Scientific Programme

Sunday, July 23rd

15.00 – 21.00 **Registration of participants** (Faculty of Civil Engineering, Slovak University of Technology)
The registration desk will also be open daily from 12.15 to 13.45.

Monday, July 24th

8.45 – 9.00 **Opening of the conference** (B001) – **Pavel Brunovský**

Plenary lectures (B001) – chairman Jozef Kačur

9.00 – 9.50 **Sunčica Čanić:** Mesh-reinforces structures interacting with incompressible fluids

9.50 – 10.40 **Randall LeVeque:** Adjoint error estimation for adaptive refinement of hyperbolic PDEs

10.40 – 11.20 **Coffee break**

Plenary lecture (B001) – chairman Miloslav Feistauer

11.20 – 12.10 **Jérôme Droniou:** The beauty and efficiency of the Gradient Discretisation Method

12.10 – 13.50 **Lunch** (Dining hall of the Faculty of Civil Engineering)

14.00 – 16.00 Parallel sessions

Minisymposium MS1 (B103) - Entire solutions and Liouville theorems in studies of parabolic equations– *chairman P. Poláčik*

14.00 – 14.30 **Luca Rossi:** Reaction-diffusion equations in periodic domains: global and oriented invasion
14.30 – 15.00 **Eiji Yanagida:** Traveling waves in fast diffusion systems
15.00 – 15.30 **Yoshihisa Morita:** Weakly interacting fronts and standing waves in the FitzHugh-Nagumo system
15.30 – 16.00 **Thomas Giletti:** Sharp thresholds in a reaction-diffusion equation with forced speed

Minisymposium MS2 (B105) - Nonlinear elliptic and parabolic equations of fractional type – *chairman J. L. Vazquez*

14.00 – 14.30 **Matteo Bonforte:** Nonlinear and nonlocal degenerate diffusions on bounded domains
14.30 – 15.00 **Guido De Philippis:** On the singular part of measures constrained by linear PDEs and applications
15.00 – 15.30 **Matteo Muratori:** Asymptotics for the porous medium equation on negatively curved Riemannian manifolds
15.30 – 16.00 **Fernando Quirós:** Regularity theory for singular nonlocal diffusion equations

Minisymposium MS3 (B316) - Numerical methods for PDEs with applications – *chairman P. Frolkovič*

14.00 – 14.30 **Marsha Berger:** Modeling and simulation of asteroid-generated tsunamis
14.30 – 15.00 **Matej Medľa:** The construction of 2D and 3D meshes using the surface evolution
15.00 – 15.30 **Jooyoung Hahn:** Semi-implicit method with inflow-based gradient for the level set equations on a polyhedron mesh
15.30 – 16.00 **Robert Klöfkorn:** Comparison of linear reconstructions for second order finite volume schemes on polyhedral grids

Contributed talks CT1 (B319) – *chairman R. Manásevich*

14.00 – 14.30 **Giuseppina Vannella:** Multiple positive solutions for a p-Laplace critical problem (1<p<2), via Morse theory
14.30 – 15.00 **Eylem Öztürk:** On nonlinear parabolic p-Laplacian equation
15.00 – 15.30 **Vladimir Bobkov:** On multiplicity properties of higher eigenvalues of the p-Laplacian
15.30 – 16.00 **Ky Ho:** On the eigenvalue problem involving the weighted p-Laplacian in exterior domains

Minisymposium MS4 (B311) - Stochastic multiscale problems – *chairman J.Vovelle*

14.00 – 14.30 **Martina Hofmanová:** Stochastic mean curvature flow
14.30 – 15.00 **Andrea Di Blasio:** Numerical homogenization and Bayesian techniques for multiscale inverse problems
15.00 – 15.30 **Christophe Gomez:** Fractional white-noise limit and paraxial approximation for waves in random media
15.30 – 16.00 **Julien Vovelle:** Diffusion-approximation for some hydrodynamic limits

Contributed talks CT2 (B108) – *chairman D. Hilhorst*

14.00 – 14.30 **Jan Goncerzewicz:** Porous media equation in tubular domains: large time behaviour of solutions
14.30 – 15.00 **Mladen Jurak:** An existence result for non-isothermal two-phase porous media flow
15.00 – 15.30 **Pina Milišić:** The unsaturated flow in porous media with dynamic capillary pressure
15.30 – 16.00 **Nikolaos Roidos:** Long time existence for solutions of the porous medium equation on manifolds with conical singularities

Contributed talks CT3 (B106) – *chairman M. Medveď*

14.00 – 14.30 **Michal Fečkan:** Implicit ordinary differential equations
14.30 – 15.00 **Wojciech Mydlarczyk:** Nonuniqueness of solution for a sytem of nonlinear Volterra type integral equations
15.00 – 15.30 **Denis Patterson:** Asymptotic growth in nonlinear Volterra equations
15.30 – 16.00 **Mariana Marčoková:** Classical and generalized Jacobi polynomials orthogonal with different weight functions and differential equations with these polynomial solutions

Contributed talks CT4 (B315) – *chairman T. Yokota*

14.00 – 14.30
14.30 – 15.00 **Mohamed Berbiche:** Global existence and blow-up of solutions for certain evolution equations
15.00 – 15.30 **Oliver Leingang:** Discrete blow-up behaviour for the Keller-Segel system
15.30 – 16.00 **Motohiro Sobajima:** Weighted energy estimates for wave equation with space-dependent damping term growing at infinity

Contributed talks CT5 (B317) – *chairman P. Takáč*

14.00 – 14.30 **Bartosz Bieganowski:** Nonlinear (fractional) Schrödinger equation with sign-changing nonlinearities
14.30 – 15.00 **Kirian Döpfner:** Efficient approximation-schemes for Schrödinger-type equations including turning points
15.00 – 15.30 **Hiroaki Niikuni:** Spectral problems for periodic Schrödinger operators with two distinct potentials on the degenerate carbon nanotube
15.30 – 16.00 **Jorge A. Esquivel Avila:** Remarks on the qualitative behavior of the undamped Klein-Gordon equation

16.00 – 16.30 **Coffee break**

16.30 – 18.30 Parallel sessions

Minisymposium MS1 (B103) - Entire solutions and Liouville theorems in studies of parabolic equations– *chairman L. Rossi*

16.30 – 17.00 **Hiroshi Matano:** Generation and propagation of fine transition layers for the stochastic Allen-Cahn equation
17.00 – 17.30 **Andrej Zlatoš:** Stochastic homogenization for reaction-diffusion equations
17.30 – 18.00 **Arnaud Ducrot:** Travelling waves for a non-monotone bistable equation with delay: existence and oscillations
18.00 – 18.30 **Hirokazu Ninomiya:** Entire solutions originating from monotone fronts to the Allen-Cahn equation

Minisymposium MS2 (B105) - Nonlinear elliptic and parabolic equations of fractional type – *chairman M. Bonforte*

16.30 – 17.00 **Grzegorz Karch:** Nonlocal model of pattern formation
17.00 – 17.30 **Luz Roncal:** Hardy inequalities for fractional Laplacians and sublaplacians
17.30 – 18.00 **Diana Stan:** Recent results on porous medium equations with nonlocal pressure
18.00 – 18.30 **Bruno Volzone:** Nonlinear aggregation-diffusion equations: Radial symmetry and long time asymptotics

Contributed talks CT6 (B316) – *chairman J. Hahn*

16.30 – 17.00 **Martin Ambroz:** Numerical modelling of wildland forest fire propagation
17.00 – 17.30 **Petr Pauš:** Numerical study of spiral motion and tip meandering
17.30 – 18.00 **Balázs Kósa:** 3D point cloud surface reconstruction by using level set methods
18.00 – 18.30 **Michal Kollár:** Nonlinear diffusion filter influenced by the surface Laplacian of data

Minisymposium MS6 (B319) - Handling wave propagation phenomena numerically – *chairman M. Gander*

