SCIENTIFIC PROGRAMME

MONDAY, AUGUST 26, 2013

HALL A (No. 131)

9.00 – 9.30 Opening Ceremony

PLENARY LECTURES

HALL A (No. 131)

9.30 – 10.30 Bounds for Eigenfunctions of the Laplacian on Noncompact Riemannian Manifolds
*Vladimir **Maz'ya** | Sweden*

10.35 – 11.35 Parabolic Equations with Rough Initial Data
*Herbert **Koch** | Germany*

11.35 – 12.00 Coffee Break

INVITED LECTURES

HALL A (No. 131)

12.00 – 12.30 Quantum Ergodicity on Large Regular Graphs
*Nalini **Anantharaman** | France*

HALL B (No. 200)

12.00 – 12.30 Multigrid for Helmholtz Equations Just Does Not Work! Or Does It?
*Martin J. **Gander** | Switzerland*

HALL C (No. 300)

12.00 – 12.30 On Adaptivity, Convergence and Inexact Algebraic Computations in Numerical Solution of Partial Differential Equations
*Zdeněk **Strakoš** | Czech Republic*

12.30 – 14.00 Lunch

MINISYMPOSIA

HALL B (No. 200)

MS4 - Variational Methods for Quasilinear Elliptic Problems
*Organizer: Peter **Takáč** | Germany*

14.00 – 14.30 On Travelling Waves in Nonlinear Diffusion Models
*Peter **Takáč** | Germany*

14.30 – 15.00 On a Quasilinear Schrödinger Equation
*Andrzej **Szulkin** | Sweden*

15.00 – 15.30 On the Solvability of Resonance Problems with Respect to the Fucik Spectrum
*Stephen B. **Robinson**, Pavel Drábek | USA*

15.30 – 16.00 Positive Solutions to a Nonlinear Nonlocal Elliptic System Arising in Desertification
*Jesús **Hernández Alonso** | Spain*

HALL C (No. 300)

MS14 - Analysis and Simulations of Fluid-Structure Interaction
*Organizer: Mária **Lukáčová-Medviďová** | Germany*

14.00 – 14.30 Fluid-Structure Interaction with Multiple Structural Layers (Keynote lecture)
*Suncica **Canic**[1], Boris Muha[2], Martina Bukac[1] | [1]USA, [2]Croatia*

14.30 – 15.00 Existence and Collision Results for Some Fluid-Elastic Coupling
*Céline **Grandmont** | France*

15.00 – 15.30 On the Existence of Weak Solution to the Coupled Fluid-Structure Interaction Problem for Non-Newtonian Shear-Dependent Fluid
*Šárka **Nečasová**[1], A. Hundertmark-Zaušková[2], M. Lukáčová-Medviďová[2] | [1]Czech Republic, [2]Germany*

15.30 – 16.00 Kinematic Splitting Algorithm for Fluid-Structure Interaction in Hemodynamics
*Mária **Lukáčová-Medviďová,** A. Hundertmark-Zaušková, G. Rusnáková | Germany*

HALL D (No. 301)

MS5 - Geometrical Aspects of Spectral Theory
*Organizer: David **Krejčiřík** | Czech Republic*

14.00 – 14.30 High Order Selfadjoint Operators and Domain Perturbation
*José M. **Arrieta** | Spain*

14.30 – 15.00 Optimal Hardy-Type Inequalities and the Spectrum of the Corresponding Operator
*Yehuda **Pinchover** | Israel*

15.00 – 15.30 The Magnetic Laplacian in Shrinking Tubular Neighbourhoods of Hypersurfaces
*Matěj **Tušek** | Czech Republic*

15.30 – 16.00 Spectral Estimates of the Magnetic Dirichlet Laplacian in Domains
*Timo **Weidl** | Germany*

HALL E (No. 018)

MS8 - Recent Trends in Nonlinear Boundary Value Problems
*Organizer: Alberto **Cabada** | Spain*

14.00 – 14.30 Existence Results for Equations with Reflection
*Alberto **Cabada** | Spain*

14.30 – 15.00 On a Problem of Huang Concerning Best Constants in Sobolev Embeddings
*Antonio **Iannizzotto** | Italy*

15.00 – 15.30 New Criteria for the Existence of Multiple Solutions in Cones
*Gennaro **Infante** | Italy*

15.30 – 16.00 On Homoclinic Solutions of Semilinear *P*-Laplacian Difference Equations
*Stepan A. **Tersian** | Bulgaria*

HALL F (No. 217)

MS7 - Analysis and Numerical Methods in Nonlinear Solid Mechanics
*Organizer: Gerhard **Starke** | Germany*

14.00 – 14.30 First-Order System Finite Elements for Nonlinear Models in Solid Mechanics
*Gerhard **Starke** | Germany*

14.30 – 15.00 Extending Korn's First Inequality to Incompatible Tensor Fields
*Patrizio **Neff** | Germany*

15.00 – 15.30 LSFEM for Geometrically and Physically Nonlinear Elasticity Problems
*Benjamin **Müller** | Germany*

15.30 – 16.00 Plasticity of Crystalline Solids Treated as Material Flow Through Adjustable Crystal Lattice
*Piotr **Minakowski** | Poland*

HALL G (No. 429)

MS16 - Hamiltonian Wave Equations
*Organizer: Gerald **Teschl** | Austria*

14.00 – 14.30 A Closer Look at Conservative and Dissipative Solutions for the Camassa-Holm Equation
*Helge **Holden** | Norway*

14.30 – 15.00 On the Long-Time Asymptotics for the Dispersionless Camassa-Holm Equation
*Gerald **Teschl** | Austria*

15.00 – 15.30 Hamiltonian PDEs and Dispersive Shock Waves
*Tamara **Grava** | Italy*

15.30 – 16.00 On the Existence and Stability of Solitary-Wave Solutions to a Class of Evolution Equations of Whitham Type
*Mats **Ehrnstrom** | Norway*

HALL H (No. 317)

MS11 - Qualitative Theory of Nonlinear Elliptic and Parabolic Equations
*Organizer: Kazuhiro **Ishige** | Japan*

14.00 – 14.30 Parabolic Power Concavity and Parabolic Boundary Value Problems
*Kazuhiro **Ishige** | Japan*

14.30 – 15.00 A Simple PDE Model of Spot Replication
*Chiun-Chuan **Chen** | Taiwan*

15.00 – 15.30 On The Scale-Invariant Critical Hardy's Inequality and Related Variational Problems
*Michinori **Ishiwata** | Japan*

15.30 – 16.00 Finite-Time Blow-Up in Parabolic Keller-Segel Systems
*Michael **Winkler** | Germany*

HALL I (No. 209)

MS20 - Slow-Fast and Hysteretic Models of Population Dynamics
*Organizer: Dmitrii **Rachinskii** | USA, Ireland*

14.00 – 14.30 Memory in Switching Two-Phenotype Populations
*Dmitrii **Rachinskii**[1,2], Gary Friedman[1], Pavel Gurevich[3] | [1]USA, [2]Ireland, [3]Germany*

14.30 – 15.00 BV Solutions of Rate Independent Differential Inclusions
*Vincenzo **Recupero** | Italy*

15.00 – 15.30 Reaction-Diffusion Systems with Spatially Distributed Relays
*Pavel **Gurevich**[1], Sergey Tikhomirov[2] | [1]Germany, [2]Russia*

