# Workshop "Probability, Analysis and Geometry"

University of Ulm - Moscow State University

Ulm, September 2 - 6, 2013

# Programme

#### Monday, September 2.

9:15 - 9:30 Welcoming address by Prof. Dieter Rautenbach, the dean of the faculty

Lectures (Stochastic Analysis):

09:30 - 11:15 A. Shiryaev "Stopping Times: Theory and Applications"

11:30 - 13:15 M. Kunze "Uniqueness through noise"

Short talks (Probability):

14:30 - 15:00 E. Bulinskaya "Limit theorems for catalytic branching processes"

15:00 - 15:30 P. Alonso-Ruiz "Analysis on Hanoi-type fractal quantum graphs"

Short break.

Short talks (Probability and Statistics):

**15:35 - 16:05** M. Zhitlukhin "On the Kiefer-Weiss and Chernoff sequential testing problems"

**16:05 - 16:35** I. Rodionov "Discrimination between close hypotheses on tail distributions belonging Gumbel maximum domain of attraction"

### Tuesday, September 3.

Lectures (Probability Theory):

09:00 - 10:45 A. Bulinski "Around the Central Limit Theorem"

11:00 - 12:45 Z. Kabluchko "Zeros of random analytic functions"

Short talks (Applied Probability and Statistics):

14:30 - 15:00 E. Tuzhilina "Asymptotic behavior of the interacting cells model"

15:00 - 15:30 A. Rakitko "Estimation of non-binary response variables"

**15:30 - 16:00** A. Khaplanov "The study of the multivariate logistic regression with increasing number of covariates"

Short break.

Short talks (Applied Probability and Statistics):

**16:05 - 16:35** C. Hirsch "First-passage percolation on random geometric graphs and an application to shortest-path trees"

**16:35 - 17:05** O. Stenzel "Stochastic modeling of the 3D morphology of energy materials on various length scales"

#### Wednesday, September 4.

Lectures (Functional Analysis):

09:00 - 10:45 W. Arendt "The Dirichlet problem and Feller semigroups"

11:00 - 12:45 G. Kobelkov "Existence in the large of a solution to primitive equation"

Short talks (Analysis):

14:30 - 15:00 S. Fackler "A stochastic characterization of maximal parabolic regularity"

15:00 - 15:30 G. Malenová "Spectra of Quantum Graphs"

Short break

Short talks (Analysis, Geometry):

15:35 - 16:05 J. Glück "Positive Semigroups and Perron-Frobenius Theory"

16:05 - 16:35 J. Kampf "Asymptotic properties of the parallel volume"

### Thursday, September 5.

Lecture (Analysis):

09:00 - 10:45 B. Kashin "New Methods in Approximation Theory"

Short talks (Differential Geometry):

11:00 - 11:30 E. Kantonistova "The bifurcation diagrams of some Hamiltonian systems"

11:30 - 12:00 V. Shmarov "Strongly taut immersions into Riemann manifolds"

12:00 - 12:30 A. Spener "Variational Flows of Curves in Riemannian Space"

Long break. Short talks:

13:30 - 14:00 Z. Fechner "Trigonometry on groups"

**14:00 - 14:30** M. Heinlein "About the divisors of a^n+1 and their interesting connection to prime numbers"

14:30 - 15:00 S. Schmieg "Rigid analytic curves and their Jacobians"

### Friday, September 6.

Lectures (Probability, Geometry):

09:00 - 10:45 E. Spodarev "Prediction of stable stochastic processes"

**11:00 - 12:45** A. Tuzhilin "Geometrical Optimization Problems with One-dimensional Branching Extremals"

Short talks (Analysis):

**14:30 - 15:00** A. Meleshkina "Lower bounds for n-term approximations of some functions with respect to orthonormal systems"

15:00 - 15:30 A. Radomskiy "On an inequality of Sidon type for trigonometric polynomials"

Short break. Short talks (Probability and Statistics):

15:35 - 16:05 K. Schiefele "Estimation of treatment effects under non-compliances"

- **16:05 16:35** S. Roth "Inverse problems in the estimation of the Lévy-triplet of infinitely divisible random fields"
- **16:35 17:05** J. Schmidt "CLT for the volume of excursion sets of stationary associated random fields"