16.30 – 17.00 **Stefan Sauter and Céline Torres:** Explicit stability estimate for the Helmholtz equation with rapidly oscillating coefficients
17.00 – 17.30 **Victorita Dolean:** A two-level domain-decomposition preconditioner for the time-harmonic Maxwell's equations
17.30 – 18.00 **Domenico Lahaye:** How to choose the shift in the shifted Laplace preconditioner for the Helmholtz equation combined with deflation
18.00 – 18.30 **Jens M. Melenk:** Directional H^2-matrices for Helmholtz integral operators

Contributed talks CT7 (B311) – *chairman B. H. Gilding*

16.30 – 17.00 **Perla El Kettani:** A stochastic mass conserved reaction-diffusion equation with nonlinear diffusion
17.00 – 17.30 **Ryota Nakayashiki:** Allen-Cahn equation including singular diffusion with dynamic boundary condition
17.30 – 18.00 **Takeshi Fukao:** Cahn-Hilliard equation on the boundary with bulk condition of Allen-Cahn type
18.00 – 18.30 **Luca Bisconti:** Global well-posedness of the two-dimensional horizontally filtered simplified Bardina turbulence model on a strip-like region

Contributed talks CT8 (B108) – *chairman P. Brunovský*

16.30 – 17.00 **Gary Froyland:** Transfer operator analysis of dynamical systems: extraction of coherent structures with a dynamic Laplace operator
17.00 – 17.30 **Domagoj Vlah:** The box dimension of a class of degenerate foci
17.30 – 18.00 **Alexey Ivanov:** Connecting orbits for singularly perturbed Lagrangian systems with turning points
18.00 – 18.30 **Renato Huzak:** Regular and slow-fast codimension 4 saddle-node bifurcations

Contributed talks CT9 (B106) – *chairman M. Medveď*

16.30 – 17.00 **Marco Spadini:** Multiple forced oscillations for a class of parametrized scalar retarded functional differential equations
17.00 – 17.30 **Peter Šepitka:** Riccati equations for linear Hamiltonian systems revisited
17.30 – 18.00 **Valery Y. Glizer:** Singularly perturbed set of periodic functional-differential equations arising in optimal control theory
18.00 – 18.30 **Daniel Strzelecki:** The existence of non-stationary periodic solutions of Newtonian systems via symmetric Liapunov center theorems

Contributed talks CT10 (B315) – *chairman J. Vala*

16.30 – 17.00 **Toyohiko Aiki:** Control problem for concrete carbonation
17.00 – 17.30 **Damien Allen:** Submonolayer deposition with subcritical island fragmentation
17.30 – 18.00 **Kota Kumazaki:** On a multiscale model for moisture transport with adsorption phenomenon in concrete materials
18.00 – 18.30 **Mikhail Turbin:** Existence of weak solution for the optimal feedback control problem for Bingham fluid with periodic boundary conditions

Contributed talks CT11 (B317) – *chairman M.Marčoková*

16.30 – 17.00 **Aurelian Cernea:** Existence results for a second-order evolution inclusion
17.00 – 17.30 **Volodymyr Sushch:** On algebraic versions of the discrete Dirac–Kähler equation
17.30 – 18.00 **Elshan Ibayev:** The Laplace-Stilties transformation of compatible distribution of the kind semimarkov random walk process
18.00 – 18.30 **Jana Burkotová:** Signular nonlinear ODEs with φ-Laplacian

20.00 – 24.00 **Poster session with local craft beer selection and snacks** (Dining hall of the Faculty of Civil Engineering)

List of posters:

M.Ambroz, A.Audrito, M.Bathory, B.Bieganowski, N.Črnjarić-Žic + L.Simčić, I.Dražić, R.Čunderlík, G.Feltrin, D.Hipp, Y.-H.Kim, V.Kleinová, M.Kollár, B.Kósa, Z.Krivá, S.Kurima, H.-L.Lin, M.Macák, M.Medľa, P.R.Mensah, M.Minárová, K.Sakakibara, N.Simonov, E.Sovrano, O.Stašová, T.Sushida, M.Šagát, H.Šamajová, R.Špir, M.Tibenský, M.Tješšová, L.Tomek, J.Urbán

Tuesday, July 25th

Plenary lectures (B001) – chairman Eduard Feireisl

9.00 – 9.50 **László Székelyhidi Jr.:** The h-principle in fluid mechanics: non-uniqueness and dissipation

9.50 – 10.40 **Arnold Reusken:** Partial differential equations on surfaces: Analysis and numerical methods

10.40 – 11.20 **Coffee break**

Plenary lecture (B001) – chairman Eiji Yanagida

11.20 – 12.10 **Sigurd B. Angenent:** Ancient convex solutions to mean curvature flow

12.10 – 13.50 **Lunch** (Dining hall of the Faculty of Civil Engineering)

14.00 – 16.00 Parallel sessions

Minisymposium MS1 (B103) - Entire solutions and Liouville theorems in studies of parabolic equations– *chairman H. Matano*

14.00 – 14.30 **Jean-Michel Roquejoffre:** Front propagation driven by a line of fast diffusion: a property of the level sets
14.30 – 15.00 **Philippe Souplet:** A Liouville-type theorem for the 3-dimensional parabolic Gross-Pitaevskii and related systems
15.00 – 15.30 **Pavol Quittner:** Self-similar solutions of a semilinear parabolic equation

Minisymposium MS7 (B105) - Qualitative theory of nonlinear elliptic equations – *chairman S. Tanaka*

14.00 – 14.30 **Rául Manásevich:** Some results for non-existence in R^n of positive solutions for system and consequences
14.30 – 15.00 **Marta García-Huidobro:** Boundary singularities of positive solutions of quasilinear Hamilton-Jacobi equations
15.00 – 15.30 **Ryuji Kajikiya:** Symmetric solutions of p-Laplace elliptic equations in hollow domains
15.30 – 16.00 **Inbo Sim:** On the study of positive solutions of semipositone (singular) p-Laplacian problems with nonlinear boundary conditions

Minisymposium MS3 (B316) - Numerical methods for PDEs with applications – *chairman M. Berger*

14.00 – 14.30 **Peter Bastian:** Efficient implementation of high-order Discontinuous Galerkin methods
14.30 – 15.00 **Lukáš Tomek:** Finite volume methods for mean curvature flow
15.00 – 15.30 **Peter Frolkovič:** Semi-implicit numerical methods for advection equations with applications
15.30 – 16.00 **Edward J. Kansa:** Moving node schemes with exact numerical time integration

Minisymposium MS6 (B319) - Handling wave propagation phenomena numerically – *chairman V. Dolean*

14.00 – 14.30 **Martin Gander:** A Numerical Study on the Compressibility of Schur Complements of Discretized Helmholtz Equations
14.30 – 15.00 **Gabriele Ciaramella:** The method of reflections: relations with Schwarz methods and other classical iterative methods
15.00 – 15.30 **Bo Song:** New Coarse Spaces for the Additive Schwarz Method
15.30 – 16.00 **Christophe Besse:** Artificial boundary conditions for dispersive PDEs

Minisymposium MS8 (B311) - Stochastic PDEs – *chairman M. Hofmanová*

14.00 – 14.30 **Dominic Breit:** Stationary solutions to the stochastic compressible Navier-Stokes system
14.30 – 15.00 **Alexandre Boritchev:** Multidimensional Burgers Turbulence
15.00 – 15.30 **Martin Ondreját:** Support of solutions of stochastic differential equations in general Hölder spaces
15.30 – 16.00 **Marco Romito:** Random initial conditions for semi--linear PDEs

Minisymposium MS9 (B108) - Fluid-structure interaction – *chairman Š.Nečasová*

14.00 – 14.30 **Thomas Richter:** Large Deformation FSI with contact
14.30 – 15.00 **Mária Lukáčová:** Hybrid multiscale method for colloid-solvent interaction in polymeric fluids
15.00 – 15.30 **Boris Muha:** A generalization of Aubin-Lions-Simon theorem for moving domains
15.30 – 16.00 **Ana Leonor Silvestre:** On a fluid-structure interaction model for studying the seismic behavior of dam-reservoir-foundation systems

Minisymposium MS5 (B106) - Differential and integro-differential models of diffusion processes – *chairman L. Malaguti*

