Auditorium Maximum of the Jagiellonian University, ul. Krupnicza 33

	Plenary session	**Room A**
8.30	H. Furuta, K. Nakatsu, K. Takahiro, D.M. Frangopol Applications of Evolutionary Optimization in Structural Engineering	
9.30	A. Lewis Semi-algebraic Ideas in Nonsmooth Optimization	

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

	I.6-8 Control and Optimization of Nonlinear Evolutionary PDE Systems	**Room B**
11.00	G. Todorova Regularizing effects of nonlinear damping in supercritical defocusing nonlinear wave equations	
11.30	V.N. Domingos Cavalcanti Uniform Stabilization of the wave equation on compact surfaces and locally distributed damping	
12.00	M. Rammaha Systems of Nonlinear Wave Equations with Damping and Source Terms	
12.30	M.M. Cavalcanti On existence, uniform decay rates and blow up for solutions of the 2-D wave equation with exponential source	

	I.8-5 Stability, Sensitivity and Error Analysis for Optimal Control Problems. Regularization Strategies	**Room C**
11.00	A. Rösch, F. Tröltzsch Regularity of Lagrange multipliers for optimal control problems with PDEs and mixed control-state constraints	
11.30	S. Cherednichenko, A. Rösch Regularization and Discretization of Constrained Optimal Control Problems	
12.00	K. Krumbiegel A virtual control concept for state constrained optimal control problems	
12.30	U. Prüfert, F. Tröltzsch An interior point method for a parabolic optimal control problem with regularized pointwise state constraints	

	R.4 Optimal control of ODE systems	**Room D**
11.00	H.J. Oberle A Note on Nonsmooth Optimal Control Problems	
11.30	R. Rosendahl Second Order Sufficient Conditions for Space-Travel Optimal Control Problems	
12.00	V. Lykina, S. Pickenhain, M. Wagner On existence results for infinite horizon optimal control problems	
12.30	A.J. Zaslavski Nonoccurrence of the Lavrentiev phenomenon in nonconvex optimal control	

I.12-3 Modelling, Control and Optimization of Dynamical Systems   Room E
Theory and Applications to Biomedicine

11.00   D. Greenhalgh, F. Lewis
Control of HIV amongst injecting drug users

11.30   J. Śmieja
Two-scale model of interferon mediated antiviral response

12.00   P. Hinow, S. E. Wang, C. L. Arteaga, G. F. Webb
A mathematical model separates quantitatively the cytostatic and cytotoxic effects of a HER2 tyrosine kinase inhibitor

12.30   A. Marciniak-Czochra, P. Getto, M. Kimmel
Multiscale modelling of viral infection of cells and of interferon resistance

R.5 Nonlinear programming   Room F

11.00   H.D. Scolnik, N. Echebest, M.T. Guardarucci
Regularized incomplete oblique projections method for solving least-squares problems in image reconstruction

11.30   A. Cegielski
Convergence of relaxed alternating projection methods

12.00   E. Mijangos
Approximate subgradient methods over Lagrangian relaxations on networks

13.00   Lunch   Room G

I.6-9 Control and Optimization of Nonlinear Evolutionary PDE Systems   Room B

14.30   G. Fabbri, F. Gozzi, A. Święch
A verification theorem and construction of ε-optimal controls for optimal control of PDE

15.00   R. Triggiani
A Coupled Parabolic-Hyperbolic PDE system Arising in Fluid-Structure Interaction

15.30   W. Littman, S. Taylor
Heat and Schrödinger equations boundary control in one shot

16.00   M. Grobbelaar
On a structural acoustic model which incorporates shear and thermal effects in the structural component