15.30 – 16.00 Modelling Permanent Effects of a Temporary Stimulus (PETS) In Predator-Prey and SIR Systems
*Alexander **Pimenov**[1], Andrei Korobeinikov[2], Dmitrii Rachinskii[3,4] | [1]Germany, [2]Spain, [3]Ireland, [4]USA*

16.00 – 16.30 Coffee Break

CONTRIBUTED TALKS

HALL B (No. 200)

16.30 – 16.50 Critical Case of Nonlinear Schrödinger Equations with Inverse-Square Potentials
*Toshiyuki **Suzuki** | Japan*

16.50 – 17.10 Convergence for a 2D Elliptic Problem with Large Exponent in Nonlinearity
*Futoshi **Takahashi** | Japan*

17.10 – 17.30 L^p and $W^{2,p}$-Estimates for Solutions of Elliptic Equations in Unbounded Domains
*Sara **Monsurrò** | Italy*

17.30 – 17.45 Break

17.45 – 18.05 Global Existence and Nonexistence of Solutions for Second-Order Nonlinear Differential Equations
*Naoto **Yamaoka** | Japan*

18.05 – 18.25 Unique Solvability and Positivity of Green's Functions for Impulsive Delay Equations
*Irina **Volinsky**, Alexander Domoshnitsky | Israel*

18.25 – 18.45 Existence of Solutions of Integral Equations Related to Inverse Problems of Quasilinear Ordinary Differential Equations
*Hiroyuki **Usami** | Japan*

HALL C (No. 300)

16.30 – 16.50 On Semi-Discrete Problems' Analytic Solutions for Some Equations of Mathematical Physics with Periodic Boundary Conditions
*Aigars **Gedroics** | Latvia*

16.50 – 17.10 Interactions of Traveling Spots in a Reaction-Diffusion System
*Kota **Ikeda** | Japan*

17.10 – 17.30 Anisotropic Level-Set Equation in Relative Geometry
*Dieu Hung **Hoang**, Michal Beneš, Tomáš Oberhuber | Czech Republic*

17.30 – 17.45 *Break*

17.45 – 18.05 Homotopy Invariants Detecting Global Bifurcations of Solutions to Multiparameter Differential Problems
*Dorota **Gabor** | Poland*

18.05 – 18.25 On a Linear Fractional Difference Equation
*Luděk **Nechvátal** | Czech Republic*

~~18.25 – 18.45 Polynomial Quasisolutions Method for Some Linear Differential Difference Equations of Mixed Type~~
~~*Valery B. **Cherepennikov** | Russia*~~

18.25 - 18.45 Measure Neutral Functional Differential Equations as Generalized ODEs
*Marcia Cristina A. B. **Federson** | Brazil*

HALL D (No. 301)

16.30 – 16.50 Estimates of the Principal Eigenvalue of the p-Laplacian and the p-Biharmonic Operator
*Jiří **Benedikt** | Czech Republic*

16.50 – 17.10 Dirichlet Problems with the Mean Curvature Operator in Minkowski Space
*Cristian **Bereanu** | Romania*

17.10 – 17.30 Spiral-Shaped Solutions to Crystalline Motion with a Moving Tip
*Tetsuya **Ishiwata** | Japan*

17.30 – 17.45 *Break*

17.45 – 18.05 On Existence Analysis of Steady Flows of Generalized Newtonian Fluids with Concentration Dependent Power-Law Index
*Petra **Pustějovská**[1], Miroslav Bulíček[2] | [1]Austria, [2]Czech Republic*

18.05 – 18.25 Solvability Of Mathematical Modeling for Brewing Process of Japanese Sake With Unknown Finish Time
*Yusuke **Murase** | Japan*

18.25 – 18.45 Discrete Model of the Dirac-Kähler Equation
*Volodymyr **Sushch** | Poland*

HALL E (No. 018)

16.30 – 16.50	Semidefinite Optimization for Measure-Valued Differential Equations *Didier **Henrion** | France, Czech Republic*
16.50 – 17.10	Primal-Dual Nonlinear Rescaling Method with Dynamic Scaling Parameter Update for the Optimization Arising from 3D Contact Problems *Richard **Andrášik** | Czech Republic*
17.10 – 17.30	Centers in the Trigonometric Abel Equation *Maite **Grau**, Jaume Giné, Xavier Santallusia | Spain*
17.30 – 17.45	*Break*
17.45 – 18.05	Diffusion with Self-Induced Convection *Rostislav **Vodák** | Czech Republic*
18.05 - 18.25	Periodic Solutions for Singular Perturbations of the Singular Φ-Laplacian Operator *Dana **Bereanu** | Romania*
18.25 – 18.45	Regularity of Weak Solutions to *p*-Laplace and *p*-Stokes Systems *Petr **Kaplický** | Czech Republic*

HALL F (No. 217)

16.30 – 16.50	A New Error Estimate for a Fully Finite Element Discretization Scheme for Parabolic Equations Using Crank-Nicolson Method *Abdallah **Bradji** | Algeria*
16.50 – 17.10	Deterministic and Stochastic Models of Circadian Rhythms *Tomáš **Vejchodský** | United Kingdom, Czech Republic*
17.10 – 17.30	Homogenization of a Carcinogenesis Model with Different Scalings with the Homogenization Parameter *Isabell **Graf** | Germany*
17.30 – 17.45	*Break*
17.45 – 18.05	Non-Isolated t-Periodic Orbits of t-Periodic Differential Equations Through Inverse Jacobi Multipliers *Isaac **García** | Spain*

18.05 – 18.25 A Counterpart of the Kamenev Theorem for Second-Order Linear Differential Equations
*Jiří **Šremr** | Czech Republic*

18.25 – 18.45 Limit-Point/Limit-Circle Problem for Quasilinear Second Order Equations with Damping
*Miroslav **Bartušek** | Czech Republic*

HALL G (No. 429)

16.30 – 16.50 On the Quasilinear Degenerate Parabolic Equations
*Pelin **Güven Geredeli** | Turkey*

16.50 – 17.10 Boundedness of Global Solutions to Degenerate Keller-Segel Systems
*Sachiko **Ishida** | Japan*

17.10 – 17.30 Abstract Theory of Variational Inequality and Application to Nonlinear PDE
*Takeshi **Fukao** | Japan*

17.30 – 17.45 Break

17.45 – 18.05 Solvability of the Complex Ginzburg-Landau Type Equation
*Kentarou **Yoshii** | Japan*

18.05 – 18.25 Properties of Monodromic Singularities on Center Manifolds in R3 Characterized from Lie Symmetries
*Susanna **Maza** | Spain*

18.25 – 18.45 Asymptotic Expansion of Solutions to the Dissipative Equation with Fractional Dissipation
*Masakazu **Yamamoto** | Japan*

HALL H (No. 317)

16.30 – 16.50 Global Ill-Posedness for Compressible Isentropic Euler System
*Ondřej **Kreml** | Czech Republic*

16.50 – 17.10 Regularity of Solutions of 3D Navier-Stokes Equations in a Lipschitz Domain for Small Data
*Minkyu **Kwak** | Republic of Korea*

17.10 – 17.30 The Robin Problem for the Scalar Oseen Equation
*Dagmar **Medková** | Czech Republic*

17.30 – 17.45 *Break*

17.45 – 18.05 Energy-Dissipations In Multidimensional Kobayashi-Warren-Carter Models of Grain Boundaries
*Hiroshi **Watanabe** | Japan*

