

**International
Uzbek-Ukrainian Conference
"Modern problems of the
theory of stochastic processes
and their applications"**

Report of Contributions

Contribution ID: 1

Type: **not specified**

Opening ceremony

Tuesday, October 10, 2023 7:20 AM (10 minutes)

Chairman: Ya. M. Khusanbaev.

Speakers: Sh. K. Formanov, A. A. Dorogovtsev.

Contribution ID: 2

Type: **not specified**

Equations with interaction, second quantization, stability and polymer models

Tuesday, October 10, 2023 7:30 AM (1 hour)

Primary author: DOROGOVTSEV, A.A.

Presenter: DOROGOVTSEV, A.A.

Session Classification: Session 1

Contribution ID: 3

Type: **not specified**

A family of F-quadratic stochastic operators.

Tuesday, October 10, 2023 8:35 AM (30 minutes)

Primary author: JAMILOV, U.U.

Presenter: JAMILOV, U.U.

Session Classification: Session 1

Contribution ID: 4

Type: **not specified**

Asymptotic estimates for a small parameter in Hartman-Wintner law of the iterated logarithm

Tuesday, October 10, 2023 9:10 AM (30 minutes)

Primary author: GAFUROV, M.U.

Presenter: GAFUROV, M.U.

Session Classification: Session 1

Contribution ID: 5

Type: **not specified**

Functional limit theorems for perturbed random walks

Tuesday, October 10, 2023 9:45 AM (30 minutes)

Primary author: PILIPENKO, A.Yu.

Presenter: PILIPENKO, A.Yu.

Session Classification: Session 1

Contribution ID: 6

Type: **not specified**

Intermittency phenomena for mass distributions of stochastic flows with interaction

Tuesday, October 10, 2023 10:30 AM (15 minutes)

Primary author: WEISS, A.

Co-author: DOROGOVTSEV, A.A.

Presenters: WEISS, A.; DOROGOVTSEV, A.A.

Session Classification: Session 2

Contribution ID: 7

Type: **not specified**

Gaussian structure in coalescing stochastic flows

Tuesday, October 10, 2023 10:50 AM (15 minutes)

Primary author: HLYNIANA, K.V.

Presenter: HLYNIANA, K.V.

Session Classification: Session 2

Contribution ID: 8

Type: **not specified**

Hausdorff dimension of invariant measure of piecewise linear circle maps with two break points

Tuesday, October 10, 2023 11:10 AM (15 minutes)

Primary author: ALIYEV, A.F.

Presenter: ALIYEV, A.F.

Session Classification: Session 2

Contribution ID: 9

Type: **not specified**

Asymptotic behaviour of branching processes with non-homogeneous immigration

Tuesday, October 10, 2023 11:30 AM (15 minutes)

Primary author: AZIMOV, J.B.

Presenter: AZIMOV, J.B.

Session Classification: Session 2

Contribution ID: **10**

Type: **not specified**

Operators of second quantization for Bernoulli noise

Tuesday, October 10, 2023 11:50 AM (15 minutes)

Primary author: HRABOVETS, A.

Presenter: HRABOVETS, A.

Session Classification: Session 2

Contribution ID: 11

Type: **not specified**

Martingale representation of Brownian functionals

Tuesday, October 10, 2023 1:05 PM (15 minutes)

Primary author: PURTUKHIA, O.

Co-author: JOKHADZE, V.

Presenters: PURTUKHIA, O.; JOKHADZE, V.

Session Classification: Session 3

Contribution ID: 12

Type: **not specified**

Copula functions and its applications in survival analysis with covariates

Tuesday, October 10, 2023 1:25 PM (15 minutes)

Primary author: ABDUSHUKUROV, A.A.

Co-author: MURADOV, R.S.

Presenters: ABDUSHUKUROV, A.A.; MURADOV, R.S.

Session Classification: Session 3

Contribution ID: 13

Type: **not specified**

Central limit theorem for strong mixing random variables with values in $L_p[0;1]$ space

Tuesday, October 10, 2023 1:45 PM (15 minutes)

Primary author: SHARIPOV, O.Sh.

Co-author: MUXTOROV, I.G.

Presenters: MUXTOROV, I.G.; SHARIPOV, O.Sh.

Session Classification: Session 3

Contribution ID: 14

Type: **not specified**

Asymptotic approximation for a certain class of statistics defined on several generalized urn models

Tuesday, October 10, 2023 2:05 PM (15 minutes)

Primary author: MIRAKHMEDOV , Sh.M.

Presenter: MIRAKHMEDOV , Sh.M.

Session Classification: Session 3

Contribution ID: 15

Type: **not specified**

Limit theorems for U-statistics of positively associated random variables

Tuesday, October 10, 2023 2:35 PM (15 minutes)

Primary author: MUKHAMEDOV, A.

Co-author: SHARIPOV, O.Sh.

Presenters: MUKHAMEDOV, A.; SHARIPOV, O.Sh.

