Tuesday, July 24

Auditorium Maximum of the Jagiellonian University, ul. Krupnicza 33

Plenary session — Room A

8.30	V. Schulz Mathematical Challenges and Fast Solution Methods in Aerodynamic Shape Optimization
9.30	M. Grötschel Half a Century of Discrete Mathematics a Progress Report

10.30 Coffee break — Room G

I.6-3 Control and Optimization of Nonlinear Evolutionary PDE Systems — Room B

11.00	M.C. Delfour Two-person zero-sum differential games
11.30	G. Fabbri, F. Gozzi Economic model of vintage capital the dynamic programming approach
12.00	B. Pasik-Duncan, T.E. Duncan, B. Masłowski Mild Solutions of Semilinear Stochastic Equations with Fractional Noise
12.30	T.E. Duncan, B. Masłowski, B. Pasik-Duncan Semilinear stochastic equations in a Hilbert space with a fractional Brownian motion

I.9-3. Evolution Problems and Optimal Control with Applications — Room C

11.00	B.S. Mordukhovich, D. Wang Optimal control of semilinear constrained parabolic inclusions
11.30	S. Migórski Evolution of viscoelastic contact problems for piezoelectric materials with adhesion
12.00	A. Ochal On integrodifferential hemivariational inequalities for viscoelastic materials with long memory term

I.13-1. Knowledge-Based Modeling Environments — Room D

11.00	A.J.M. Beulens, Y. Li, M. R. Kramer, J.G.A.J. van der Vorst Development of a Framework for Early Warning and Proactive Control System in Food Supply Networks
11.30	X. Shi, S. Voss Game Theoretical Aspects in Modeling and Analyzing Shipping Alliances
12.00	F. Thilo, C. Müller, M. Grauer Parallel direct search methods for simulation-based optimization
12.30	H.J. Sebastian Integration of Knowledge and Analytical Model Analysis in the field of Facility Location

I.16 Model Reduction for Nonlinear Control Systems — Room E

11.00	T.C. Ionescu, J.M.A. Scherpen Cross Gramians for Nonlinear Systems
11.30	A. Verhoeven, T. Bechtold, J. ter Maten, R.M.M. Mattheij Model order reduction for nonlinear IC models

12.00	M. Kahlbacher, S. Volkwein Parameter estimation in non-linear elliptic systems utilizing POD
12.30	K. Kunisch, S. Volkwein POD for optimality systems

R.1 Computational methods of optimal control for ODE systems   Room F

11.00	O. Bokanowski, N. Megdich, H. Zidani A fast anti-dissipative method for the minimum time problem. Application to atmospheric re-entry
11.30	J. Sternberg, M. Gerdts Memory-efficient implementation of stable nonsmooth Newton's method application to control-state constrained optimal control problems
12.00	R. Hannemann, W. Marquardt Fast Computation of the Hessian of the Lagrangian in the Sequential Approach for Optimal Control
12.30	A. Korytowski, M. Szymkat Adaptive parameterization for direct optimal control computations

13.00   Lunch   Room G

I.6-4 Control and Optimization of Nonlinear Evolutionary PDE Systems   Room B

14.30	F. Bourquin, A. Nassiopoulos Toward real-time model-based temperature assimilation for Structural Health Monitoring
15.00	L. Zietsman Mesh independence for LQR control of convection diffusion equations
15.30	W.W. Hager, B. Caliskan Aslan, S. Moskow A generalized eigenproblem for the Laplacian and its Application to the Lightning Discharge
16.00	J. Borggaard, M. Stoyanov, L. Zietsman Comparison of full- and reduced-order models for feedback control of fluids

I.9-4 Evolution Problems and Optimal Control with Applications   Room C

14.30	S. Carl Quasilinear parabolic variational inequalities Existence and Comparison
15.00	L. Gasiński Scalar Periodic Problems at Resonance with p-Laplacian-Like Operator
15.30	M. E. Filippakis, A. Kristaly, N.S. Papageorgiou, Five nontrivial solutions with precise sign data for a p-Laplacian equation
16.00	R.P. Agarwal, M.E. Filippakis, D. O'Regan, N.S. Papageorgiou Nodal and multiple constant sign solutions for equations with the p-Laplacian