18.05 – 18.25 Existence and Uniqueness of Solutions to *p*-Laplacian Parabolic Equations with Constraints Coupled with Navier-Stokes Equations in 2D Domains
*Yutaka **Tsuzuki** | Japan*

18.25 – 18.45 On investigation of a Dynamical Thermoelastic Model with Two Phase-Lags
*Gia **Avalishvili** | Georgia*

HALL I (No. 209)

16.30 – 16.50 Large Time Behavior of Solutions of a Semilinear Elliptic Equation with a Dynamical Boundary Condition
*Tatsuki **Kawakami** | Japan*

16.50 – 17.10 Large Time Behavior of a Solution for Carbon Dioxide Transport Model in Concrete Carbonation Process
*Kota **Kumazaki** | Japan*

17.10 – 17.30 Chaotic Behaviour of Continuous Dynamical System Generated by Euler Equation Branching in Plane R^2 and its Application in Macroeconomics
*Barbora **Volná** | Czech Republic*

17.30 – 17.45 *Break*

17.45 – 18.05 The Generalized Krasnosel'skii Formula for Semilinear Differential Equations and Periodic Solutions
*Wojciech **Kryszewski** | Poland*

18.05 – 18.25 Stability of Functional Differential Systems with a Finite Number of Delays
*Josef **Rebenda** | Czech Republic*

18.25 – 18.45 Oscillation Criteria for Some Third Order Ordinary Differential Equations
***Tadie** | Denmark*

TUESDAY, AUGUST 27, 2013

PLENARY LECTURES

HALL A (No. 131)

9.00 – 10.00 From Newtonian System of Particles to Heat Equation
*Laure **Saint-Raymond** | France*

10.05 – 11.05 Extinction of Solutions of the Fast Diffusion Equation
*Marek **Fila** | Slovakia*

11.05 – 11.30 Coffee Break

INVITED LECTURES

HALL A (No. 131)

11.30 – 12.00 Nonlinear Boundary Value Problems Involving the Extrinsic Mean Curvature Operator
*Jean **Mawhin** | Belgium*

HALL B (No. 200)

11.30 – 12.00 On a Gradient Flow of Plane Curves Minimizing the Isoperimetric Ratio in the Relative Geometry
*Daniel **Ševčovič** | Slovak Republic*

HALL C (No. 300)

11.30 – 12.00 Singularity Formation in Some Kinetic Models
*Juan J. L. **Velázquez** | Germany*

12.00 – 13.30 Lunch

HALL B (No. 200)

MS2 - Critical Point Theory and Applications to Nonlinear Differential Problems
*Organizer: Gabriele **Bonanno** | Italy*

13.30 – 14.00 Dirichlet Problems with Critical Growth via a Local Minimum Theorem
*Gabriele **Bonanno** | Italy*

14.00 – 14.30 Sign-Changing Solutions for Quasilinear Elliptic Equations with Neumann Boundary Conditions
*Giuseppina **Barletta** | Italy*

14.30 – 15.00 Existence and Multiplicity Results for Parameter-Depending Quasilinear Elliptic Equations
*Pasquale **Candito** | Italy*

15.00 – 15.30 Non-Smooth Critical Point Theory on Closed Convex Sets
*Salvatore Angelo **Marano** | Italy*

HALL C (No. 300)

MS13 - Coupled Variants of the Cahn-Hilliard Equation
*Organizer: Elisabetta **Rocca** | Italy*

13.30 – 14.00 A Nonlocal Model H with Nonconstant Mobility
*Elisabetta **Rocca** | Italy*

14.00 – 14.30 A Nonisothermal Model for Two-Phase Fluids
*Giulio **Schimperna** | Italy*

14.30 – 15.00 Some Generalizations of the Cahn-Hilliard Equation
*Alain **Miranville** | France*

15.00 – 15.30 On Convergent Numerical Schemes for Two-Phase Flow of Incompressible Fluids with Different Mass Densities
*Günther **Grün** | Germany*

HALL D (No. 301)

MS15 - Thin Poroelastic Media and Applications
*Organizers: Anna **Marciniak-Czochra**, Andro **Mikelić** | Germany, France*

13.30 – 14.00 A Rigorous Derivation of the Equations for the Clamped Biot-Kirchhoff-Love Poroelastic Plate
*Andro **Mikelić**[1], Anna Marciniak-Czochra[2] | [1]France, [2]Germany*

14.00 – 14.30 Weak Solutions for the Motion of a Self-Propelled Deformable Structure in a Viscous Incompressible Fluid
*Šárka **Nečasová**[1], Takéo Takahashi[2], Marius Tucsnak[2] | [1]Czech Republic, [2]France*

14.30 – 15.00 Homogenization in Vibro-Acoustic Problems Involving Perforated Plates
*Eduard **Rohan**[1], B. Miara[2], V. Lukeš[1] | [1]Czech Republic, [2]France*

~~15.00 – 15.30 Regularizing Effects of a Thin Elastic Interface with Mass in Fluid-Multi-Layered Structure Interaction Problems~~
~~*Suncica **Canic**[†], Boris Muha[2], Martina Bukač[†] | [†]USA, [2]Croatia*~~

15.00 – 15.30 Comparison Between Darcy and Brinkman Laws in a Fracture
*Eduard **Marusic-Paloka** | Croatia*

HALL E (No. 018)

MS27 - Recent Results in Continuum and Fracture Mechanics
*Organizer: Werner **Varnhorn** | Germany*

13.30 – 14.00 Degenerating Cahn-Hilliard Systems Coupled with Mechanical Effects and Complete Damage Processes
*Christian **Heinemann** | Germany*

14.00 – 14.30 The Energy Criterion in Quasistatic Crack Propagation: Some Special Aspects
*Maria **Specovius-Neugebauer**, Martin Steigemann, Sergej A. Nazarov | Germany*

14.30 – 15.00 Change of Energy Caused by Crack Propagation in 3-Dimensional Anisotropic Solids
*Martin **Steigemann**, Maria Specovius-Neugebauer | Germany*

15.00 – 15.30 Uniqueness of Solutions of Fully Implicit Nonlinear Difference Schemes
*Florian **Zanger** | Germany*

HALL F (No. 217)

MS6 - Differential Equations with Singularities and Impulses
*Organizer: Irena **Rachůnková** | Czech Republic*

13.30 – 14.00 Boundary Value Problems with State-Dependent Impulses
*Irena **Rachůnková** | Czech Republic*

14.00 – 14.30 Positive Solutions of Periodic Boundary Value Problem at Resonance
*Mirosława **Zima** | Poland*

14.30 – 15.00 Positive Solutions of Two-Point Boundary Value Problems for Higher Order Nonlinear Differential Equations
*Ivan **Kiguradze** | Georgia*

15.00 – 15.30 Periodic Oscillations in a Singular Equation Modelling Valveless Pumping
*José Ángel **Cid** | Spain*

HALL G (No. 429)

MS17 - Weak Solutions to the Navier-Stokes Equations and Their Regularity
*Organizer: Reinhard **Farwig** | Germany*

13.30 – 14.00 Optimal Initial Values and Regularity Conditions of Besov Space Type for Weak Solutions to the Navier-Stokes System
*Reinhard **Farwig** | Germany*