I.10-1 Stochastic Control and Mathematics of Finance   Room C

14.30   T.E. Duncan
Existence of optimal controls for some stochastic systems with a fractional Brownian motion

15.00   M. Di Giacinto, F. Gozzi
Pension funds with minimum guarantee a stochastic control approach

15.30   A. Święch
Hamilton-Jacobi-Bellman equations and large deviations for stochastic PDE

16.00   R. Rudnicki
Asymptotic behavior of a stochastic gene expression model

R.6 Modelling and optimization of infinite dimensional systems   Room D

14.30 K. Liu
Green Function and its Role in the Optimal Control of Infinite Dimensional Neutral Systems

15.00 A. Myśliński
Level set method for shape and topology optimization of contact problems

15.30 D. Uciński, J. Korbicz
Optimal guidance of mobile sensor network nodes for fault detection in distributed parameter systems

16.00 P. Woźniak
Finite Element Multiobjective Design Of Permanent Magnet Generator Based On Dimensionality Reduction

I.12-4 Modelling, Control and Optimization of Dynamical Systems   Room E
Theory and Applications to Biomedicine

14.30 E. Afenya
Hemopoietic Dynamics in the Bone Marrow, the Myelodysplastic Syndromes, and Issues Related to Control of this Disease

15.00 T. Lipniacki, K. Puszynski, P. Paszek, A.R. Brasier, M. Kimmel
Stochastic robustness of NF-κB signaling

15.30 K. Rejniak, A. R. A. Anderson
Modelling morphological transformations of multi-cellular systems interacting with local environment

16.00 K. Fujarewicz
Planning identification experiments for cell signaling pathways using sensitivity analysis

R.7 Stochastic optimization   Room F

14.30 B. Lai
Lagrangian Relaxation for Stochastic Optimization with Probabilistic Constraints

15.00 I. Deák
No degradation of efficiency in very high dimensional Monte Carlo computations

15.30 J. Czekaj, L. Socha
Comparison of the exact and approximate algorithms in the random shortest path problem

16.00 Nguyen Huu Thong, Tran Van Hao
A stochastic algorithm for engineering optimization problems

16.30 Coffee break   Room G

I.1 Variational Inequalities and Proximal-like Methods   Room B

17.00 J. Gwiner, F. Raciti
Monotone Random Variational Inequalities on Random Sets with Applications to Traffic Networks

17.30 C. Jager
Extension of the Auxiliary Problem Principle Using Logarithmic-quadratic Functions

18.00 R. Tichatschke, A. Kaplan
Extended Auxiliary Problem Principle Using Bregman Distances

I.10-2 Stochastic Control and Mathematics of Finance   Room C

17.00 B. Pasik-Duncan, P. Mandl, T.E. Duncan
A Linear Control System Model for Risk Reserves

17.30 Ł. Kruk
Limiting distributions for minimum relative entropy calibration

18.00 O. Bokanowski, B. Bruder, S. Maroso, H. Zidani
Numerical approximation for super-replication problems under gamma constraints

R.8 Modelling and optimization of ODE Systems   Room D

17.00 V. Y. Glizer
On a Constrained Control Mayer's Problem for Singularly Perturbed Delayed Systems

17.30 F. Benmakrouha, C. Hespel
Generating series for the study of stability of bilinear systems

18.00 J. Bochniak, K. Gałkowski, E. Rogers, J. Velten
Control of an Industrial Rolling Process Using The Theory of Switched Repetitive Processes

18.30 Y. L. Menshikov
Identification problem as a problem of optimal control

I.12-5 Modelling, Control and Optimization of Dynamical Systems   Room E
Theory and Applications to Biomedicine

17.00 B. Hat, T. Lipniacki
Single cell experiments and modeling of p53/Mdm2 pathway

17.30 K. Puszyński, T. Lipniacki
Two feedback loop model of p53|Mdm2 signaling pathway

R.9 Modelling of PDE systems   Room F

17.00 S. Aihara, A. Bagchi
Adaptive parameter estimation for infinite-dimensional factor model by using particle filter

17.30 S. E. Rebiai
A conservative control system described by the Schrödinger equation

18.00 T.P. Azevedo-Perdicoúlis, G. Jank
Modelling a gas network through a parabolic DAE system

18.30 I. Ouranos, P. Stefaneas, K. Barlas, S. Demertzis, G. Koletsos, P. Frangos
Modelling real time authentication protocols using algebraic specification techniques - the case of TESLA protocol