

# Małe Ciche 2019: Function Spaces and PDEs

## Sunday, September 22, 2019

19:00 - ... arrival  
supper

## Monday, September 23, 2019

**7:30-8:30 breakfast**

8:50-9:00 Agnieszka Kałamajska, Welcome

*Chairman: Agnieszka Kałamajska*

9:00-9:40 Ritva Hurri-Syrianen, *On pointwise estimate*

9:45-10:25 Jana Björn, *Boundary regularity for nonlinear parabolic equations*

10:25-10:45 coffee break

*Chairman: Ritva Hurri-Syrianen*

10:45-11:25 Elvira Zappale, *Reiterated homogenization in the Orlicz-Sobolev setting*

11:30-12:10 Teresa Radice, *A neo-Hookean model of plates*

**12:40-14:00 lunch**

*Chairman: Jana Björn*

16:50-17:30 Jan Malý, *Inverting of BV homeomorphisms*

17:30-17:50 coffee break

17:50-18:20 Martin Křepela, *Bogovski estimates and solenoidal difference quotients*

18:25-18:45 Nirjan Biswas, *Some embeddings and applications*

18:45-19:05 Ujjal Das, *Optimal space of Hardy potentials*

**19:30- dinner**

## Tuesday, September 24, 2019

**7:30-8:30 breakfast**

*Chairman: Jan Malý*

8:50-9:40 Luboš Pick, *Shrinking maps into Marcinkiewicz spaces are maximally noncompact*

9:45-10:25 Bohumir Opíc, *Optimal local embeddings of Besov spaces involving only slowly varying smoothness*

10:25-10:45 coffee break

Chairman: *Teresa Radice*

10:45-11:25 Luigi d'Onofrio, *Atomic decompositions, two stars theorems, and distances for the Bourgain-Brezis-Mironescu space and other big spaces*

11:30-12:10 Amiran Gogatishvili, *Operators in generalized Morrey-type spaces and one dimensional inequalities involving Hardy operators*

group photo

**12:40-14:00 lunch**

Chairman: *Elvira Zappale*

17:00-17:30 Everaldo de Mello Bonotto, *Stochastic Differential Equations via Generalized ODEs*

17:30-17:50 coffee break

17:50-18:10 Hana Turčinová, *Characterization of Sobolev functions with zero trace*

18:10-18:30 Michał Jureczka, *Solving variational-hemivariational inequalities by application of nonsmooth optimization*

18:30-18:50 Jakub Takáč, *Space optimality for kernel operators*

**19:30- dinner**

### **Wednesday, September 25, 2019**

**7:30-8:30 breakfast**

Chairman: *Andrzej Rozkosz*

9:15-9:50 Grzegorz Łukaszewicz, *Rayleigh-Bénard heat convection problem for the micropolar and Navier-Stokes fluid models* (a talk given by co-author Piotr Kalita)

9:55-10:25 Aleksandra Orpel, *Multiplicity of positive solutions of nonlinear elliptic equations*

10:25-10:45 coffee break

Chairman: *Luigi d'Onofrio*

10:45-11:25 Krzysztof Bogdan, *Semilinear Dirichlet problem for the fractional Laplacian*

11:30-12:10 Anders Björn,  *$p$ -harmonic Green functions and their local integrability*

**12:40-14:00 lunch**

14:00 excursion

**19:00 bonfire**

## **Thursday, September 26, 2019**

**7:30-8:30 breakfast**

*Chairman: Krzysztof Bogdan*

9:00-9:40 Andrzej Rozkosz, *On the structure of smooth measures*

9:45-10:25 Stefan Krömer, *Injective nonlinear elasticity via penalty terms: analysis and numerics*

10:25-10:45 coffee break

*Chairman: Aleksandra Orpel*

10:45-11:15 Raj Narayan Dhara, *Waves of maximal height for a class nonlocal equations with homogeneous symbol*

11:20-11:50 Michał Gaczkowski, *Improved compactness in Hajlasz spaces*

11:55-12:15 Artur Stabuszewski, *Discontinuity of functions in Hajlasz space with critical exponent*

**12:40-14:00 lunch**

*Chairman: Leszek Gasiński*

16:50-17:10 Antoni Kijowski, *Mean value property for solutions of PDEs*

17:10-17:30 Piotr Kozarzewski, *Optimal design for thin structures in generalized Sobolev spaces*

17:30-17:50 coffee break

**19:30- dinner**

## **Friday, September 27, 2019**

**7:30-9:00 breakfast**

10:30- departure