001** on the **Campus Nord** at TU Dortmund.

Thursday			
Time	Theme	Speaker	Affiliation
13:00 - 13:10	Opening and Welcome		
13:10 - 13:40	(Un)conventional sensors for fast and agile flight	Kayacan, Erdal	Paderborn University
13:40 - 14:10	Passivity-based control of DC microgrids (a recent result)	Machado, Juan E.	Brandenburg University of Technology
14:10 - 14:30	Implicit predictors in regularized data-driven predictive control	Klädtker, Manuel	TU Dortmund, RCS
14:30 - 15:00	Coffee Break		
15:00 - 15:30	Mean-square dissipativity and turnpike results for discrete-time stochastic linear-quadratic optimal control problems	Schießl, Jonas	Universität Bayreuth
15:30 - 15:50	Sobolev training for data-efficient approximate nonlinear model predictive control	Lüken, Lukas	TU Dortmund, PAS
15:50 - 16:10	Towards privacy-preserving cooperative control via encrypted distributed optimization	Binfet, Philipp	TU Dortmund, RCS
16:10 - 16:40	Coffee Break		
16:40 - 17:10	Oseen flows in port-Hamiltonian formulation	Reis, Timo	TU Ilmenau
17:10 - 17:40	Discussion (Aussprache)		
19:00	Dinner at Hövels Hausbrauerei (Hoher Wall 5-7, 44137 Dortmund)		
Friday			
Time	Theme	Speaker	
09:00 - 09:20	Model reduction for switched DAEs	Trenn, Stephan	University of Groningen
09:20 - 09:40	Towards reliable predictive control for aquifer thermal energy storages (ATES)	van Randenborgh, Johannes	TU Dortmund, RCS
09:40 - 10:10	Kernel learning for data-driven control and optimization	Jiang, Yuning	EPFL
10:10 - 10:50	A fresh look at approximate dynamic programming - projection, aggregation and power systems	Engelmann, Alexander & Bandeira, Maísa	TU Dortmund, ie3
10:50 - 11:20	Coffee Break		
11:20 - 11:40	Robust MPC approaches for monotone systems	Heinlein, Moritz	TU Dortmund, PAS
11:40 - 12:10	Energy-optimal control of adaptive structures	Schaller, Manuel	TU Ilmenau
12:10	Coffee and Farewell		

Contact: (please use the given phone number in case of urgent problems)

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