14.00 – 14.30 Stability of Local Existence and Numerical Verification of Regularity in 3D Navier-Stokes Equations
*Witold **Sadowski** | Poland*

14.30 – 15.00 On the Local Pressure and Local Regularity for Suitable Weak Solutions to the Navier-Stokes Equations and Related Systems
*Joerg **Wolf** | Germany*

15.00 – 15.30 Some Recent Results on Regularity of Weak Solutions to the Navier-Stokes Equations
*Jiří **Neustupa** | Czech Republic*

HALL H (No. 317)

MS31 - Recurrence and Stability of Nonlinear Models Arising in the Applied Sciences
*Organizer: Pedro J. **Torres** | Spain*

13.30 – 14.00 Periodic Solutions of a Fluid Particle Induced by a Prescribed Vortex Path in a Circular Domain
*Pedro J. **Torres** | Spain*

14.00 – 14.30 Some Results About Epidemiological Models
*Carlota **Rebelo** | Portugal*

14.30 – 15.00 Some Analytical Results About Periodic Orbits in the Restricted Three Body Problem with Dissipation
*Alessandro **Margheri** | Portugal*

15.00 – 15.30 Nonuniform Dichotomies with Different Growth Rates
*Jifeng **Chu**, Barreira Luis, Claudia Valls | China*

HALL I (No. 209)

MS9 - Geometric Aspects of Elliptic PDEs and Related Inequalities
*Organizer: Andrea **Cianchi** | Italy*

13.30 – 14.00 Sharp Constants in Sobolev Trace Inequalities in BV
*Andrea **Cianchi** | Italy*

14.00 – 14.30 A Stability Result for an Overdetermined Problem in Potential Theory
*Wolfgang **Reichel** | Germany*

14.30 – 15.00 Discontinuous Gradient Constraints and the Infinity Laplacian
*Julio Daniel **Rossi** | Spain*

15.00 – 15.30 Concentration Profiles for Moser-Trudinger Functional are Shaped Like Toy Pyramids
*Cyril **Tintarev** | Sweden*

15.30 – 16.00 Coffee Break

CONTRIBUTED TALKS

HALL B (No. 200)

16.00 – 16.20 Extreme Solutions to a System of *n* Nonlinear Differential Equations and Regularly Varying Functions
*Pavel **Řehák** | Czech Republic*

16.20 – 16.40 Periodic Differential Operators with Asymptotically Predefined Spectral Gaps
*Andrii **Khrabustovskyi** | Germany*

16.40 – 17.00 Bifurcation of Periodic Solutions of Asymptotically Linear Autonomous Hamiltonian System
*Anna **Gołębiewska** | Poland*

17.00 – 17.15 Break

17.15 – 17.35 Connecting Orbits for Nonlinear Evolution Equations at Resonance
*Piotr **Kokocki** | Poland*

17.35 – 17.55 Attractivity Implies Stability for Half-Linear Differential Systems with Time-Varying Coefficients
*Masakazu **Onitsuka** | Japan*

HALL C (No. 300)

16.00 – 16.20 On the Existence of Solutions for a Nonlinear Differential Inclusion
*Aurelian **Cernea** | Romania*

16.20 – 16.40 An Ergodic Poincaré-Bendixson Theorem for Extended Scalar Reaction-Diffusion Equations
*Siniša **Slijepčević** | Croatia*

16.40 – 17.00 Functional-Differential Equations with Riemann-Liouville Fractional Integrals in the Nonlinearities
*Milan **Medveď** | Slovakia*

17.00 – 17.15 Break

17.15 – 17.35 Boundedness of Solutions to Parabolic-Elliptic Keller-Segel Systems
*Tomomi **Yokota** | Japan*

17.35 – 17.55 On the Stability of the Initial Conditions for the Parabolic Gelfand Problem
*Alejandro Omón **Arancibia** | Chile*

HALL D (No. 301)

16.00 – 16.20 Some New Error Estimates for Finite Element Methods for Second Order Hyperbolic Equations Using the Newmark Method
*Abdallah **Bradji** | Algeria*

16.20 – 16.40 New Numerical Results on Some Boussinesq-Type Wave Equations
*Handan **Borluk** | Turkey*

16.40 – 17.00 Time Delay In Chemical Exchange During an NMR Pulse
*Dan **Gamliel** | Israel*

17.00 – 17.15 Break

17.15 – 17.35 Local and Global Estimates for Modified Riccati Equation in Half-Linear Oscillation Theory
*Simona **Fišnarová** | Czech Republic*

17.35 – 17.55 Weak Almost Periodic Motions, Minimality and Stability in Impulsive Semidynamical Systems
*Manuel Francisco **Zuloeta Jimenez** | Brazil*

17.55 – 18.15 Effects of Noise on a Periodic Solution of a System of Nonlinear Delay-Differential Equations in Application to Semiconductor Lasers
*Alexander **Pimenov**[1], Natalia Rebrova[2], Dmitrii Rachinskii[2,3], Andrei G. Vladimirov[1,2] | [1]Germany, [2]Ireland, [3]USA*

HALL E (No. 018)

16.00 – 16.20 Large Time Behavior of a Solution to a Two-Scale Problem as Mathematical Model for Sulfate Attack in Sewer Pipes
*Toyohiko **Aiki** | Japan*

16.20 – 16.40 Boundary Value Problems Governed by the Helmholtz Equation in a Half-Plane with an Obstacle Perpendicular to the Boundary
*Luis **Castro** | Portugal*

16.40 – 17.00 Elliptic Problems with Variable Exponent and Nonhomogeneous Neumann Conditions
*Giuseppina **D'Aguì** | Italy*

17.00 – 17.15 Break

17.15 – 17.35 The Termination Principle and Bifurcation Geometry of Polynomial Dynamical Systems
*Valery A. **Gaiko** | Belarus*

17.35 – 17.55 Asymptotic Analysis of Positive Decreasing Solutions of a Class of Systems of Second Order Nonlinear Differential Equations in the Framework of Regular Variation
*Tomoyuki **Tanigawa** | Japan*

HALL F (No. 217)

16.00 – 16.20 Asymptotic Behaviour of Non-Autonomous Systems
*María **Anguiano** | Spain*

16.20 – 16.40 On Asymptotic Behavior of Solutions to Emden-Fowler Type Higher-Order Differential Equations
*Irina V. **Astashova** | Russia*

16.40 – 17.00 Forced Oscillations for Second Order Odes on a Class of Implicitly Defined Manifolds
*Alessandro **Calamai** | Italy*

17.00 – 17.15 Break

17.15 – 17.35 Forward-Backward Diffusion Equations and Indefinite Spectral Problems
*Aleksey **Kostenko** | Austria*

17.35 – 17.55 Sharp Estimate of the Spreading Speed Determined by Nonlinear Free Boundary Problems
*Hiroshi **Matsuzawa** | Japan*

17.55 – 18.15 Recent Results on Nonlocal Diffuse-Interface Models for Binary Fluids
*Sergio **Frigeri** | Italy*

HALL G (No. 429)

16.00 – 16.20 Three Solutions Theorem for *p*-Laplacian Problems with a Sign-Changing Singular Weight and Its Application
*Eun Kyoung **Lee** | Republic of Korea*

16.20 – 16.40 A New Solution Operator for *p*-Laplacian Systems with Sign-Changing Singular Weights
*Yong-Hoon **Lee** | Republic of Korea*

