

INTERNATIONAL WORKSHOP
“PROBABILITY, ANALYSIS AND GEOMETRY”

(Lomonosov Moscow State University and Ulm University)

Moscow, September 30 – October 4, 2014

PROGRAM

September 30 (Tuesday)

Room 16-24

10:00–10.50 **V.N. Chubarikov** (MSU).

Arithmetic and Harmonic Analysis (*special invited lecture*)

10:55–11.45 **Anna Dall’Acqua** (Ulm University).

Elastic plates and surfaces (*special invited lecture*)

Coffee-break (room 16-03)

12.10–12.55 **S.V. Konyagin** (Steklov Math. Institute of RAS, MSU)

Large gaps between consecutive prime numbers (*plenary talk*)

13:00–13:45 **V.I. Bogachev** (MSU)

Lower bounds for the Kantorovich distance and multidimensional analogs of the Hardy–Landau–Littlewood inequality (*plenary talk*)

Lunch (University restaurants)

ANALYSIS, Room 16-08

15:00–15.45 **P.A. Borodin** (MSU)

Density of semigroups in Banach spaces (*plenary talk*)

15:45–16:15 **Lukas Bartholomäus** (Ulm University)

Local solutions to a class of Monge-Ampère equations of mixed type

16:15–16:35 **A.V. Meleshkina** (MSU)

On n -term Approximations with Respect to Frames Bounded in $L^p(0, 1)$, $2 < p \leq \infty$

Break

16:45–17:15 **A.M. Savchuk** (MSU)

Asymptotic formulae and Riesz basicity of EAF system of Dirac operator with summable potential

17:15–17:35 **A.A. Flerov** (MSU)

On locally and bounded Chebyshev sets

17:35–17:55 **A.V. Shaposhnikov** (MSU)

Some remarks on Davies uniqueness theorem

17:55–18:15 **E.D. Kosov** (MSU)

Estimates of integral norms of polynomials on spaces with convex measures

October 1 (Wednesday)

Room 12-08

10:00–10:50 **V.M. Buchstaber** (Steklov Mathematical Institute of RAS, MSU).
Fiberwise multiplicative Hirzebruch genera (*special invited lecture*)

10:55–11:40 **S.M. Gusein-Zade** (MSU).
Higher order orbifold Euler characteristics and their generalizations
(*plenary talk*)

Coffee-break (room 16-03)

12:05–12:55 **Stefan Wewers** (Ulm University).
L-functions of curves over number fields (*special invited lecture*)

13:00–13:45 **E.V. Troitsky** (MSU)
Reidemeister classes and twisted inner representations (*plenary talk*)

Lunch (University restaurants)

GEOMETRY, Room 13-02

15:00–15:30 **Frédéric Stoffers** (Ulm University)
Embedding of Riemannian metrics with negative curvature in 3-dimensional
Euclidean space

15:30–16:00 **D.V. Millionshchikov** (MSU)
Cohomology of Landweber-Novikov algebra and singular Virasoro vectors

16:00–16:30 **I.K. Kozlov** (MSU)
Discrete invariants and topology of the Kovalevskaya integrable cases on the
Lie algebras $\mathfrak{so}(4)$ and $\mathfrak{so}(3,1)$

Break

16:40–17:10 **D.V. Gugin** (MSU)
On integral cohomology ring of symmetric products

17:10–17:30 **A. Skripchenko** (MSU)
Polygonal billiards with one-sided scatterings

17:30–17:50 **A.I. Korchagin** (MSU)
On group factor isomorphism problem

17:50–18:10 **V. Shastin** (MSU)
A combinatorial model of the Teichmüller metric for surfaces with punctures

PROBABILITY, Room 16-04

15:00–15:45 **A.S. Holevo** (Steklov Mathematical Institute of RAS).
On the problem of Gaussian optimizers in quantum information theory
(*special invited talk*)

15:45–16:30 **E.B. Yarovaya** (MSU).
Spatio-temporal structure of stochastic lattice systems (*special invited talk*)

Break

16:40–17:25 **D.A. Shabanov** (MSU).
A probabilistic approach for estimating the Van der Waerden numbers
(*special invited talk*)

17:25–17:55 **A.A. Shklyaev** (MSU).
Deviations for solutions of random difference equation and
branching processes in random environment

October 2 (Thursday)

Room 12-08

10:00–10:50 **A.M. Zubkov** (*Steklov Mathematical Institute of RAS, MSU*)
Application of the Laplace transform to the geometrical and
probabilistic problems (*special invited lecture*)

10:55–11:40 **V.Yu. Korolev** (MSU)
Product representations for random variables with Weibull distributions and
their applications (*plenary talk*)

Coffee-break (room 16-03)