14.00 – 14.30 **Juan Campos:** Traveling waves in parabolic equations with flux-limited operators
14.30 – 15.00 **Andrea Corli:** Traveling wave solutions in models of collective movements
15.00 – 15.30 **Maurizio Garrione:** Wave fronts for some reaction-diffusion models with nonlinear diffusion
15.30 – 16.00 **Brian H. Gilding:** An integral equation approach to travelling-wave solutions

Contributed talks CT12 (B315) – *chairman Y. Lou*

14.00 – 14.30 **Tomomi Yokota:** Asymptotic stability in a two-dimensional two-species chemotaxis-Navier-Stokes system with competitive kinetics
14.30 – 15.00 **Noriaki Yoshino:** On global solvability of a chemotaxis system with logistic source
15.00 – 15.30 **Tatsunari Sakurai:** Growth-diffusion-chemotaxis model for deposition pattern of Escherichia coli
15.30 – 16.00 **Masaaki Mizukami:** Stabilization in a two-species chemotaxis-competition system

Contributed talks CT13 (B317) – *chairman Kenji Tomoeda*

14.00 – 14.30 **Maria Gokieli:** A flow constrained by growing biomass
14.30 – 15.00 **Kyoko Tomoeda:** Toward a mathematical analysis for a model of suspension flowing down an inclined plane
15.00 – 15.30 **Philippe Caillol:** A nonlinear and singular shear wave packet in a rapidly rotating vortex
15.30 – 16.00 **Michael Dreher:** Incompressible limits for generalisations to symmetrisable systems

16.00 – 16.30 **Coffee break**

16.30 – 18.30 Parallel sessions

Minisymposium MS10 (B103) - Ergodic-theoretical techniques in partial differential equations – *chairman S. Slijepčević*

16.30 – 17.00 **Alex Blumenthal:** SRB measures for Banach space mappings
17.00 – 17.30 **Zeng Lian:** Periodic structure of a quasi-periodic system
17.30 – 18.00 **Mouhamadou Sy:** Long time behaviour of some Hamiltonian PDE via invariant measures
18.00 – 18.30 **Davor Dragičević:** Nonuniform spectrum on Banach spaces

Minisymposium MS7 (B105) - Qualitative theory of nonlinear elliptic equations – *chairman Y. Naito*

16.30 – 17.00 **Soohyun Bae:** Existence of positive solutions of nonlinear elliptic equations
17.00 – 17.30 **Yasuhito Miyamoto:** Structure of the positive radial solutions for the supercritical Neumann problem $\varepsilon \Delta u-u+u^p=0$ in a ball
17.30 – 18.00 **Yūki Naito:** Singular extremal solutions for supercritical elliptic equations in a ball
18.00 – 18.30 **Satoshi Tanaka:** Symmetry-breaking bifurcation for positive solutions of the one-dimensional Henon equation

Minisymposium MS11 (B316) - Computational methods in direct and inverse PDE's – *chairman M. Slodička*

16.30 – 17.00 **Jozef Kačur:** Numerical modeling of heat exchange in unsaturated porous media
17.00 – 17.30 **Anar Rahimov:** An approach to numerical solution to inverse source problems with nonlocal conditions
17.30 – 18.00 **Ľubomír Baňas:** Numerical approximation and optimal control of phase-field models for multiphase flow
18.00 – 18.30 **Karel Van Bockstal:** The identification of a space-dependent load source in anisotropic thermoelastic systems

Minisymposium MS29 (B319) Spectral and oscillation theory of Hamiltonian and symplectic systems – *chairman R. Šimon Hilscher*

16.30 – 17.00 **Vera Zeidan:** Constrained linear-quadratic control problems on time scales
17.00 – 17.30 **Sylvia Novo:** Oscillation theory for non-autonomous linear Hamiltonian systems
17.30 – 18.00 **Julia Elyseeva:** Transformations of linear Hamiltonian differential systems and the comparative index
18.00 – 18.30 **Roman Šimon Hilscher:** Principal solutions in oscillation theory of linear Hamiltonian systems

Minisymposium MS8 (B311) - Stochastic PDEs – *chairman D. Breit*

16.30 – 17.00 **Dirk Blömker:** Modulation equation and SPDEs on unbounded domains
17.00 – 17.30 **Julien Vovelle:** Convergence of the finite volume approximation of stochastic, scalar first-order conservation laws
17.30 – 18.00 **Luigi Amadeo Bianchi:** Additive noise destroys the random attractor close to bifurcation
18.00 – 18.30 **Bohdan Maslowski:** Linear SPDEs driven by Volterra type processes

Minisymposium MS9 (B108) - Fluid-structure interaction – *chairman S. Čanić*

16.30 – 17.00 **Šárka Nečasová:** Weak-strong uniqueness for fluid-rigid body interaction problem
17.00 – 17.30 **Marius Tucsnak:** A perturbation approach to linearized fluid-structure interactions problems
17.30 – 18.00 **David Gérard-Varet:** Stability of boundary layer flows
18.00 – 18.30 **Takéo Takahashi:** Feedback boundary stabilization of a fluid-beam interaction system

Minisymposium MS5 (B106) - Differential and integro-differential models of diffusion processes – *chairman L. Malaguti*

16.30 – 17.00 **Rodica Toader:** Subharmonic solutions of Hamiltonian systems satisfying some sublinear growth condition
17.00 – 17.30 **Martina Pavlačková:** Higher-order asymptotic boundary value problems
17.30 – 18.00 **Elisa Sovrano:** Multiplicity of positive solutions for indefinite weight problems and applications in population genetics
18.00 – 18.30 **Valeri Obukhovskii:** On some properties of fractional order semilinear differential inclusions

Contributed talks CT14 (B315) – *chairman H. Murakawa*

16.30 – 17.00 **Kenji Tomoeda:** Behaviour of the support of the solution appearing in some nonlinear diffusion equation with absorption
17.00 – 17.30 **Nobuyuki Kato:** Optimal harvesting for size-structured population models with spatial diffusion
17.30 – 18.00 **Hiroshi Matsuzawa:** A free boundary problem for nonlinear diffusion equations with a given forced moving boundary
18.00 – 18.30 **Anita Gerstenmayer:** Analysis of a degenerate parabolic cross-diffusion system for ion transport

Contributed talks CT15 (B317) – *chairman P. Bastian*

16.30 – 17.00 **Miloslav Vlasák:** Stability of space-time discontinuous Galerkin time discretization for nonlinear convection-diffusion problems in time-dependent domains
17.00 – 17.30 **David Hipp:** A unified error analysis for non-conforming space discretizations of wave equations with dynamic boundary conditions
17.30 – 18.00 **Andreas Brenner:** Fully discrete a posteriori estimates for the two-step backward differentiation formula (BDF2) for the time dependent Stokes equations
18.00 – 18.30 **Klaus Kaiser:** High order numerical methods for weakly compressible flows
18.30 – 19.00 **Bangwei She:** Asymptotic preserving error estimates for numerical solutions of compressible Navier-Stokes equations in the low Mach number regime

Wednesday, July 26th

Plenary lectures (B001) – chairman Pavol Quittner

9.00 – 9.50 **Michael Winkler:** Emergence of large densities in chemotaxis systems

9.50 – 10.40 **Ansgar Jüngel:** The boundedness-by-entropy method for parabolic cross-diffusion systems

10.40 – 11.20 **Coffee break**

Plenary lecture (B001) – chairman Michal Beneš

11.20 – 12.10 **Harald Garcke:** Cahn-Hilliard-Darcy models for tumour growth and related free boundary problems

12.10 – 13.50 **Lunch** (Dining hall of the Faculty of Civil Engineering)

14.00 – 16.00 Parallel sessions

Minisymposium MS12 (B103) - Nonlinear parabolic equations – *chairman E. Yanagida*

14.00 – 14.30 **Peter Poláčik:** On the behavior of bounded solutions of parabolic equations on the real line
14.30 – 15.00 **Masaharu Taniguchi:** An (N-1)-dimensional convex compact set gives an N-dimensional traveling front
15.00 – 15.30 **Yihong Du:** The Stefan problem for the Fisher-KPP equation with unbounded initial habitat
15.30 – 16.00 **Matteo Franca:** Stability and instability of ground states for parabolic equations

