



Schedule

Spring School on Theory and Applications of port-Hamiltonian Systems

28 – 30 March 2023

University of Wuppertal, Building G, Room G.15.20

Monday, 27 March

Information on the arrival

19:00 Arrival

Information:

- We will go to Luisenviertel (local bar district) on Monday evening for some drinks and chatting. If you are interested in joining, you can write an email to meschmitz@uni-wuppertal.de when you arrived.
 - One of the local coordinators will wait at Wuppertal main station on Tuesday morning to guide you to the University.
Checkpoint: In front of Rewe ToGo inside the hall
Departure: 8:20 am
 - In most of the hotels you get a ticket for public transport for free. Please inform yourself and plan additional time if you need to buy one at the main station (of course you could also walk).
 - Verdi (German union) announced a strike on public transport on Monday. This could affect **long-distance and regional trains** and airports. Please check your train connections and look for alternatives. It may be advisable to travel to Wuppertal on Sunday if possible.
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Tuesday, 28 March

Morning session

Chair: Birgit Jacob

- 09:00 - 10:00** **Hans Zwart** (Twente):
Personal perspective on port-Hamiltonian systems
- 10:00 - 10:30** Coffee Break
- 10:30 - 10:50** **Najmeh Javanmardi** (Groningen):
Robust trajectory tracking for underactuated mechanical systems without velocity measurements
- 10:50 - 11:10** **Guanru Pan** (Dortmund):
Data-driven predictive control under stochastic uncertainties
- 11:15 - 11:35** **Dorothea Hinsén** (Berlin):
On discrete-time port-Hamiltonian (descriptor) systems
- 11:35 - 11:55** **Philipp Kinon** (Karlsruhe):
Modeling and simulation of geometrically exact strings in a nonlinear port-Hamiltonian framework
- 12:00 - 13:30** Lunch

Afternoon session

Chair: Bernhard Maschke

- 13:30 - 14:00** **Silke Glas** (Twente):
Symplectic Model Reduction for Hamiltonian Systems
- 14:00 - 15:30** Interactive Session
- 15:30 - 16:00** Coffee Break + Foto Session
- 16:00 - 16:30** **Nelson Cisneros** (Besançon):
Design, fabrication and port-Hamiltonian modelling and control of a complex Hasel actuator
- 16:30 - 17:00** **Annika Meyer** (Wuppertal):
Stability of Linear Infinite-Dimensional port-Hamiltonian Systems via Closure Relations
- 18:00 - 20:00** Social Activity: Underground Golfing
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Wednesday, 29 March

Morning session

Chair: Hans Zwart

- 09:00 - 10:00** **Markus Clemens** (Wuppertal):
Discrete electromagnetic and thermal field formulations considered within the port-Hamiltonian framework
- 10:00 - 10:30** Coffee Break
- 10:30 - 12:00** Interactive Session
- 12:00 - 13:30** Lunch

Afternoon session

Chair: Paul Kotyczka

- 13:30 - 14:00** **Elise Julien** (Wuppertal):
Les Français, les Allemands, les autres ? Des clichés à l'interculturalité / Die Franzosen, die Deutschen, die anderen? Von Stereotypen zu Interkulturalität
- 14:00 - 14:30** Information on the Doctoral College and Mobility
- 14:30 - 15:00** Discussion with Coffee
- 15:00 - 15:30** **Jonas Kirchhoff** (Ilmenau):
Towards ports from parametrised Lagrangian subspaces
- 15:30 - 16:00** **Thomas Risse** (Sorbonne):
Physical modelling of a simplified vocal apparatus in the port-Hamiltonian framework
- 17:00 - 19:00** City Tour
- 19:00** Dinner
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Thursday, 30 March

Morning session

Chair: Arjan van der Schaft

- 09:00 - 10:00** **Claudia Totzeck** (Wuppertal):
On the port-Hamiltonian structure of interacting particle systems
- 10:00 - 10:30** Coffee Break
- 10:30 - 11:00** **Colette Voisembert** (Sorbonne):
Space and time discretization of port-Hamiltonian systems: combination of existing methods and current work on mixed boundary conditions
- 11:00 - 11:30** **Kaja Krhac** (Twente/Lyon):
Energy Port for port-Hamiltonian Systems
- 11:30 - 12:00** **Mehmet Erbay** (Wuppertal):
Infinite-dimensional port-Hamiltonian DAEs
- 12:00 - 13:30** Lunch
- 13:30 - 14:00** Closing
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