16.40 – 17.00 Quasilinear Elliptic Equations with Positive Exponent on the Gradient
*Jadranka **Kraljević**, D. Žubrinić | Croatia*

17.00 – 17.15 Break

17.15 – 17.35 A Continuation Problem for Computing Solutions of Discretised Evolution Problems
*Tomáš **Ligurský** | Czech Republic*

17.35 – 17.55 Smooth Approximation of Data and Its Application
*Karel **Segeth** | Czech Republic*

17.55 – 18.15 Kernel Function Based Interior-Point Algorithms for Symmetric Optimization Problems
*Gyeong Mi **Cho** | Republic of Korea*

HALL H (No. 317)

16.00 – 16.20 The Brownian Traveller on Manifolds
*David **Krejčiřík** | Czech Republic*

16.20 – 16.40 On the Estimates to the Eigenvalues of a Robin Problem
*Alexey V. **Filinovskiy** | Russia*

16.40 – 17.00 Multiplicity Results for the Scalar Curvature Equation
*Matteo **Franca** | Italy*

17.00 – 17.15 Break

17.15 – 17.35 General Model of Traffic Flow in a Network
*Angela **Jimenez-Casas** | Spain*

17.35 – 17.55 On Periodic Solutions of a Model Equation for Surface Waves of Moderate Amplitude in Shallow Water
Nilay ***Duruk Mutlubas*** | *Austria*

17.55 – 18.15 Travelling Wave in a Time-Discrete Reaction-Diffusion Equation
Zdeněk ***Pospíšil*** | *Czech Republic*

HALL I (No. 209)

16.00 – 16.20 Attractors for the Magnetic Bénard Problem
Naoyuki ***Ishimura****, MasaAki Nakamura* | *Japan*

16.20 – 16.40 Positive Solutions of the p-Laplace Emden-Fowler Equation in Hollow Thin Symmetric Domains
Ryuji ***Kajikiya*** | *Japan*

16.40 – 17.00 A Mathematical Model for the Recovery of Human and Economic Activities in Disaster Regions
Nobuyuki ***Kenmochi****, Atsushi* ***Kadoya*** | *Japan*

17.00 – 17.15 *Break*

17.15 – 17.35 Abstract Size-Structured Population Dynamics in Banach Spaces
Nobuyuki ***Kato*** | *Japan*

17.35 – 17.55 On the Existence of Solutions of Ordinary Differential Equations in Banach Spaces
Aldona ***Dutkiewicz*** | *Poland*

WEDNESDAY, AUGUST 28, 2013

HALL A (No. 131)

PLENARY LECTURE

9.00 – 10.00 A Quantitative Theory in Stochastic Homogenization
*Felix **Otto** | Germany*

BERNARD BOLZANO LECTURE

10.05 – 11.05 Two Notions Which Affected Nonlinear Analysis
*Pavel **Drábek** | Czech Republic*

11.05 – 11.30 Coffee Break

INVITED LECTURES

HALL A (No. 131)

11.30 – 12.00 Sturm Global Attractors and Morse Decompositions
*Carlos **Rocha** | Portugal*

12.00 – 12.30 On Hölder Continuity of Solution to Elliptic Systems & Variational Integrals
*Miroslav **Bulíček** | Czech Republic*

HALL B (No. 200)

11.30 – 12.00 Random Ordinary Differential Equations and Their Numerical Approximation
*Peter **Kloeden** | Germany*

12.00 – 12.30 The Electrostatics Problem with a Dipole Source: Theoretical Results and Numerical Approximation
*Alberto **Valli** | Italy*

HALL C (No. 300)

11.30 – 12.00 Liouville Type Theorems for a Class of Non-Cooperative Elliptic Systems
*Tobias **Weth** | Germany*

12.00 – 12.30 Removable and Non-Removable Singularities in Parabolic Equations
*Eiji **Yanagida** | Japan*

12.30 – 13.30 *Lunch*

15.00 – 17.00 **Sightseeing Tour of Prague**
Meeting point: conference venue

THURSDAY, AUGUST 29, 2013

PLENARY LECTURES

HALL A (No. 131)

9.00 – 10.00 Heat Flow, Optimal Transport and Curvature
*Giuseppe **Savaré** | Italy*

10.05 – 11.05 Hierarchical Construction of Solutions in Critical Regularity Spaces
*Eitan **Tadmor** | USA*

11.05 – 11.30 *Coffee Break*

INVITED LECTURES

HALL A (No. 131)

11.30 – 12.00 Some Recent Advances on Time Optimal Control Problems for Infinite Dimensional Systems
*Marius **Tucsnak** | France*

HALL B (No. 200)

11.30 – 12.00 Long Time Average of Mean Field Games
*Alessio **Porretta** | Italy*

HALL C (No. 300)

11.30 – 12.00 Nondegeneracy of Blow-Up Points for the Parabolic Keller-Segel System
*Philippe **Souplet** | France*

12.00 – 13.30 *Lunch*

MINISYMPOSIA

HALL B (No. 200)

MS10 - Quantum Dynamics on Graphs
*Organizer: Pavel **Exner** | Czech Republic*

13.30 – 14.00 Resonances in Quantum Graphs
*Pavel **Exner** | Czech Republic*

14.00 – 14.30 Shrinking Fat Graphs and Convergence of Operators and Spectra
*Olaf **Post** | United Kingdom*

14.30 – 15.00 Nonlinear Schrödinger Equation on Graphs
*Claudio **Cacciapuoti** | Germany*

15.00 – 15.30 Nodal Count of Graph Eigenfunctions as an Index of Instability
*Gregory **Berkolaiko** | USA*

HALL C (No. 300)

MS28 - Fourier Analysis and Compressible Navier-Stokes Equations
*Organizer: Raphaël **Danchin** | France*

13.30 – 14.00 A Survey on Fourier Analysis Methods for Compressible Flows
*Raphaël **Danchin** | France*

14.00 – 14.30 Existence of Global Strong Solution for Korteweg System with Large Infinite Energy Initial Data
*Boris **Haspot** | France*

14.30 – 15.00 On the Well-Posedness of the Low Mach Number Limit System
*Xian **Liao** | Czech Republic*

15.00 – 15.30 Convergence of Capillary Fluid Models: From the Non-Local to the Local Korteweg System
*Frédéric **Charve** | France*

HALL D (No. 301)

MS19 - Topological Methods in Differential Equations
*Organizer: Luisa **Malaguti** | Italy*

13.30 – 14.00 Topological Methods for Semi-Linear Evolution Equations in Abstract Spaces
*Luisa **Malaguti** | Italy*

14.00 – 14.30 Instability of a Reaction-Diffusion System with Unilateral Obstacles
*Martin **Väth** | Germany*

14.30 – 15.00 Structure of the Solution Sets to Impulsive Differential Inclusions
*Grzegorz **Gabor** | Poland*

15.00 – 15.30 Limit-Periodic Solutions of Differential and Difference Equations
*Jan **Andres** | Czech Republic*

HALL E (No. 018)

MS29 - Partial Differential Equations in Fluid Mechanics
*Organizer: Antonín **Novotn**ý | France*

13.30 – 14.00 On the Euler Boussinesq Asymptotics of the Navier-Stokes-Fourier System
*Antonín **Novotný** | France*

14.00 – 14.30 On the Rotating Patches for Inviscid Flows
*Taoufik **Hmidi** | France*