Minisymposium MS13 (B105) - Qualitative behavior of nonlinear evolution problems relative to chemotaxis – *chairman G. Karch*

14.00 – 14.30 **Takasi Senba:** On behavior of solutions to a chemotaxis system with a nonlinear sensitivity function
14.30 – 15.00 **Kentarou Fujie:** A generalization of the Keller-Segel system to higher dimensions from a structural viewpoint
15.00 – 15.30 **Jan Burczak:** Regularity results for fractional Patlak-Keller-Segel system
15.30 – 16.00 **Bruno Volzone:** Recent advances in symmetrization techniques for nonlocal equations

Minisymposium MS14 (B316) - Moving boundaries and complex phenomena I – *chairman T. Ishiwata*

14.00 – 14.30 **Tetsuya Ishiwata:** Motion by crystalline curvature of polygonal curves
14.30 – 15.00 **Ondřej Pártl:** Numerical modeling of non-isothermal compositional compressible gas flow in soil and coupled atmospheric boundary layer
15.00 – 15.30 **Masakazu Akiyama:** A self-propelled particle model based on cell polarity for understanding collective cell migrations
15.30 – 16.00 **Michal Beneš:** Constrained curvature flow of multiple curves

Minisymposium MS15 (B319) - Higher-order methods for the numerical solution of PDEs – *chairman V. Dolejší*

14.00 – 14.30 **Miloslav Feistauer:** Analysis of the FEM and DGM for an elliptic problem with a nonlinear Newton boundary condition
14.30 – 15.00 **Thomas Richter:** Efficient adaptive finite elements of higher order for complex problems
15.00 – 15.30 **Georg May:** A continuous mesh model for Target-Based Mesh Optimization using discontinuous Galerkin methods
15.30 – 16.00 **Tomáš Vejchodský:** Higher order lower bounds on eigenvalues of symmetric elliptic operators

Minisymposium MS16 (B311) - Singular perturbations and singularities: theory and applications – *chairman P. Szmolyan*

14.00 – 14.30 **Paul Carter:** Single and double pulses in the FitzHugh-Nagumo system
14.30 – 15.00 **Elena Bossolini:** Singular limit analysis of a model for earthquake faulting
15.00 – 15.30 **Mike R. Jeffrey:** Switching layers and hidden dynamics
15.30 – 16.00 **Kristian Uldall Kristiansen:** The Painlevé paradox with compliance

Minisymposium MS17 (B108) - Compressible fluid flow and related topics – *chairman M. Pokorný*

14.00 – 14.30 **Eduard Feireisl:** Stationary solutions to problems involving compressible fluids
14.30 – 15.00 **Antonín Novotný:** Stability analysis for compressible Navier-Stokes equations: theory and numerics
15.00 – 15.30 **Julian Fischer:** Guaranteed error estimates with improved stability properties for the incompressible Navier-Stokes equation
15.30 – 16.00 **Šimon Axmann:** Existence of strong steady solutions to the Navier-Stokes-Fourier system for dense compressible fluid

Minisymposium MS18 (B106) - Mathematical modelling and numerical simulation in drug delivery systems – *chairman J. A. Ferreira*

14.00 – 14.30 **José A. Ferreira:** Drug delivery enhanced by waves: coupling hyperbolic and parabolic IBVPs
14.30 – 15.00 **Martin Meere:** Mathematically modelling the dissolution of solid dispersions
15.00 – 15.30 **Pascoal Martins da Silva:** Drug delivery to the posterior segment of the eye: towards a precision ophthalmology
15.30 – 16.00

Contributed talks CT16 (B315) – *chairman A. Araújo*

14.00 – 14.30 **Eduardo Cuesta:** Linear Cross-Diffusion Filtering: Characterization, Scale-Space Axiomatic, and other Properties
14.30 – 15.00 **Oľga Stašová:** Nonlinear tensor diffusion in image processing
15.00 – 15.30 **Viera Kleinová:** A new numerical method for optical flow estimation based on level-set motion
15.30 – 16.00 **Sanjeev Kumar:** Image defogging using fractional anisotropic diffusion

Contributed talks CT17 (B317) – *chairman A. Zlatoš*

14.00 – 14.30 **Anja Vrbaški:** Homogenization result for immiscible incompressible two-phase flow in double porosity media
14.30 – 15.00 **Martin Kalousek:** Homogenization of nonlinear elliptic systems in nonreflexive Musielak-Orlicz spaces
15.00 – 15.30 **Erika Maringová:** Globally Lipschitz minimizers for variational problems with linear growth
15.30 – 16.00 **Jiří Vala:** Computational design optimization of low-energy buildings

16.00 – 16.30 **Coffee break**

16.30 – 18.30 Parallel sessions

Minisymposium MS12 (B103) - Nonlinear parabolic equations – *chairman H.Ninomiya*

16.30 – 17.00 **Siniša Slijepčević:** Inertial manifolds on unbounded domains in uniformly local norms
17.00 – 17.30 **Toru Kan:** On the solution structure of bistable reaction-diffusion equations on some thin tubular domain
17.30 – 18.00 **Jin Takahashi:** Solvability of a semilinear parabolic equation with measures as initial data
18.00 – 18.30 **Chang-Hong Wu:** On a free boundary problem for a reaction-diffusion-advection logistic model in heterogeneous environment

Minisymposium MS13 (B105) - Qualitative behavior of nonlinear evolution problems relative to chemotaxis – *chairman P. Biler*

16.30 – 17.00 **Piotr Biler:** Comparison principles for chemotaxis systems
17.00 – 17.30 **Johannes Lankeit:** Locally bounded global solutions to a chemotaxis consumption model with singular sensitivity and nonlinear diffusion
17.30 – 18.00 **Christian Stinner:** Global existence for a structured nonlocal model for tumor invasion
18.00 – 18.30 **Grzegorz Karch:** Diffusion-induced blow-up in reaction-diffusion systems

Minisymposium MS25 (B316) - Electromagnetic waves in biomedical imaging – *chairman O. Scherzer*

16.30 – 17.00 **Adérito Araújo:** Modelling and simulation of diabetic macular edema changes on optical coherence tomography of the human retina
17.00 – 17.30 **Victorita Dolean:** Microwave tomographic imaging of cerebrovascular accidents by using high-performance computing
17.30 – 18.00 **Martin Ehler:** Automated identification of retinal fluid
18.00 – 18.30 **Sílvia Barbeiro:** Analysis of a leap-frog discontinuous Galerkin method for time-domain Maxwell's equations in anisotropic materials

Minisymposium MS15 (B319) Higher-order methods for the numerical solution of PDEs – *chairman M. Feistauer*

16.30 – 17.00 **Vít Dolejší:** Anisotropic hp-adaptive methods for the numerical solution of partial differential equations
17.00 – 17.30 **Andrea Moiola:** Space-time Trefftz-discontinuous Galerkin methods for wave problems
17.30 – 18.00 **Poorvi Shukla:** Error analysis of a space-time discontinuous Galerkin method for the wave equation
18.00 – 18.30 **Maurizio Tavelli:** An arbitrary high order space-time DG method for the compressible Navier-Stokes equations on staggered unstructured meshes

Minisymposium MS16 (B311) - Singular perturbations and singularities: theory and applications – *chairman P. Szmolyan*

16.30 – 17.00 **Christian Kuehn:** On singular methodological boundaries in reaction-diffusion systems
17.00 – 17.30 **Manuel V. Gnann:** Singularities in thin film flow from a dynamical systems perspective
17.30 – 18.00 **Christos Sourdis:** On the converse problem for the two-component Gross-Pitaevskii system with a large coupling parameter
18.00 – 18.30 **Alan E. Lindsay:** Numerical resolution and continuation beyond singularities of nonlinear PDEs
18.30 – 19.00 **Peter Szmolyan:** Progress and challenges in singular perturbations

Minisymposium MS17 (B108) - Compressible fluid flow and related topics – *chairman E. Feireisl*

