

Monday 20.06.2016

KINETIC THEORY (Room C)

9:00 - 9:10 OPENING OF THE CONFERENCE

9:10 - 10:00 Alexander V. Bobylev *Maxwellian bounds for solutions of the spatially homogeneous Boltzmann equation*

10:00 - 10:50 Giuseppe Toscani *Kinetic theory of wealth distribution*

10:50 - 11:20 Coffee break

11:20 - 12:10 David Gerard-Varet *The mean field Kuramoto model*

12:10 - 13:00 Piotr Gwiazda *Concentrated polymers*

13:00 Lunch

15:00 - 15:50 Grzegorz Karch *Eternal and infinite energy solutions of homogeneous Boltzmann equation*

15:50 - 16:30 Agnieszka Świerczewska-Gwiazda *Trailer of the Simons Semester*

16:30 - 17:00 Coffee break

19:00 Banquet

Tuesday 21.06.2016

KINETIC THEORY (Room C)

9:00 - 9:50 Andrea Tosin *A Boltzmann-type kinetic approach to the modelling of vehicular traffic*

9:50 - 10:40 Mirosław Lachowicz *Multiscale descriptions of swarming phenomena*

10:40 - 11:10 Coffee break

MATHEMATICAL FLUID MECHANICS (Room C)

11:10 - 12:00 INTRO Piotr Mucha *Transport in fluid mechanics*

12:00 - 12:30 MFD1 Piotr Zgliczyński *Symbolic dynamics (chaos) for Kuramoto-Sivashinsky PDE on the line - a computer assisted proof*

12:30 - 13:00 MFD2 Grzegorz Łukaszewicz *Bounds on the vertical heat transfer for the Rayleigh–Bénard Convection in the micropolar fluid*

13:00 Lunch

14:30 - 15:00 MFD3 Ewelina Zatorska *Incompressible congestions modelled by the compressible Navier-Stokes equations*

15:00 - 15:30 MFD4 Piotr Minakowski *The Taylor-Galerkin method and its applications*

15:30 - 16:00 MFD5 Jan Burczak *Existence and optimal regularity of solutions to a quasilinear Stokes system with a very weak forcing*

16:00 - 16:30 Coffee break

16:30 - 17:00 MFD6 Aneta Wróblewska-Kamińska *Non-Newtonian flow over a rough surface*

17:00 - 17:30 MFD7 Tomasz Piasecki *On the stationary flow of reactive gaseous mixture*

17:30 - 18:00 MFD8 Piotr Kalita *Smooth attractors for weak solutions of the SQG equation with critical dissipation*

CHEMOTAXIS AND OTHER NONLOCAL PROBLEMS (Room A)

11:10 - 12:00 INTRO Piotr Biler *Radial solutions of chemotaxis systems with nonlocal diffusion*

12:00 - 12:30 CH1 Dariusz Wrzosek *Interspecies competition and chemorepulsion*

12:30 - 13:00 CH2 Ryszard Rudnicki *Phenotype-structured population models. Does assortative mating lead to speciation?*

13:00 Lunch

14:30 - 15:00 CH3 Karolina Kropielnicka *Structured population models in a space of measures; From analytical foundations to numerical results*

15:00 - 15:30 CH4 Lucjan Sapa *On local weak solutions to Nernst–Planck–Poisson system*

15:30 - 16:00 CH5 Rafał Celiński *Asymptotic profile to the chemotaxis model with chemoattractant consumption*

16:00 - 16:30 Coffee break

16:30 - 17:00 CH6 Krzysztof Topolski *Sobolev type equations: analytical and numerical approach*

17:00 - 17:30 CH7 Robert Stańczy *Evolution for diffusing particles in gravitation*

19:00 Dinner

Wednesday 22.06.2016

STOCHASTIC PARTIAL DIFFERENTIAL EQUATIONS (Room C)

9:0 - 9:50 INTRO Szymon Peszat *Stochastic Partial Differential Equations - a short overview*

9:50 - 10:20 SPDEs1 Jerzy Zabczyk *On Musiela equation for the forward rates*

10:20 - 10:50 SPDEs2 Elżbieta Motyl *Stochastic partial differential equations in hydrodynamics*

10:50 - 11:20 Coffee break

11:20 - 11:50 SPDEs3 Zdzislaw Brzezniak *On the (deterministic and stochastic) Navier-Stokes equations with constrained L^2 energy of the solution*

11:50 - 12:20 SPDEs4 Martina Hofmanova *Stochastic mean curvature flow*

12:20 - 12:50 SPDEs5 Plamen Turkedjiev *Representation of and numerics for SPDEs using backward doubly stochastic differential equations*

GEOMETRIC ANALYSIS AND RELATED PROBLEMS (Room A)

9:00 - 9:50 INTRO Tadeusz Iwaniec *The Principle of Non-Interpenetration of Matter*

9:50 - 10:20 GA1 Michał Miśkiewicz *Weak compactness for systems of n -harmonic type*