14.30 – 15.00 The Motion of the Rigid Body with Collisions in a Bounded Domain Global Solvability Result
*Nikolai V. **Chemetov**[1], Šárka Nečasová[2] | [1]Portugal, [2]Czech Republic*

15.00 – 15.30 Homogenization of a System of Multi-Species Semilinear Diffusion-Reaction Equations in an $H^{1,p}$ Setting
*Hari Shankar **Mahato** | Germany*

HALL F (No. 217)

MS30 - Long Term Behavior of Difference Equations and Systems of Difference Equations
*Organizer: Stevo **Stević** | Serbia*

13.30 – 14.00 Long Term Behavior of Positive Solutions of Some Classes of Difference Equations and Systems of Difference Equations
*Stevo **Stević** | Serbia*

14.00 – 14.30 Ważewski's Method for Discrete Equations
*Josef **Diblík** | Czech Republic*

14.30 – 15.00 Sufficient Conditions for Existence of a Positive Solution of Discrete Equations of (K+1)-st Order
*Jaromír **Baštinec**, Josef Diblík | Czech Republic*

15.00 – 15.30 Positive Solutions of *p*-Type Retarded Functional Differential Equations
*Zdeněk **Svoboda** | Czech Republic*

HALL G (No. 429)

MS1 - Methods of Nonlinear Analysis in the Theory of Differential Inclusions and Control Theory
*Organizer: Valeri **Obukhovskii** | Russia*

13.30 – 14.00 On Applications of the Method of Guiding Functions in Some Problems of Differential Inclusions and Control Systems
*Valeri **Obukhovskii** | Russia*

14.00 – 14.30 Exposed Solutions of Differential Inclusions
*Vladimir V. **Goncharov** | Portugal*

14.30 – 15.00 Multivalued Fixed Point Theorems in Banach Spaces
*Paola **Rubbioni** | Italy*

15.00 – 15.30 Semilinear Evolution Equations Without Strong Compactness: Solvability and Controllability
*Valentina **Taddei** | Italy*

HALL H (No. 317)

MS21 - Recent Trends in PDE-Constrained Control and Shape Design
*Organizer: Dietmar **Hömberg** | Germany*

13.30 – 14.00 An Optimal Shape Design Approach Towards Distortion Compensation
*Dietmar **Hömberg** | Germany*

14.00 – 14.30 Shape Optimization of the Ground State for Two Phase Conductors
*Antoine **Laurain** | Germany*

14.30 – 15.00 Optimal Control of Static Elastoplasticity with Hardening
*Christian **Meyer** | Germany*

15.00 – 15.30 Hybrid Level Set Phase Field Method in Shape Optimization
*Andrzej **Myśliński** | Poland*

HALL I (No. 209)

MS18 - Degeneration and Singularity
*Organizer: Piotr Bogusław **Mucha** | Poland*

13.30 – 14.00 Well-Posedness for a Quasi-Stationary Droplet Model
*Patrick **Guidotti** | USA*

14.00 – 14.30 Mass Transport Problems for the Euclidean Distance Obtained as Limits of *p*-Laplacian Type Problems with Obstacles
*Julio Daniel **Rossi** | Spain*

14.30 – 15.00 Examples of Singular Diffusion Equations in One and Two Dimensions: Facets and More
*Piotr **Rybka**, Piotr Mucha, Monika Muszkieta | Poland*

15.00 – 15.30 Chemically Reacting Mixtures in Terms of Degenerated Parabolic Setting
*Ewelina **Zatorska** | Poland*

15.30 – 16.00 Coffee Break

CONTRIBUTED TALKS

HALL B (No. 200)

16.00 – 16.20 The Oberbeck-Boussinesq Approximation in R^3 as a Limit of Compressible Naver-Stokes-Fourier with Low Mach Number
*Aneta **Wróblewska-Kamińska** | Poland*

16.20 – 16.40 Steady Compressible Navier-Stokes-Fourier System
*Milan **Pokorný** | Czech Republic*

16.40 – 17.00 Incompressible Limits of Fluids Excited by Moving Boundaries
*Jan **Stebel**, Eduard Feireisl, Ondřej Kreml, Šárka Nečasová, Jiří Neustupa | Czech Republic*

17.00 – 17.15 *Break*

17.15 – 17.35 The Size of Vorticity and Its Connection with Pressure in Nonlinear Navier-Stokes Equations
*Alejandro Omón **Arancibia** | Chile*

17.35 – 17.55 Strong Solutions to the Stationary Compressible Navier-Stokes-Fourier System
*Tomasz **Piasecki**| Poland*

17.55 – 18.15 L^q Theory for Generalized Stokes System Under Perfect Slip Boundary Condition
*Václav **Mácha** | Czech Republic*

HALL C (No. 300)

16.00 – 16.20 Fatigue Accumulation in Oscillating Thermoelastoplastic Structures with Hysteresis - Part I (Modelling)
*Michela **Eleuteri** | Italy*

16.20 – 16.40 Fatigue Accumulation in Oscillating Termoelastoplastic Structures with Hysteresis, Part II (Mathematics)
*Jana **Kopfová** | Czech Republic*

16.40 – 17.00 On Modeling Torsion of a Bar with Multi-Connected Profile
*Jan **Franců**, Petra Nováčková | Czech Republic*

17.00 – 17.15 *Break*

17.15 – 17.35 Morse Index and Symmetry-Breaking for Positive Solutions of One-Dimensional Hénon Type Equations
*Satoshi **Tanaka** | Japan*

17.35 – 17.55 Formal Adjoint Theory and Asymptotic Formula of Solutions of Integral Equations with Infinite Delay
*Hideaki **Matsunaga** | Japan*

HALL D (No. 301)

16.00 – 16.20 Blow-Up Phenomena for Dullin-Gottwald-Holm Equation with Dissipative Term
*Emil **Novruzov** | Turkey*

16.20 – 16.40 Minimal Energy Solutions for Repulsive Nonlinear Schrödinger Systems
*Rainer **Mandel** | Germany*

16.40 – 17.00 Solvability of a One Dimentional Free Boundary Problem for Adsorption Phenomena
*Naoki **Sato** | Japan*

17.00 – 17.15 *Break*

17.15 – 17.35 On Chemotactic Systems with Competitive Terms
*J. Ignacio **Tello** | Spain*

17.35 – 17.55 On One Extension Theorem Dealing with Weighted Orlicz-Slobodetskii Space on the Boundary of Domain
*Raj Narayan **Dhara**, Agnieszka Kałamajska | Poland*

HALL E (No. 018)

16.00 – 16.20 Hopf Bifurcation for Dissipative Hyperbolic PDEs
*Lutz **Recke** | Germany*

16.20 – 16.40 Bifurcations of Invariant Measures in Discrete-Time Parameter Dependent Cocycles
*Volker **Reitmann**, Anastasia Maltseva | Russia*

16.40 – 17.00 Stability Regions for Fractional Difference Equations
*Tomáš **Kisela** | Czech Republic*

17.00 – 17.15 Break

17.15 – 17.35 Rhythmic Phenomenon of the Belousov-Zhabotinsky Reaction Catalyzed by Cerium and Ferroin
*Chikahiro **Egami** | Japan*

17.35 – 17.55 Identification of Material Characteristics in Heat and Mass Transfer
*Jiří **Vala** | Czech Republic*

17.55 – 18.15 A Norm and Two Metrics in the Space of Regulated Functions
*Dana **Fraňková** | Czech Republic*