16.30 – 17.00 **Milan Pokorný:** Derivation of the Navier-Stokes-Poisson system for accretion disks
17.00 – 17.30 **Paolo Secchi:** On the weakly nonlinear Kelvin-Helmholtz instability of current-vortex sheets
17.30 – 18.00 **Martin Michálek:** Compressible Navier-Stokes with entropy transport
18.00 – 18.30 **Alexis F. Vasseur:** Global weak solutions to the compressible quantum NAavier-Stokes equation and its semi-classical limit

Minisymposium MS18 (B106) - Mathematical modelling and numerical simulation in drug delivery systems – *chairman J. A. Ferreira*

16.30 – 17.00 **João R. Branco:** Glioma growth: a mathematical approach for chemotherapy protocols
17.00 – 17.30 **Jahed Naghipoor:** The effect of blood flow on the drug release from a PLGA-based drug eluting stent
17.30 – 18.00 **Abdul I. Barakat:** Optimizing the performance of drug-eluting stents: simulations and experiments
18.00 – 18.30 **Tuoi Vo:** Modelling of drug elution from polymer-free drug-eluting stents

Contributed talks CT18 (B315) – *chairman K. Švadlenka*

16.30 – 17.00 **Barbara Zubik-Kowal:** Numerical algorithms for mathematical models on the population dynamics of cancer cells
17.00 – 17.30 **Jakub Solovský:** Numerical simulation of two-phase compositional flow in porous media in vapor intrusion problems
17.30 – 18.00 **Shunsuke Kurima:** Simple approach to nonlinear diffusion equations and their approximations with error estimates
18.00 – 18.30 **Jochen Schütz:** Stable multiderivative solvers for PDEs

Contributed talks CT19 (B317) – *chairman D. Ševčovič*

16.30 – 17.00 **Soňa Kilianová:** Dynamic worst case portfolio optimization via a Hamilton-Jacobi-Bellman equation
17.00 – 17.30 **Igor Kossaczký:** The Tree-Grid Method for HJB equation
17.30 – 18.00 **Matúš Tibenský:** Regularised Riemannian mean curvature flow equation
18.00 – 18.30 **Martin Balažovjech:** The second order scheme and exact solution for advection-diffusion level set equation

Thursday, July 27th

Plenary lectures (B001) – chairman Mario Ohlberger

9.00 – 9.50 **James A. Sethian:** The Voronoi Implicit Interface Method for multiphase multiphysics

9.50 – 10.40 **Simon Masnou:** Surface approximations and geometric energies

10.40 – 11.20 **Coffee break**

Plenary lectures (B001) – chairman Karol Mikula

11.20 – 12.10 **Nadine Peyriéras:** Reconstruction of multilevel dynamics from biological 3D+time imaging data

12.10 – 13.50 **Lunch** (Dining hall of the Faculty of Civil Engineering)

14.00 – 16.00 Parallel sessions

Minisymposium MS19 (B103) - Cross-diffusive systems – *chairman M.Winkler*

14.00 – 14.30 **Yuan Lou:** Cross-diffusion models in population dynamics
14.30 – 15.00 **Johannes Lankeit:** Regularizing properties of logistic source terms in chemotaxis-consumption models
15.00 – 15.30 **Youshan Tao:** Dynamics of a cross-diffusion model for two-species competition
15.30 – 16.00 **Steinar Evje:** An integrative multiphase model for cancer cell migration under influence of physical cues from the microenvironment

Minisymposium MS20 (B105) - Asymptotic analysis of nonlinear parabolic equations – *chairman M. Ishiwata*

14.00 – 14.30 **Kazuhiro Ishige:** Asymptotic expansions of solutions of fractional diffusion equations
14.30 – 15.00 **Juha Kinnunen:** Supercaloric functions for the porous medium equation
15.00 – 15.30 **Tatsuki Kawakami:** Decay estimates of the solutions for a nonlinear parabolic equation
15.30 – 16.00 **Bernhard Ruf:** A heat equation with exponential nonlinearity in R^2

Minisymposium MS21 (B316) - Moving boundaries and complex phenomena II – *chairman S. Yazaki*

14.00 – 14.30 **Karel Švadlenka:** Numerical approximation of hyperbolic mean curvature flow
14.30 – 15.00 **Elliott Ginder:** Multiphase optimization in phononic crystal design
15.00 – 15.30 **Miroslav Kolář:** On an area preserving geodesic curvature driven flow of closed curves on a given surface
15.30 – 16.00 **Shigetoshi Yazaki:** Direct approaches for tracking the moving boundary arising in interfacial phenomena

Minisymposium MS22 (B319) - Multiscale wave propagation problems: analysis and numerics – *chairman M. Ohlberger*

14.00 – 14.30 **Agnes Lamacz:** Waves in heterogeneous media: derivation of dispersive effective models
14.30 – 15.00 **Niklas Wellander:** Homogenization of Quasiperiodic Maxwell equations with a non-linear conductivity
15.00 – 15.30 **Daniel Peterseim:** Relaxing the CFL condition for the wave equation on adaptive meshes
15.30 – 16.00 **Barbara Verfürth:** Numerical homogenization for electromagnetic wave propagation

Minisymposium MS23 (B311) - Nonlinear differential and difference equations: asymptotic theory and BVP's – *chairman Z. Došlá*

14.00 – 14.30 **Jana Zuzáková-Stránská:** Czechoslovak Equadiff: history in pictures
14.30 – 15.00 **Alessandro Fonda:** Radial periodic perturbations of the Kepler problem
15.00 – 15.30 **Gabriela Holubová:** Beam equation with a variable coefficient: The maximum principle
15.30 – 16.00 **Gennaro Infante:** Nontrivial radial solutions of elliptic systems with functional BCs in exterior domains

Minisymposium MS24 (B108) - PDE analysis for implicitly constituted materials – *chairman E. Süli*

14.00 – 14.30 **Josef Málek:** On the analysis for a class of thermodynamically compatible viscoelastic fluids with stress diffusion
14.30 – 15.00 **Laurent Chupin:** Existence results for viscoelastic models with an integral constitutive law
15.00 – 15.30 **Yong Lu:** On PDE analysis of flows of quasi-incompressible fluids
15.30 – 16.00 **Josef Žabenský:** On power-law fluids with the power-law index proportional to the pressure

Minisymposium MS25 (B106) - Electromagnetic waves in biomedical imaging – *chairman S. Barbeiro*

14.00 – 14.30 **Anna Katharina Trull:** Point spread function based image reconstruction in optical projection tomography
14.30 – 15.00 **Francisco Romero Hinrichsen:** Heat generation with plasmonic nanoparticles
15.00 – 15.30 **Leonidas Mindrinos:** The inverse scattering problem in quantitative polarized-sensitive OCT
15.30 – 16.00 **Otmar Scherzer:** Photoacoustic Tomography With Spatially Varying Compressibility and Density

Contributed talks CT20 (B315) – *chairman M. Yamamoto*

14.00 – 14.30 **Milan Medveď:** Exponential stability of solutions of integro-differential equatios whose right-hand sides involve fractional integrals
14.30 – 15.00 **Evgeny Galakhov and Olga Salieva:** Nonexistence of solutions for some nonlinear inequalities with fractional Laplacian
15.00 – 15.30 **Atsuhide Ishida:** Propagation property and inverse scattering for the factional power of negative Laplacian
15.30 – 16.00 **Rodica Luca Tudorache:** Positive solutions for a system of semipositone coupled fractional boundary value problems

Contributed talks CT21 (B317) – *chairman M. García-Huidobro*

14.00 – 14.30 **Giuseppina Di Blasio:** Some questions related to fully anisotropic elliptic equations
14.30 – 15.00 **Mario Bukal:** Convergence of equilibria of von Kármán rods
15.00 – 15.30 **László Simon:** On multiple solutions of nonlinear elliptic functional equations
15.30 – 16.00 **Alexander Rezounenko:** Some properties of solutions to nonlinear PDE/ODEs with state-dependent delay