I.13-2 Knowledge-Based Modeling Environments   Room D

14.30	D.R. Dolk Next Generation Model Management. Model Evolution as Knowledge Dynamics
15.00	A. Bordetsky Modeling Collaboration in Tactical Network-Centric Environments

| 15.30 | M. Grauer, J. Reichwald, T. Barth
A grid-based infrastructure for virtual product and process optimization in manufacturing |
| 16.00 | A.P. Wierzbicki, Y. Nakamori
Testing Knowledge Creation Theories |

I.8-1 Stability, Sensitivity and Error Analysis for Optimal Control Problems. Stability and discretization of optimal control problems Room E

14.30	T. Donchev, E. Farkhi, B. S. Mordukhovich Stability of discrete approximations for optimal control of one-sided Lipschitzian Differential Inclusions
15.00	W. Alt, N. Bräutigam, D. Karolewski A collocation method for quadratic control problems gorverned by ordinary elliptic differential equations
15.30	R. Griesse, T. Grund, D. Wachsmuth Update Strategies for Perturbed Nonsmooth Equations
16.00	N. Metla, R. Griesse, A. Rösch Convergence analysis of SQP method for semilinear elliptic optimal control problems with mixed control-state constraints

I.3-1 PDE Constrained Optimization Room F

14.30	C. Grossmann Elliptic control by general penalty techniques with control reduction
15.00	A. Günther, M.Hinze Goal-oriented adaptive concepts for elliptic optimal control problems in the presence of control and state constraints
15.30	M. Hintermüller, K. Kunisch Path-following techniques in PDE-constrained optimization with low multiplier regularity

16.30 Coffee break Room G

I.6-5 Control and Optimization of Nonlinear Evolutionary PDE Systems Room B

17.00	M.A. Horn Stabilization of Linked Structures of Differing Dimensions
17.30	B.S. Mordukhovich Suboptimal Feedback Control Design of Constrained Parabolic Systems in Uncertainty Conditions
18.00	S. Avdonin Control and Inverse Problems for the Wave and Heat Equations on Graphs

I.9-5 Evolution Problems and Optimal Control with Applications Room C

17.00	A. Nowakowski Nonhomogeneous boundary value problem for semilinear hyperbolic equation. Stability
17.30	P. Beremlijski, J. Haslinger, M. Kočvara, R. Kučera, J. Outrata Shape optimization in 3D contact problems with Coulomb friction
18.00	M. Jakszto Elliptic control systems in unbounded sets

I.5-3 Shape and Topology Optimization and Applications   Room D

17.00   W. Mitkowski, K. Oprzędkiewicz
An optimal sample time estimation for the finite-dimensional discrete dynamic compensator implemented at the " soft PLC "

17.30   J. Sokołowski, A. Żochowski
Asymptotic analysis and topological derivatives for linear elasticity

18.00   W. Mitkowski, P. Skruch
Shape optimization and the Pontryagin principle

18.30   G. Dzierżanowski
Computational analysis of layered laminates in two-dimensional elasticity problems

19.00   J.R. de Faria, A.A. Novotny, R.A. Feijóo, C. Padra
On the Second Order Topological Asymptotic

I.8-2 Stability, Sensitivity and Error Analysis for Optimal Control   Room E
     Problems. Discretization and error estimates I

17.00   O. Benedix, B. Vexler
A posteriori error estimates for elliptic optimal control problems with inequality constraints

17.30   M. Hinze, U. Matthes
Semidiscretizaton for semilinear elliptic optimal control problems with control constraints

18.00   W. Alt, N. Bräutigam
Discretization of Optimal Control Problems with Time Dependent Parameters

I.3-2 PDE Constrained Optimization   Room F

17.00   S. Schmidt, C. Ilic, V. Schulz
Structure Exploitation in Aerodynamic Shape Optimization

17.30   A. Walther, L. Biegler
A trust-region algorithm for nonlinear programming problems with dense constraint Jacobians

18.00   E. Bänsch, P. Benner, A. Heubner
Riccati-Based Feedback Stabilization of Flow Problems