HALL F (No. 217)

16.00 – 16.20 Smooth Attractors for Quintic Wave Equations with Fractional Damping
*Anton **Savostianov**, Sergey Zelik | United Kingdom*

16.20 – 16.40 Spectral Comparison in a Reaction-Diffusion System
*Yoshihisa **Morita** | Japan*

16.40 – 17.00 Thresholds for Global Existence and Blow-Up in a General Class of Doubly Dispersive Nonlocal Wave Equations
*Albert **Erkip** | Turkey*

17.00 – 17.15 Break

17.15 – 17.35 Direct and Inverse Problems for Semilinear Higher Order Ultraparabolic Equation
*Nataliya P. **Protsakh** | Ukraine*

17.35 – 17.55 Parametrices for the Modified Korteweg-De Vries Equation in a Modulated Elliptic Wave Region
*Alexander A. **Minakov** | Czech Republic*

HALL G (No. 429)

~~16.00 – 16.20 Uniqueness of Positive Radial Solutions of $\Delta u+G(R)U+H(R)U^p=0$ and its Applications~~
~~*Naoki **Shioji** | Japan*~~

16.00 – 16.20 BMO Estimates for *p*-Parabolic Systems
*Sebastian **Schwarzacher** | Germany*

16.20 – 16.40 Existence and Uniqueness Results for *p(x)*-Laplacian with Degeneracy
*Inbo **Sim** | Republic of Korea*

16.40 – 17.00 Method of Lyapunov Functions for Impulsive Semidynamical Systems
*Jaqueline da **Costa Ferreira**, Everaldo de Mello Bonotto | Brasil*

17.00 – 17.15 Break

17.15 – 17.35 Continuous Dependence of Solutions of Generalized Linear Differential Equations on a Parameter
*Giselle **Antunes Monteiro** | Czech Republic*

17.35 – 17.55 Impulsive Neutral Fractional Functional Differential Equation with State Dependent Delay and an Integral Condition
*Jaydev **Dabas** | India*

HALL H (No. 317)

16.00 – 16.20 Method of Lines for Parabolic Stochastic Functional Partial Differential
*Maria **Ziemlanska** | Poland*

16.20 – 16.40 On Set-Valued and Fuzzy Stochastic Differential Equations
*Marek T. **Malinowski** | Poland*

16.40 – 17.00 Effective Flow of Quasi-Newtonian Fluid Through a Domain with a Slightly Rough Bottom
*Francisco Javier **Suárez-Grau** | Spain*

17.00 – 17.15 Break

17.15 – 17.35 Blow-Up for Differential Inequalities with Singularities on Unbounded Sets
*Evgeny **Galakhov** | Russia*

17.35 – 17.55 Multiple Positive Solutions for a Higher-Order Multi-Point Boundary Value Problem
*Rodica **Luca-Tudorache** | Romania*

HALL I (No. 209)

16.00 – 16.20 Scales of Banach Spaces, Theory of Interpolation and Their Applications
*Łukasz **Dawidowski** | Poland*

16.20 – 16.40 Dirichlet and Neumann Problems in Multi-Dimensional Cone
*Vladimir B. **Vasilyev** | Russia*

16.40 – 17.00 Surjectivity of Non-Linear Operators from a Banach Space into Itself
*Nikos **Yannakakis** | Greece*

17.00 – 17.15 Break

17.15 – 17.35 Dynamics of a Single Species in a Fluctuating Environment
*Svitlana P. **Rogovchenko** | North Cyprus*

17.35 – 17.55 Meanfield and Cellular Automata Models of Competitions in Metapopulations with Overcolonization
*János **Karsai**, Ágnes Méri, Irma Szimjanovszki, Éva V.P. Rácz | Hungary*

19.30 – 21.30 Conference Dinner
Cruise on the Vltava River through the historic centre of Prague
Meeting point: 19.00 - conference venue

FRIDAY, AUGUST 30, 2013

PLENARY LECTURES

HALL A (No. 131)

9.00 – 10.00 Long-Term Analysis of Numerical and Analytical Oscillations
*Ernst **Hairer** | Switzerland*

10.05 – 11.05 Towards a Global View of Dynamical Systems, for The C^1-Topology
*Christian **Bonatti** | France*

11.05 – 11.30 Coffee Break

INVITED LECTURES

HALL A (No. 131)

11.30 – 12.00 On the Local Exact Controllability of the 1-D Compressible Navier-Stokes Equation
*Sylvain **Ervedoza** | France*

HALL B (No. 200)

~~11.30 – 12.00 Global Wellposedness of a Third Order in Time Nonlinear Wave Equation Arising in High Intensity Ultrasound (HIU)~~
~~*Irena **Lasiecka** | USA*~~

HALL C (No. 300)

11.30 – 12.00 A Topological Approach to Computing the Conley Index of Poincaré Maps
*Roman **Srzednicki** | Poland*

12.00 – 13.30 Lunch

MINISYMPOSIA

HALL B (No. 200)

MS12 - Functional Differential Equations
*Organizer: Alexander **Domoshnitsky** | Israel*

13.30 – 14.00 Maximum Principles for Functional Differential Equations with Ordinary or Partial Derivatives and Nonlocal Boundary Conditions
*Alexander **Domoshnitsky** | Israel*

14.00 – 14.30 On Discreteness of Spectrum of a Functional-Differential Operator on Axis
*Sergey **Labovskiy**[1], Mário Frengue Getimane[2] | [1]Russia, [2]Mozambique*

14.30 – 15.00 Some Oscillation Criteria for the Second-Order Linear Delayed Differential Equation
*Zdeněk **Opluštil** | Czech Republic*

15.00 – 15.30 Second Order Quasilinear Functional Equations
*László **Simon** | Hungary*

HALL C (No. 300)

MS22 - Asymptotic Behavior of Functional Differential Equations
*Organizer: Mihály **Pituk** | Hungary*

13.30 – 14.00 Asymptotic Behavior of Functional Differential Equations
*Mihály **Pituk** | Hungary*

14.00 – 14.30 Global Dynamics for Spatial Epidemic and Population Models in Patchy Environment with Delays
*Gergely **Röst** | Hungary*

14.30 – 15.00 Almost Periodic and Almost Automorphic Dynamics for Non Autonomous Functional Differential Equations
*Rafael **Obaya** | Spain*

15.00 – 15.30 Stability and Asymptotic Properties of Neutral Delay Differential Equations
*Jan **Čermák** | Czech Republic*

HALL D (No. 301)

MS23 - Hyperbolic Conservation Laws
*Organizer: Piotr **Gwiazda** | Poland*

13.30 – 14.00 Hyperbolic Conservation Laws: Classical Results and New Perspectives
*Piotr **Gwiazda** | Poland*

14.00 – 14.30 Multi-Dimensional Scalar Conservation Laws with Fluxes Discontinuous in the Unknown and the Spatial Variable
*Agnieszka **Świerczewska-Gwiazda** | Poland*

14.30 – 15.00 Hyperbolic Conservation Laws with Multiplicative Stochastic Perturbation
*Petra **Wittbold** | Germany*

15.00 – 15.30 Degenerate Parabolic Problems with Discontinuous Flux
*Boris **Andreianov**, Shyam Sundar Ghoshal | France*

HALL E (No. 018)