16.00 – 16.30 **Coffee break**

16.30 – 18.30 Parallel sessions

Minisymposium MS19 (B103) - Cross-diffusive systems – *chairman M.Winkler*

16.30 – 17.00 **Junping Shi:** Dynamics and pattern formation in diffusive predator-prey system with prey-taxis or predator-taxis
17.00 – 17.30 **Lucilla Corrias:** A parabolic model for chemotaxis on weighted networks
17.30 – 18.00 **Yulan Wang:** Global existence in a chemotaxis-fluid system
18.00 – 18.30 **Xinru Cao:** An interpolation inequality and its application in Keller-Segel model

Minisymposium MS20 (B105) - Asymptotic analysis of nonlinear parabolic equations– *chairman K. Ishige*

16.30 – 17.00 **Yoshihisa Morita:** Localized patterns in a reaction-diffusion system with mass conservation
17.00 – 17.30 **Gabriele Grillo:** The porous medium equation on negatively curved Riemannian manifolds
17.30 – 18.00 **Tetsuya Ishiwata:** Mathematical and numerical studies on the blow-up rate to a quasi-linear parabolic equation
18.00 – 18.30 **Evangelos Latos:** Global existence and blow-up for nonlocal Fisher-KPP type problems

Contributed talks CT22 (B316) – *chairman Ľ. Baňas*

16.30 – 17.00 **Daniel Ševčovič:** Solution to the Inverse Wulff Problem
17.00 – 17.30 **Marián Slodička:** Some inverse problems in parabolic partial differential equations
17.30 – 18.00 **Katarína Šišková:** An identification of a time-dependent source term in a fractional wave equation from a integral over-determination
18.00 – 18.30 **Michal Galba:** Reconstruction of a time-dependent convolution kernel from a boundary measurement in nonlinear Maxwell's equations

Minisymposium MS22 (B319) Multiscale wave propagation problems: analysis and numerics – *chairman B. Verfürth*

16.30 – 17.00 **Ilaria Perugia:** Trefftz finite elements for time-harmonic wave propagation
17.00 – 17.30 **Christian Stohrer:** FE heterogeneous multiscale methods for Maxwell's equations in time domain
17.30 – 18.00 **Maik Urban:** Homogenization of the time-harmonic Maxwell equations in general periodic microstructures
18.00 – 18.30 **Mario Ohlberger:** Localized model reduction for wave propagation problems

Minisymposium MS23 (B311) - Nonlinear differential and difference equations: asymptotic theory and BVP's – *chairman Z. Došlá*

16.30 – 17.00 **Wojciech Kryszewski:** Bifurcation from infinity for elliptic problems on R^N
17.00 – 17.30 **Serena Matucci:** Positive decaying solutions to BVPs with mean curvature operator
17.30 – 18.00 **Zuzana Došlá:** Kneser solutions to nonlinear equations with indefinite weight
18.00 – 18.30 **Petr Zemánek:** Discrete symplectic system and self-adjoint extensions

Minisymposium MS24 (B108) - PDE analysis for implicitly constituted materials
– *chairman J. Málek*

16.30 – 17.00 **Miroslav Bulíček:** Limiting strain models in elasticity theory and variational integrals with linear growth
17.00 – 17.30 **Victor A. Kovtunenko:** Limiting small strain problems with cracks
17.30 – 18.00 **Sebastian Schwarzacher:** Existence of strong solutions to rate independent systems
18.00 – 18.30 **Yasemin Şengül:** Traveling waves in one-dimensional non-linear models of strain-limiting viscoelasticity

Minisymposium MS28 (B106) - Topological methods in differential equations – *chairman V. Obukhovskii*

16.30 – 17.00 **Paola Rubbioni:** An integro-differential model involving impulses and feedback controls
17.00 – 17.30 **Ioan I. Vrabie:** Semilinear delay differential equations subjected to nonlocal initial conditions
17.30 – 18.00 **Wojciech Kryszewski:** The intermediate value theorem and differential equations
18.00 – 18.30 **Jan Andres:** Sharkovsky-type theorems applicable to differential equations revisited

Contributed talks CT23 (B315) – *chairman A. Ishida*

16.30 – 17.00 **Masakazu Yamamoto:** Asymptotic expansion of solutions to the drift-diffusion equation with anomalous diffusion
17.00 – 17.30 **Vladimir Orlov:** Solvability of one fractional non-Newtonian fluid dynamics model
17.30 – 18.00 **Jaydev Dabas:** Existence results for the class of impulsive fractional differential equation
18.00 – 18.30 **Dariusz Idczak:** Sensitivity of a nonlinear ordinary BVP with fractional Dirichlet-Laplace operator

Contributed talks CT24 (B317) – *chairman E. Ginder*

16.30 – 17.00 **Saadet Erbay:** On the decoupling of the improved Boussinesq equation into two uncoupled Camassa-Holm equations
17.00 – 17.30 **Yoshitaro Tanaka:** The theoretical approach for pattern formations based on the convolution kernels in the network systems
17.30 – 18.00 **Michal Kozák:** Analysis of pattern emergence in Turing systems with inhomogeneity in reaction term
18.00 – 18.30 **Josef Navrátil:** Systems of reaction-diffusion equations with unilateral sources

20.00 – 01.00 **Conference dinner with Slovak food, wine, music and dancing** (Mladá garda social hall)

Friday, July 28th

Plenary lectures (B001) – chairman Peter Poláčik

9.00 – 9.50 **Philippe Souplet:** Diffusive Hamilton-Jacobi equations and their singularities

9.50 – 10.40 **Yuan Lou:** Concentration phenomena in some integro-PDE models for evolution of dispersal

10.40 – 11.20 **Coffee break**

Plenary lectures (B001) – chairman Marek Fila

11.20 – 12.10 **Eiji Yanagida:** Moving singularities in some parabolic partial differential equations

12.10 – 13.50 **Lunch** (Dining hall of the Faculty of Civil Engineering)

14.00 – 16.00 Parallel sessions

Minisymposium MS26 (B103) - Patterns and dynamics in nonlinear partial differential equations – *chairman Y. Morita*

14.00 – 14.30 **Danielle Hilhorst:** Dispersal towards food: the singular limit of an Allen-Cahn equation
14.30 – 15.00 **Peter Takáč:** On compact support solutions to parabolic problems with the p-Laplacian
15.00 – 15.30 **Elliott Ginder:** A line mass approach to the modeling of interfacial active matter
15.30 – 16.00 **Tomoyuki Miyaji:** Torus bifurcations to rippling rectangular waves

Minisymposium MS27 (B105) - Elliptic equations and systems from mathematical physics – *chairman Y. Kabeya*

14.00 – 14.30 **Soohyun Bae:** Asymptotic self-similarity of entire solutions for quasilinear equations with exponential nonlinearity
14.30 – 15.00 **Jann-Long Chern:** On elliptic equations of Hardy-Sobolev type with multiple boundary singularities and Caffarelli-Kohn-Nirenberg inequality
15.00 – 15.30 **Hidemitsu Wadade:** Remarks on the Caffarelli-Kohn-Nirenberg type inequality of the logarithmic form
15.30 – 16.00 **Hsin-Yuan Huang:** Bubbling solutions in Chern-Simons system with two Higgs particles

Contributed talks CT25 (B316) – *chairman K. Van Bockstal*

14.00 – 14.30 **Matteo Caggio:** Non-equilibrium diffusion limit for a barotropic radiative flow in a presence of magnetic field
14.30 – 15.00 **Yutaka Tsuzuki:** Existence of solutions to Vlasov-Poisson equations with angle errors in magnetic field in a half-space
15.00 – 15.30 **Risei Kano:** The existence of solutions for the parabolic problem related to hardening phenomena
15.30 – 16.00 **Jaroslav Chovan:** A vector-scalar formulation of a mathematical model for the induction hardening process with a nonlinear law for the magnetic field

Contributed talks CT26 (B319) – *chairman M. Bulíček*

14.00 – 14.30 **Hana Mizerová:** A kinetic model for the Peterlin viscoelastic fluids
14.30 – 15.00 **Andrey Zvyagin:** Optimal feedback control for a viscoelastic model of non-Newtonian hydrodynamics
15.00 – 15.30 **Victor Zvyagin:** Initial-boundary value problem of viscoelastic media with memory motion
15.30 – 16.00

