

Monday, July 23

Senate Hall (Aula) of the AGH University of Science and Technology, al. Mickiewicza 30

9.00 **Opening**

Plenary session

9.30 G. Augusti, M. Ciampoli
Performance-Based Design as a Decision Strategy for Risk Reduction

Auditorium Maximum of the Jagiellonian University, ul. Krupnicza 33

10.30 **Coffee break** **Room G**

Plenary session **Room A**

11.00 S. Scholtes
Mathematical Programs with Equilibrium Constraints

12.00 J-P. Zolésio
Shape Tube metric, Geodesic Equation

13.00 **Lunch** **Room G**

I.6-1 Control and Optimization of Nonlinear Evolutionary PDE Systems **Room B**

14.30 F. Alabau-Boussouira
Decay of energy for evolution equations with memory damping

15.00 S. Faggian, F. Gozzi
Dynamic programming for infinite horizon boundary control problems for PDE's with age structure

15.30 P. Grabowski, F.M. Callier
Lur'e feedback systems wellposedness and stability using nonlinear semigroups

16.00 F. Bucci
Long-term dynamics of a nonlinear structural acoustic model with thermoelastic wall

I.9-1 Evolution Problems and Optimal Control with Applications **Room C**

14.30 N.U. Ahmed
Evolution Equations Determined by Vector and Operator Valued Measures and optimal Control

15.00 O. Cârjă, D. Motreanu
Lyapunov pairs and applications

15.30 N. Hritonenko, Y. Yatsenko
Discrete and Continuous Optimization of Asset Replacement in Economics and OR

16.00 Z. Naniewicz
On variational aspects of the economic equilibrium problem with application to Pareto optimality

I.7 Static and Moving Geometries as Modeling and/or Control Variables		Room D
14.30	J. Cagnol, J.-P. Zolésio Shape Derivative in Maxwell System by Hidden Regularity	
15.00	J.-P. Zolésio Tubes and Saddle Point Analysis	
15.30	M.C. Delfour Minimal smoothness of the midsurface in the asymptotic theory of shells	
16.00	L. Blanchard, J.-P. Zolésio Shape Approximation. Galerkin strategy for level set shape analysis	
I.4 Risk-Averse Optimization		Room E
14.30	A. Eichhorn, G. Pflug, W. Römisch Multiperiod risk functionals and their application in electricity risk management	
15.00	W. Ogryczak, M. M. Opolska-Rutkowska On primal-dual third degree stochastic dominance	
15.30	D. Dentcheva, A. Ruszczyński Stochastic Dynamic Optimization with Multivariate Stochastic Dominance Constraints	
16.00	D. Dentcheva, R. Henrion, A. Ruszczyński Stability and sensitivity of optimization problems with stochastic ordering constraints	
I.5-1 Shape and Topology Optimization and Applications		Room F
14.30	M. Pierre About regularity of optimal eigenfunctions for the Laplacian	
15.00	A. Henrot, G.A. Philippin Some geometric inequalities with applications	
15.30	M. Hintermüller, A. Laurain A level set based shape and topology optimization technique for solving obstacle problems	
16.00	P.I. Plotnikov, J. Sokołowski Drag minimisation for stationary, compressible Navier-Stokes equations. Part 1 Existence of optimal shapes	
16.30	Coffee break	Room G
I.6-2 Control and Optimization of Nonlinear Evolutionary PDE Systems		Room B
17.00	P. Cannarsa Null controllability results for degenerate parabolic equations	
17.30	A. Favini, L. Pandolfi On-line reconstruction of inputs to a class of distributed parameter systems	
18.00	J. Le Rousseau Some results of null controllability of parabolic equations in the case of non-smooth coefficients	
18.30	A. Kowalewski Boundary Control of Parabolic-Hyperbolic Systems with Time Delays	

I.9-2 Evolution Problems and Optimal Control with Applications		Room C
17.00	D. Idczak, S. Walczak Optimal control systems of second order with infinite time horizon	
17.30	O. Cârjă Flow-invariance and controllability	
18.00	M. Michta Existence of Optimal Solutions to Partial Differential Inclusions	
I.15 Boundary value problems factorization via invariant embedding		Room D
17.00	J. Henry, B. Louro, A. Ramos A Factorization Method for a Singular Perturbation Problem	
17.30	J. Henry, B. Louro, M.C. Soares Factorization by invariant embedding of a second order elliptic operator	
18.00	K.K. Sharma, J. Henry The computing zoom method and experimentation	
18.30	J. Henry, M. Orey QR like factorization for elliptic boundary value problems	
19.00	J. Henry A robust extension of the Kalman filter for parabolic systems in the deterministic framework	
I.2 Multi Scale Analysis in Global Optimization Strategies		Room E
17.00	T. Burczyński, W. Kuś, A. Mrozek Evolutionary methods in multiscale modeling	
17.30	Ł. Madej, D. Szeliga Identification of the multi scale CAFE model using the inverse method	
18.00	B.-A. Behrens, H. Conrads, A. Hundertmark Size-Effects in Metal Forming Processes	
18.30	G. Kokot, W. Kuś Global optimization of shell structures with small features by using multiscale approach	
19.00	M. Kopernik, A. Stanisławczyk, J. Kusiak, M. Pietrzyk Identification of material models in hard system of nanocoatings using metamodel	
I.5-2 Shape and Topology Optimization and Applications		Room F
17.00	S. Gaile, G. Leugering, M. Stingl Free Material Optimization for Plates and Shells	
17.30	K. Szulc, A. Laurain Inverse problems and self-adjoint extensions of Laplacian	
18.00	M. Grzanek, K. Szulc Numerical Method for Inverse Problems of Detection of Imperfections with Topological Derivatives and Neural Networks	
18.30	Z. Belhachmi, J.-M. Sac-Epée, J. Sokołowski, K. Szulc Modeling of geometrical imperfections. Topological derivatives in nonsmooth domains	
19.00	S. Czarnecki, T. Lewiński The free material design revisited	