MS24 - Structure-Preserving Numerical Schemes and Related Topics
*Organizer: Shigetoshi **Yazaki** | Japan*

13.30 – 14.00 On a Structure-Preserving Numerical Scheme for Moving Boundary Problems
*Shigetoshi **Yazaki** | Japan*

14.00 – 14.30 Geometric Properties of Kahan's Method
*Brynjulf **Owren** | Norway*

14.30 – 15.00 An Attempt to Create Fast Numerical Schemes with the Discrete Variational Derivative Method
*Daisuke **Furihata** | Japan*

15.00 – 15.30 Numerical Solution of Constrained Mean Curvature Flow
*Michal **Beneš**[1], Miroslav Kolář[1], Daniel Ševčovič[2] | [1]Czech Republic, [2]Slovak Republic*

HALL F (No. 217)

MS25 - Selected Navier-Stokes Problems
*Organizer: Reimund **Rautmann** | Germany*

13.30 – 14.00 Bounds to the Change of Vorticity by Transition From Slip- to No-Slip Fluid Flow
*Reimund **Rautmann** | Germany*

14.00 – 14.30 Solution of Leray's Problem for Stationary Navier-Stokes Equations in Plane Domains
*Konstantin **Pileckas**[1], Mikhail V. Korobkov[2], Remigio Russo[3] | [1]Lithuania, [2]Russia, [3]Italy*

14.30 – 15.00 On the Correct Asymptotic Conditions at Infinity for the Time-Periodic Stokes Problem Set in a System of Semi-Infinite Pipes
*Mindaugas **Skujus** | Lithuania, Switzerland*

15.00 – 15.30 Necessary and Sufficient Conditions for the Existence of Helmholtz Decompositions in General Domains
*Werner **Varnhorn** | Germany*

HALL G (No. 429)

MS26 - Large Time Behavior of Solutions to Nonlinear and Nonlocal Problems
*Organizer: Grzegorz **Karch** | Poland*

13.30 – 14.00 Blowup and Self-Similar Solutions for Two Component Drift-Diffusion Systems
*Piotr **Biler** | Poland*

14.00 – 14.30 Cahn-Hilliard Equation in $H^1(R^N)$
*Jan **Cholewa** | Poland*

14.30 – 15.00 L^2-Asymptotic Stability of Mild Solutions to Navier-Stokes System
*Dominika **Pilarczyk** | Poland*

15.00 – 15.30 Asymptotic Behavior of Some Nonlocal Convection-Diffusion Equations
*Anna **Pudełko** | Poland*

HALL H (No. 317)

MS3 - Qualitative Theory of Quasilinear Differential Equations
*Organizer: Ondřej **Došlý** | Czech Republic*

13.30 – 14.00 Recent Trends in the Half-Linear Oscillation Theory
*Ondřej **Došlý** | Czech Republic*

14.00 – 14.30 Existence of Globally Positive and Bounded Solutions for Second Order Equations with Changing Sign Weight
*Serena **Matucci** | Italy*

14.30 – 15.00 Asymptotic Stability of an Underwater Pendulum with Quadratic Damping
*Jitsuro **Sugie** | Japan*

15.00 – 15.30 Oscillation of a Class of Nonlinear Neutral Differential Equations
*Yuriy V. **Rogovchenko** | Norway*

15.30 – 16.00 Coffee Break

Students' Minisymposium - Differential Equations and Their Applications
*Organizer: Jan **Pospíšil** | Czech Republic*

13.30 – 13.50 Compactness Conditions for *p*-Laplacian
*Pavel **Jirásek** | Czech Republic*

13.50 – 14.10 Differentiability Properties of *p*-Trigonometric Functions
*Lukáš **Kotrla** | Czech Republic*

14.10 – 14.30 From Generalization of Bistable Equation to Fibonacci Sequence
*Radim **Hošek** | Czech Republic*

14.30 – 14.50 The Asymptotes of Fucik Curves for Asymmetric Difference Operator
*Iveta **Looseová** | Czech Republic*

14.50 – 15.10 Existence of Oscillatory Solutions of Nonlinear Singular ODE
*Martin **Rohleder** | Czech Republic*

15.10 – 15.30 Singular Second Order ODE with Regularly Varying Coefficients
*Jana **Vampolová** | Czech Republic*

15.30 – 16.00 Coffee Break

16.00 – 16.20 Transport Equation on Semidiscrete Domains
*Jonáš **Volek** | Czech Republic*

16.20 – 16.40 Calibration and Simulation of Heston Stochastic Volatility Model
*Milan **Mrázek** | Czech Republic*

16.40 – 17.00 Implementation of Fractional Stochastic Volatility Model
*Tomáš **Sobotka** | Czech Republic*

CONTRIBUTED TALKS

HALL B (No. 200)

16.00 – 16.20 Embedding Properties for Weighted Sobolev Spaces in Unbounded Domains
*Hirokazu **Ohya** | Japan*

16.20 – 16.40 The Cauchy Problem for a General Class of Doubly Dispersive Nonlocal Nonlinear Wave Equations
*Husnu Ata **Erbay** | Turkey*

HALL C (No. 300)

16.00 – 16.20 Existence Results for a Fourth Order PDE Arising in Condensed Matter Physics
*Carlos **Escudero** | Spain*

16.20 – 16.40 Radial Basis Function Method for Multidimensional Elliptic Equation with Nonlocal Conditions
*Svajūnas **Sajavičius** | Lithuania*

16.40 – 17.00 Symmetry Breaking of Solutions of Non-Cooperative Elliptic Systems
*Piotr **Stefaniak** | Poland*

HALL D (No. 301)

16.00 – 16.20 Existence of Solitary Waves for a Class of Nonlocal Nonlinear Equations
*Saadet **Erbay** | Turkey*

16.20 – 16.40 Oscillation of the Even Order Delay Differential Equation
*Jozef **Džurina**, B. Baculíková | Slovak Republic*

HALL E (No. 018)

16.00 – 16.20 Distributional Chaos and Heteroclinic Solutions in Planar Polynomial Odes
*Paweł **Wilczyński** | Poland*

16.20 – 16.40 On Stability Regions of Modified Midpoint Method Applied to Linear Delay Differential Equation
*Petr **Tomášek** | Czech Republic*

HALL F (No. 217)

16.00 – 16.20 Oscillation Constant for Half-Linear Equations with Asymptotically Almost Periodic Coefficients
*Petr **Hasil** | Czech Republic*

16.20 – 16.40 Limit Periodic Homogeneous Linear Difference Systems
*Michal **Veselý** | Czech Republic*

HALL G (No. 429)

16.00 – 16.20 Approximations of Quantum-Graph Vertex Couplings by Singularly Scaled Potentials
*Stepan S. **Manko** | Czech Republic*

16.20 – 16.40 Diffusion-Type Dynamic Equations with Discrete-Space Domains
*Antonín **Slavík** | Czech Republic*

16.40 – 17.00 Porous Media Flow with Preisach Hysteresis
*Petra **Nábělková** | Czech Republic*

HALL H (No. 317)

16.00 – 16.20 Riccati Technique for Delayed Half-Linear Differential Equation
*Robert **Mařík** | Czech Republic*

16.20 – 16.40 Existence, Uniqueness and Stability of Traveling Wave Fronts for Delayed Cellular Neural Networks
*Jian-Jhong **Lin** | Taiwan*

HALL A (No. 131)

17.00 Closing remarks and refreshment