Minisymposium MS28 (B311) - Topological methods in differential equations – *chairman V. Obukhovskii*

14.00 – 14.30 **Vladimir Goncharov:** Viscosity solution as the value function in some minimum time isotropic problem with nonconstant dynamics
14.30 – 15.00 **Guglielmo Feltrin:** An application of coincidence degree theory to cyclic feedback type systems associated with nonlinear differential operators
15.00 – 15.30 **Grzegorz Gabor:** Differential inclusions with state-dependent impulses on the half-line
15.30 – 16.00 **Sergey Kornev:** Asymptotic behavior of solutions for differential inclusions and guiding functions

16.00 – 16.30 **Coffee break**

16.30 – 18.30 Parallel sessions

Minisymposium MS26 (B103) - Patterns and dynamics in nonlinear partial differential equations – *chairman Y. Morita*

16.30 – 17.00 **Yihong Du:** Logarithmic shifting in spreading governed by the Fisher-KPP porous medium equation
17.00 – 17.30 **Hideki Murakawa:** An efficient linear scheme for the Stefan problem, the porous medium equation and nonlinear cross-diffusion systems
17.30 – 18.00 **Ján Eliaš:** On a reaction-diffusion model for the Neolithic transition from hunting and gathering to early farming
18.00 – 18.30 **Junping Shi:** Reaction-diffusion model with nonlocal effects modeling tidal marsh spatial patterning

Minisymposium MS27 (B105) - Elliptic equations and systems from mathematical physics – *chairman J. L. Chern*

16.30 – 17.00 **Zhi-You Chen:** Large sharp range of flux and the structure of solutions for the self-dual Maxwell-Chern-Simons O(3) sigma model
17.00 – 17.30 **Yong-Li Tang:** Classification of standing wave solutions to a coupled Schrödinger system
17.30 – 18.00 **Yoshitsugu Kabeya:** Linear elliptic equations with the inverse square potential and the related Schrödinger semigroup
18.00 – 18.30 **Jongmin Han:** A self-dual system arising from the Maxwell gauged O(3) sigma model on a space-time manifold
18.30 – 19.00 **Kyungwoo Song:** On the gravitational Maxwell gauged O(3) sigma model

Contributed talks CT27 (B316) – *chairman A. Handlovičová*

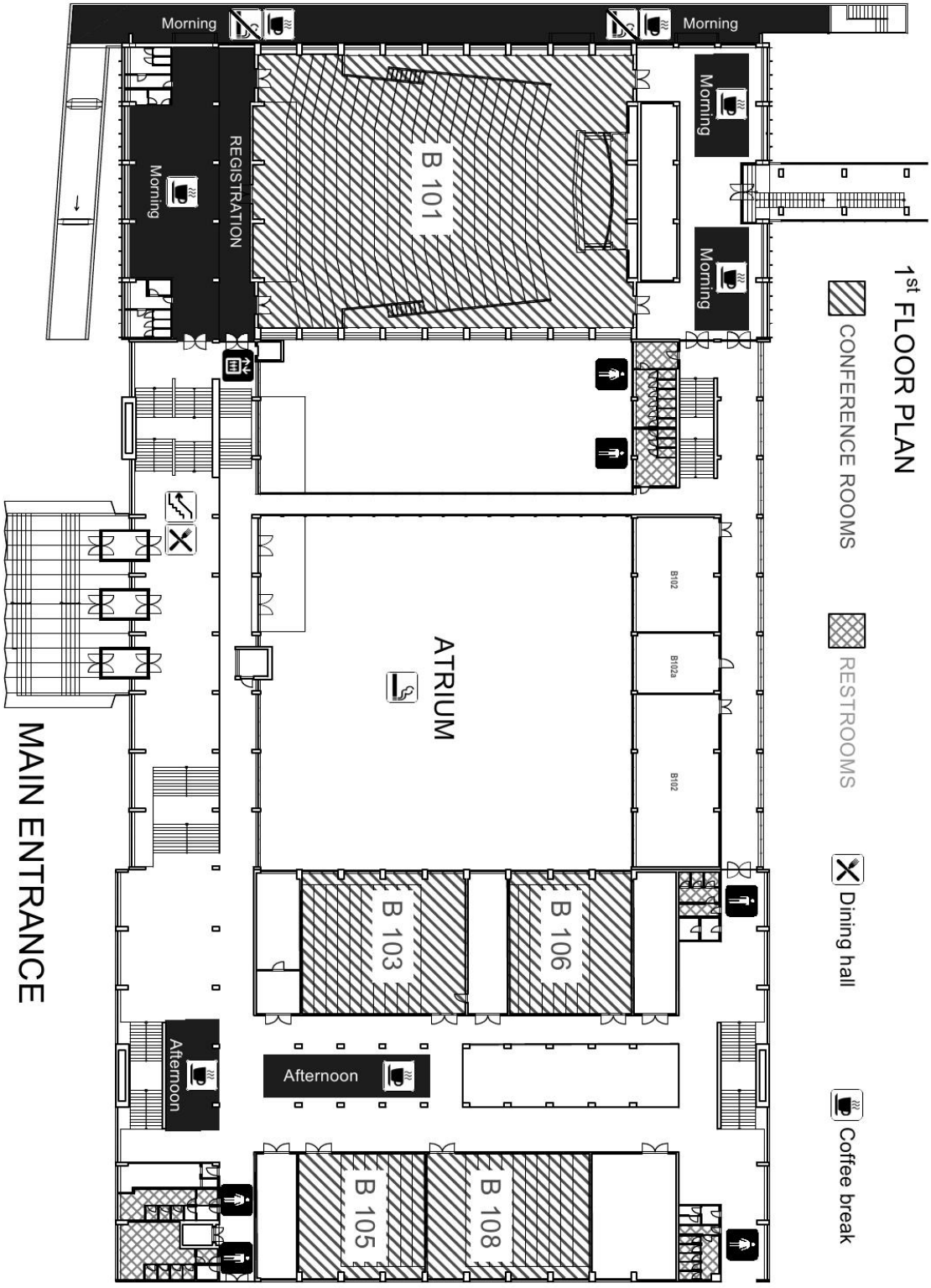
16.30 – 17.00 **Hiroshi Watanabe:** Well-posedness for parabolic-hyperbolic conservation laws with nonlocal coefficients
17.00 – 17.30 **Florian Sonner:** Temporal multiscale methods for a simplified plaque growth model
17.30 – 18.00 **Lutz Recke:** Smoothness of the data-to-solution map for parabolic and hyperbolic PDEs: A comparison
18.00 – 18.30 **Yusuke Murase:** Existence of weak solutions for mathematical model for brewing Japanese Sake and related topics