12:05–12:55 **Robert Stelzer** (Ulm University).
Lévy-driven CARMA processes (*special invited lecture*)

13:00–13:45 **I.A. Sheipak** (MSU)
Eigenvalues asymptotics of differential operators with singular weight.
Some applications for small deviations of Gaussian processes (*plenary talk*)

Lunch (University restaurants)

PROBABILITY, Room 16-13

15:00–15:30 **Patricia Alonso Ruiz** (Ulm University)
On the entropy of the directional distribution in fiber systems

15:30–16:00 **Zywilla Fechner** (Ulm University)
Parameter estimation of Lévy-driven CARMA processes

16:00–16:30 **A.D. Manita** (MSU)
On the Long Time Behavior of Some Multidimensional Stochastic Synchronization Systems

Break

16:40–17:10 **Jürgen Kampf** (Ulm University)
Central limit theorems for geometric functionals of random fields

17:10–17:30 **Yu.A. Malyshkin** (MSU)
High degree vertices in the preferential attachment model with choice

17:30–18:00 **Yuwei Zhao** (Ulm University)
The integrated periodogram of a dependent extremal event sequence

ANALYSIS, Room 13-23

15:00–15:45 **T.P. Lukashenko and V.V. Galatenko** (MSU)
System redundancy and generalizations of orthogonal expansions
(*special invited talk*)

15:45–16:30 **V.V. Vlasov and N.A. Rautian** (MSU)
Spectral analysis and representations for the solutions of Volterra integrodifferential equations in Hilbert space (*special invited talk*)

Break

16:40–17:25 **I.G. Tsarkov** (MSU)
Properties of Sets Admitting Continuous ϵ -Selections (*special invited talk*)

17:25–17:45 **N.N. Fedotov** (MSU)
The stability of orthogonal greedy expansions

17:45–18:05 **D.V. Fufaev** (MSU)
The intermediate case of regularity in the problem of differentiation of multiple integrals

October 3 (Friday)

Room 12-08

10:00–10.50 **A.A. Tuzhilin** (MSU).

Steiner ratio problem and infinite boundaries (*special invited lecture*)

10:55–11.40 **A.O. Ivanov** (MSU)

Minimal fillings of finite metric spaces (*plenary talk*)

Coffee-break (room 16-03)

12.05–12.55 **I.A. Dynnikov** (MSU).

Legendrian links, monotonic simplification, and Jones' conjecture
(*special invited lecture*)

13:00–13:45 **A.V. Penskoï** (MSU)

Symmetry Reduction and Spectral Geometry (*plenary talk*)

Lunch (University restaurants)

GEOMETRY, Room 16-13

15:00–15:30 **Adrian Spener** (Ulm University)

On the Lojasiewicz-Simon inequality

15:30–16:00 **G.V. Nosovskiï** (MSU)

Laplace transform for heat equation with perturbed order of derivative

16:00–16:20 **Michel Börner** (Ulm University)

Computational Aspects of L-functions

Break

16:30–17:00 **I.M. Nikonov** (MSU)

Weak parities and functorial maps

17:00–17:20 **Christian Steck** (Ulm University)

Semistable and regular models of curves over local fields

17:20–17:40 **Z.N. Ovsyannikov** (MSU)

Some possible numbers of edge coverings of a bipartite graph or
shortest paths with fixed ends in a space of compact sets in \mathbb{R}^n

17:40–18:00 **V. Oganessian** (MSU)

Commuting differential operators of rank 2

October 4 (Saturday)

Room 12-08

10:00–10.50 **Evgeny Spodarev** (Ulm University).

Nonparametric estimation of the characteristics of stationary Lévy random fields (*special invited lecture*)

10:55–11.40 **I.G. Shevtsova** (MSU)

Some moment estimates for characteristic functions with applications to construction of convergence rate estimates in the central limit theorem (*plenary talk*)

Coffee-break (room 16-03)

12.05–12.55 **Ulrich Stadtmüller** (Ulm University).

Modelling and analyzing dependence structures of random vectors with copulas (*special invited lecture*)

13:00–13:45 **V.A. Vatutin** (Steklov Math. Institute of RAS)

Macro- and microscopic structures of the family tree for an island model of branching processes (*plenary talk*)

Lunch (University restaurants)

PROBABILITY, Room 16-04

15:00–15:45 **A.V. Bulinski** (MSU)

Various approaches to the identification of significant factors (*plenary talk*)

15:45–16:15 **Michael Harder and Ulrich Stadtmüller** (Ulm University)

Maximal non-exchangeability: consequences and tests

Break

16:25–16:55 **A.A. Naumov** (MSU)

Limit theorems for non Hermitian random matrices

16:55–17:15 **A.S. Rakitko** (MSU)

Baum–Katz type theorem for exchangeable random sequences