10:20 - 10:50 GA2 Anna Zatorska-Goldstein *Elliptic problems with critical growth, the Hardy inequality and the existence for parabolic problems*

10:50 - 11:20 Coffee break

11:20 - 11:50 GA3 Agnieszka Kałamajska *Strongly nonlinear multiplicative inequalities and Boyd indices*

11:50 - 12:20 GA4 Aleksandra Orpel *On positive evanescent solutions of a class of singular elliptic problems*

12:20 - 12:50 GA5 Michał Łasica *The l_1 -anisotropic total variation flow in the plane*

13:00 Lunch

20:00 Bonfire

Thursday 23.06.2016

GEOMETRIC ANALYSIS AND RELATED PROBLEMS (Room C)

9:00 - 9:50 INTRO David Cruz-Uribe *$H=W$ in matrix weighted spaces, with applications to mappings of finite distortion*

9:50 - 10:20 GA6 Paweł Goldstein *Continuity of finite distortion Sobolev mappings between manifolds*

10:20 - 10:50 GA7 Sławomir Kolasiński *New solutions to a generalized Plateau problem*

10:50 - 11:20 Coffee break

11:20 - 11:50 GA8 Antoni Pierzchalski *On the reciprocity formula for two and more moduli*

11:50 - 12:20 GA9 Jarosław Mederski *Ground states and bound states of semilinear Maxwell equations*

12:20 - 12:50 GA10 Iwona Skrzypczak *Liouville theorems for elliptic problems in variable exponent spaces*

13:00 Lunch

14:30 - 15:00 GA11 Olli Toivanen *Harnack's inequality for quasiminimizers with generalized Orlicz growth conditions*

15:00 - 15:30 GA12 Piotr M. Bies *Linear elliptic equations in variable Hölder spaces*

15:30 - 16:00 GA13 Michał Gaczkowski *Variable Sobolev spaces on complete Riemannian manifolds*

16:00 - 16:30 Coffee break

16:30 - 17:00 GA14 Tomasz Kostrzewa *Sobolev spaces on metric groups*

CONTRIBUTED TALKS (Room A)

11:20 - 11:50 C1 Viktor Gerasimenko *On approaches to derivation of kinetic equations for hard sphere fluids*

11:50 - 12:20 C2 Jan Peszek *Dynamics of particles with nonlocal singular interactions*

12:20 - 12:50 C3 Katarzyna Szymańska-Dębowska *Second order ordinary differential systems with nonlocal Neumann conditions at resonance*

13:00 Lunch

14:30 - 15:00 C4 Andrzej Rozkosz *Renormalized solutions of semilinear elliptic equations involving measure data and Dirichlet operator*

15:00 - 15:30 C5 Sebastian Owczarek *Renormalised solutions in thermo-visco-plasticity*

for a Norton-Hoff type model

15:30 - 16:00 C6 Konrad Kisiel *Dynamical poroplasticity model with gradient type non-linearity*

16:00 - 16:30 Coffee break

16:30 - 17:00 C7 Grzegorz Łysik *Higher order Pizzetti's formulas and polyharmonic functions*

17:00 - 18:30 POSTER SESSION (Room B)

Bartosz Bieganski *Ground-state solutions for the semilinear Schrodinger equation with sign-changing nonlinearities*

Antoni Kijowski *Various types of harmonic functions on metric measure space*

Piotr Knosalla *Aerotaxis equations*

Igor Kosowski *Existence of solutions for boundary value problem with strong nonlinear nonlocal conditions*

Martyna Patera *The boundary Harnack principle*

Lucjan Sapa *Existence and uniqueness of global weak solutions to interdiffusion with Vegard rule*

Jakub Siemianowski *Thermomicropolar fluid*

19:00 Dinner

Friday 24.06.2016

CONTRIBUTED TALKS (Room C)

9:00 - 9:30 C8 Jan Cholewa *On a nonlinear evolution equation in scales*

9:30 - 10:00 C9 Filip Klawe *Weak-mild solution to microscopic simplified Multiple Myeloma model*

10:00 - 10:30 Coffee break

10:30 - 11:00 C10 Andrzej Nowakowski *Optimal blowup time, approximate blowup time, sufficient condition, dual dynamic programming*

11:00 - 11:30 C11 Jan Goncerzewicz *Porous media equation in tubular domains: large time behaviour of solutions*

CONTRIBUTED TALKS (Room A)

9:00 - 9:30 C12 Antoni Leon Dawidowicz *On the properties of multidimensional Lasota equation in Orlicz spaces*

9:30 - 10:00 C13 Adrian Karpowicz *The Maximum Principle for Viscosity Solutions of Elliptic Differential Functional Equations*

10:00 - 10:30 Coffee break

10:30 - 11:00 C14 Lukasz Dawidowski *Solvability of the quasilinear parabolic equation of Kirchhoff type*

11:00 - 11:30 C15 Anna Ochal *Variational-hemivariational inequalities in mathematical modeling*

11:35 -11:45 CLOSING OF THE CONFERENCE (Room C)

12:00 Lunch