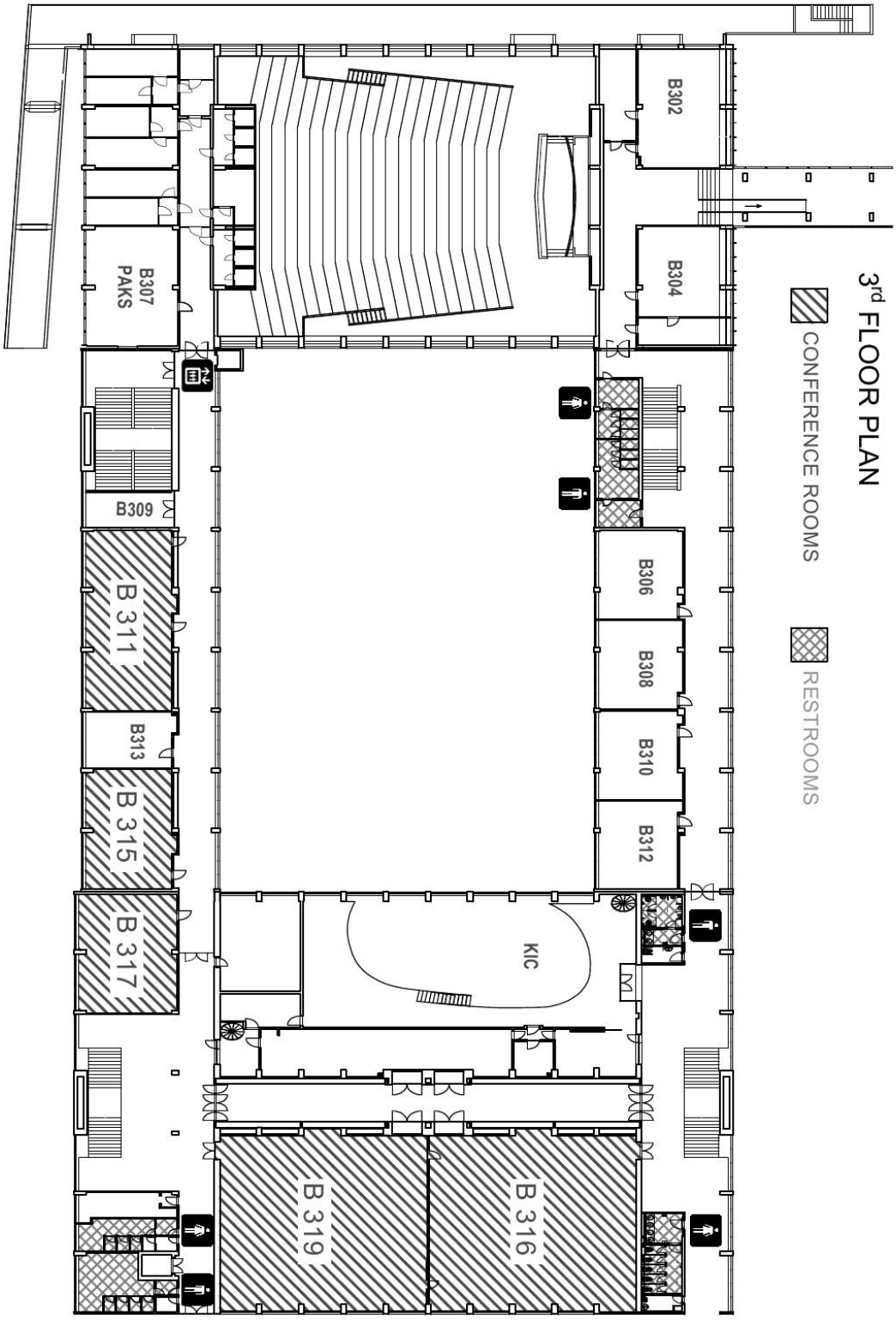
Contributed talks CT28 (B319) – *chairman V. Zvyagin*

16.30 – 17.00 **Sebastian Owczarek:** Renormalised solutions in thermo-visco-plasticity for a Norton-Hoff type model
17.00 – 17.30 **Konrad Kisiel:** Dynamical model of viscoplasticity
17.30 – 18.00 **Leszek Bartczak:** Renormalised solution for thermomechanical problem in perfect-plasticity
18.00 – 18.30 **Carlos Esteve Yagüe:** Touchdown localization for the MEMS problem with variable dielectric permittivity

Contributed talks CT29 (B311) – *chairman M. Fečkan*

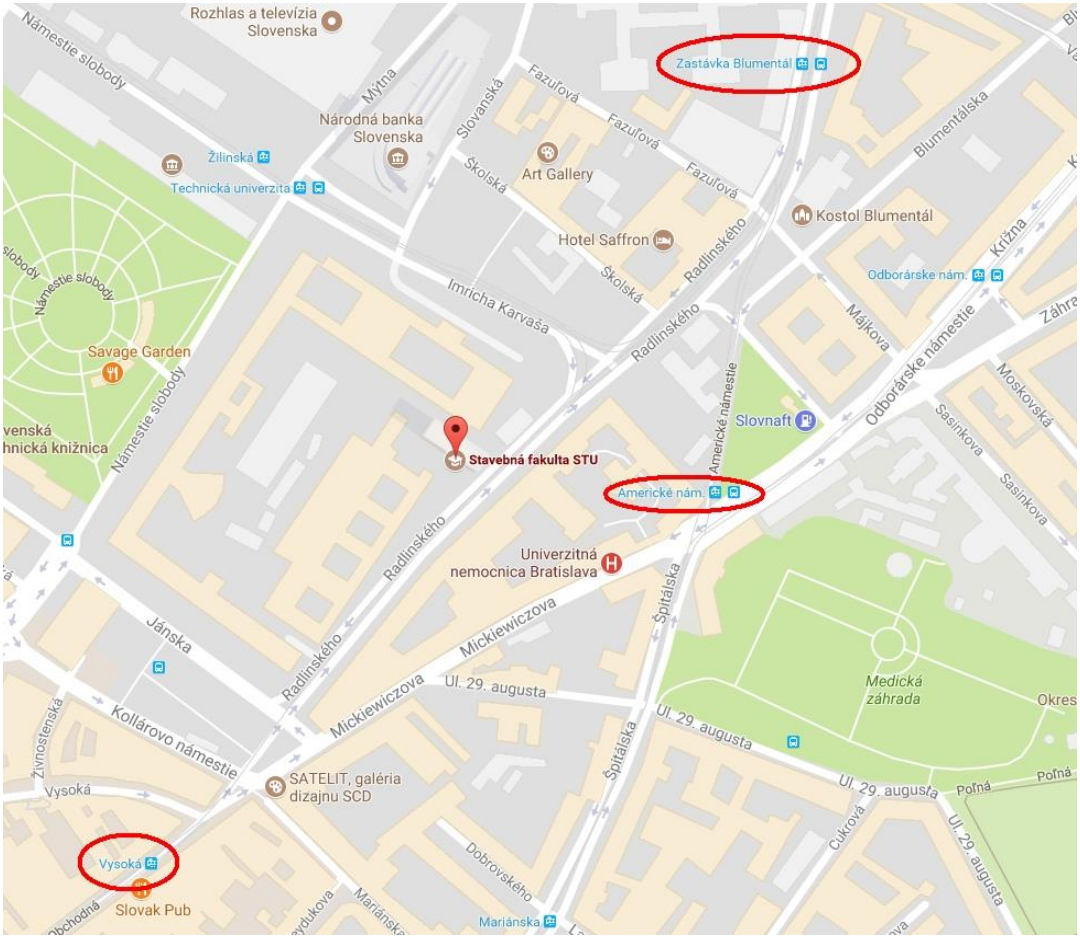
16.30 – 17.00 **Volker Reitmann:** On dimension and stratification of attractors for flows on Hilbert manifolds
17.00 – 17.30 **Jan Tomeček:** Periodic solution of distributional differential equation with state-dependent impulses
17.30 – 18.00 **Jakub Slavík:** Infinite dimensional exponential attractor for a reaction-diffusion equation in unbounded domains
18.00 – 18.30 **Takiko Sasaki:** Regularity and singularity of the blow-up curve for a nonlinear wave equation with a derivative nonlinearity


1st FLOOR PLAN
CONFERENCE ROOMS
RESTROOMS
Dining hall
Coffee break
MAIN ENTRANCE
REGISTRATION
ATRIUM
B 101
B 103
B 106
B 105
B 108
B102
B102a
B102
Morning
Afternoon


3rd FLOOR PLAN
CONFERENCE ROOMS
RESTROOMS
B302
B304
B307
PAKS
B309
B306
B308
B310
B312
B 311
B313
B 315
B 317
KIC
B 319
B 316

Transportation to Mladá garda (conference dinner venue):

To get to the conference dinner venue Mladá garda, you can use trams number 3 and 5, direction Rača, from stops Vysoká, Blumetál or Americké námestie near the Faculty of Civil Engineering. Exit on the stop Mladá garda and the venue is just on your left hand side. You will need 15 minute travel ticket (0.70€), obtained at the Registration, which must be marked in the tram. The transportation back to the city center (Námestie SNP), after 23.00, is planned to be organized by a taxi service.



Mladá garda social hall is located in the building on the upper picture. The direction of the tramway to Mladá garda is indicated on the lower picture.