

Workshop 5 within the Special Semester on Optimization

"Feedback Control"

November 28-30, 2019

Organizers: Dante Kalise, Karl Kunisch

	Thursday Nov. 28		Friday Nov. 29	Saturday Nov. 30
09:00 - 09:20	REGISTRATION			
09:20 - 09:30	Welcome			
09:30 - 10:00	V. Barbu: Asymptotic feedback controllability of Fokker-Planck equation.	09:30 - 10:00	M. Falcone: Discrete-time Dynamic Programming on a tree structure for finite-horizon optimal control.	G. Pavliotis: Spectral methods for linear and nonlinear Fokker-Planck equations.
10:00 - 10:30	M. Herty: Riccati Control for Particle Dynamics.	10:00 - 10:30	L. Saluzzi: A HJB-POD approach for the control of nonlinear PDEs on a tree structure.	G. Albi: The Boltzmann-Bellman approach for mean field control problems.
10:30 - 11:00	<i>Coffee Break</i>	10:30 - 11:00	<i>Coffee Break</i>	<i>Coffee Break</i>
11:00 - 11:30	E. Cerpa: Feedback designs for some linear infinite-dimensional systems.	11:00 - 11:30	S. Dolgov: A tensor decomposition approach for high-dimensional Hamilton-Jacobi-Bellman equations.	G. Marinoschi: Feedback stabilization of a phase-field system with viscosity effects.
11:30 - 12:00	M. Tucsnak: Polynomial stabilizability for a class of skew-adjoint systems describing water waves.	11:30 - 12:00	T. Breiten: Nonlinear infinite-horizon control using generalized Lyapunov equations.	A. Shirikyan: Exponential mixing in terms of controllability and application to boundary-driven 2D Navier-Stokes.
12:00 - 12:30	S. Gomes: Feedback control of falling liquid films.	12:00 - 12:30	G. Kirsten: Order reduction methods for solving large-scale differential matrix Riccati equations.	S. Rodrigues: Semiglobal exponential stabilization of nonautonomous semilinear parabolic-like systems.
12:30 - 14:00	<i>Lunch Break</i>	12:30 - 14:00	<i>Lunch Break</i>	Closing & Goodbye
14:00 - 14:30	C. Pignotti: Stability estimates for a Korteweg-de-Vries-Burgers equation with feedback delay.	14:00 - 14:30	J.-P. Raymond: Robust boundary stabilization of fluid flows in the case of partial observation.	
14:30 - 15:00	M. Gugat: The limits of stabilizability for networks of strings.	14:30 - 15:00	P. Benner: Numerical Computation of Robust Controllers for Incompressible Flow Problems.	
15:00 - 15:30	C. Prieur: Beam equation with saturating piezoelectric controls.	15:00 - 15:30	T. Takahashi: Feedback boundary stabilization of a fluid-beam interaction system.	
15:30 - 16:00	<i>Coffee Break</i>	15:30 - 16:00	<i>Coffee Break</i>	
16:00 - 16:30	T. Meurer: Flatness-based optimal and predictive control for PDEs.	16:00 - 16:30	J.A. Burns: Numerical Modeling for Feedback Control and Optimization of DPS.	
16:30 - 17:00	L. Pfeiffer: Analysis of the Receding Horizon Control method for stabilization problems.	16:30 - 17:00	H. Zidani: TBA	
17:00-17:30	L. Grüne: Towards efficient discretizations in model predictive control of PDEs.	17:00-17:30	B. Krämer: LQR control for systems with uncertain parameters via online-adaptive reduced models.	
18:30	Fingerfood, drinks and posters	19:00	Conference Dinner "Mensarei" Univ. Campus	