

# SCINDIS-2018

2nd Workshop on

## Stability and Control of Infinite-Dimensional Systems



Würzburg, Germany

97074 Würzburg, **Central lecture hall and seminar building Z6**

Interface between Hubland-Süd campus and Hubland-Nord campus

## Conference Program

### Tuesday, 09.10.2018

**19:00 – 21:00** Arrival and Registration, Get-Together

### Wednesday, 10.10.2018

**08:45 – 09:00** Welcome Speech

- 09:00 – 09:40 Birgit Jacob: Input-to-State Stability of Unbounded Bilinear Control Systems
- 09:40 – 10:20 Timo Reis: Adaptive Tracking for Boundary Control Systems
- 10:20 – 11:00 Hans Zwart: Well-Posedness of Infinite-Dimensional Linear Systems with Nonlinear Feedback

*11:00 – 11:30 Coffee Break*

- 11:30 – 12:10 Christophe Prieur: Control of a Beam with Saturating Piezoelectric Controls
- 12:10 – 12:50 Antoine Chaillet: On Point-Wise Dissipation for Input-to-State Stability Properties of Time-Delay Systems

*12:50 – 14:00 Lunch*

- 14:00 – 14:30 Jochen Schmid: Stabilization of Port-Hamiltonian Systems by Nonlinear Boundary Control
- 14:30 – 15:10 Yacine Chitour: Weak Damping for Hyperbolic Systems
- 15:10 – 15:50 Xu Zhang: Finite Codimensional Controllability, and Optimal Control Problems with Endpoint State Constraints

*15:50 – 16:20 Coffee Break*

- 16:20 – 17:00 Miroslav Krstic: Prescribed-time Observers for Parabolic PDEs
- 17:00 – 17:30 Alexandre Seuret: Bessel Inequality for the Study of Time-Delay and Coupled ODE-PDE Systems
- 17:30 – 18:10 Enrique Zuazua: Control of a Population Dynamics Model with Age Structuring and Diffusion

**18:00 – 19:00** POSTER SESSION

## Conference Program

### Thursday, 11.10.2018

09:00 – 09:40	Kirsten Morris:	Optimal Sensor Location
09:40 – 10:20	Lassi Paunonen:	Stability of Coupled Passive Systems and PDEs
10:20 – 11:00	Arjan van der Schaft:	Geometric Modeling and Control of Thermodynamical Systems
<i>11:00 – 11:30 Coffee Break</i>		
11:30 – 12:00	Anton Selivanov:	Robust Delayed and Sampled-Data Control of Parabolic PDEs
12:00 – 12:40	Thomas Meurer:	Dissipativity-based Observer Design for Coupled Parabolic PDEs
<i>12:40 – 14:00 Lunch</i>		
14:00 – 14:30	Sergey Dashkovskiy:	Stability of Infinitely Many Interconnected Systems
14:30 – 15:10	Bao-Zhu Guo:	Performance Output Tracking for Multi-Dimensional Heat Equation Subject to Unmatched Disturbance
15:10 – 15:50	Marius Tucsnak:	The Piston Problem: Well-Posedness, Stability and Controllability
<i>15:50 – 16:20 Coffee Break</i>		
16:20 – 17:00	Sophie Tarbouriech:	Event-Triggered Strategy for Some Hyperbolic PDEs
17:00 – 17:40	Pierdemenico Pepe:	Converse Lyapunov Theorems for Systems with Delays: The Continuous Time and the Discrete-Time Case
17:40 – 18:10	Hugo Lhachemi:	ISS with Respect to Boundary Disturbances for a Class of Riesz-spectral Boundary Control Systems
<b>19:00 -</b>	<b>DINNER</b>	

# Conference Program

Friday, 12.10.2018

09:00 – 09:40	Andrii Mirochenko:	Criteria for Practical Input-to-State Stability
09:40 – 10:20	Fabian Wirth:	ISS Small-Gain Theorems for Spatially Invariant Systems
10:20 – 11:00	Bernhard Maschke:	About the Geometry of Descriptor Port Hamiltonian Systems
<i>11:00 – 11:30 Coffee Break</i>		
11:30 – 12:10	Lars Grüne:	The Turnpike Property for Parabolic PDEs and its Use for Efficiently Solving MPC Problems
12:10 – 12:50	Giorgio Valmorbida:	Convex Optimization Methods to Solve Integral Inequalities
<i>12:50 – 14:00 Lunch</i>		
<b>14:00 –</b>	<b>DEPARTURE</b>	

## Organizing Committee

Sergey Dashkovskiy	University of Würzburg, Germany
Birgit Jacob	University of Wuppertal, Germany
Andrii Mirochenko	University of Passau, Germany
Fabian Wirth	University of Passau, Germany