Session Classification: Session 4

Contribution ID: 16

Type: **not specified**

Weak periodic gibbs measures for the potts-sos model on a cayley tree of order two

Tuesday, October 10, 2023 2:55 PM (15 minutes)

Primary author: RAHMATULLAEV, M.

Co-author: RASULOVA, M.

Presenters: RAHMATULLAEV, M.; RASULOVA, M.

Session Classification: Session 4

Contribution ID: 17

Type: **not specified**

Weak dependence properties of a vertex process of a convex hull generated by a Poisson point process inside a parabola

Tuesday, October 10, 2023 3:15 PM (15 minutes)

Primary author: KHAMDAMOV, I.M.

Co-author: MAMATOV, Kh.M.

Presenters: KHAMDAMOV, I.M.; MAMATOV, Kh.M.

Session Classification: Session 4

Contribution ID: 18

Type: **not specified**

Operator splitting methods for non-homeomorphic one-dimensional stochastic flows

Tuesday, October 10, 2023 3:35 PM (15 minutes)

Primary author: VOVCHANSKYI, M.B.

Presenter: VOVCHANSKYI, M.B.

Session Classification: Session 4

Contribution ID: 19

Type: **not specified**

Limit Gibbs measures for 1-d lattice models with competing interactions

Wednesday, October 11, 2023 8:00 AM (30 minutes)

Primary author: GANIHODJAEV, N.N.

Presenter: GANIHODJAEV, N.N.

Session Classification: Session 1

Contribution ID: 20

Type: **not specified**

p-adic dynamical systems of rational functions

Wednesday, October 11, 2023 8:35 AM (30 minutes)

Primary author: ROZIKOV, U.A.

Presenter: ROZIKOV, U.A.

Session Classification: Session 1

Contribution ID: 21

Type: **not specified**

Simulation of diffusion processes with R and its applications for the pricing of options

Wednesday, October 11, 2023 9:10 AM (30 minutes)

Primary author: BAKOEV, M.T.

Presenter: BAKOEV, M.T.

Session Classification: Session 1

Contribution ID: 22

Type: **not specified**

Strong measurable continuous modification of the Burdzy-Kaspi stochastic flow

Wednesday, October 11, 2023 9:45 AM (30 minutes)

Primary author: RIABOV, G.V.

Presenter: RIABOV, G.V.

Session Classification: Session 1

Contribution ID: 23

Type: **not specified**

On asymptotics of solutions of stochastic differential equations with jumps

Wednesday, October 11, 2023 10:30 AM (15 minutes)

Primary author: YUSKOVYCH, V.K.

Presenter: YUSKOVYCH, V.K.

Session Classification: Session 2

Contribution ID: 24

Type: **not specified**

Extremal properties of Bernoulli random variables

Wednesday, October 11, 2023 10:50 AM (15 minutes)

Primary author: SHORAKHMETOV, Sh.

Presenter: SHORAKHMETOV, Sh.

Session Classification: Session 2

Contribution ID: 25

Type: **not specified**

Functional limit theorems for branching for branching processes with non-stationary immigration

Wednesday, October 11, 2023 11:10 AM (15 minutes)

Primary author: SHARIPOV, S.O.

Presenter: SHARIPOV, S.O.

Session Classification: Session 2

Contribution ID: 26

Type: **not specified**

Limit theorems for reduced processes starting with a large number of particles

Wednesday, October 11, 2023 11:30 AM (15 minutes)

Primary author: KHUSANBAEV, Ya.M.

Presenter: KHUSANBAEV, Ya.M.

Session Classification: Session 2

Contribution ID: 27

Type: **not specified**

Probabilistic Approach to Solving one Semi-Linear Boundary Value Problem

Wednesday, October 11, 2023 11:50 AM (15 minutes)

Primary author: RASULOV, A.

Co-author: RAIMOVA, G.

Presenters: RASULOV, A.; RAIMOVA, G.

Session Classification: Session 2

Contribution ID: 28

Type: **not specified**

An intersection of joint trajectories of independent Brownian motions in Carnot groups with a given set

Wednesday, October 11, 2023 1:05 PM (15 minutes)

Primary author: RUDENKO, O.V.

Presenter: RUDENKO, O.V.

Session Classification: Session 3

Contribution ID: 29

Type: **not specified**

Asymptotic distributions of terms of a variation series in the case of random sample size

Wednesday, October 11, 2023 1:25 PM (15 minutes)

Primary author: DZHAMIRZAEV, A.A.

Co-author: MAMUROV, I.N.

Presenters: DZHAMIRZAEV, A.A.; MAMUROV, I.N.

Session Classification: Session 3

Contribution ID: 30

Type: **not specified**

Gibbs distributions for the Peierls model

Wednesday, October 11, 2023 1:45 PM (15 minutes)

Primary author: DZHALILOV, A.A.

Co-author: KHOMIDOV, M.K.

Presenters: DZHALILOV, A.A.; KHOMIDOV, M.K.

Session Classification: Session 3

Contribution ID: 31

Type: **not specified**

On the One Nonparametric Estimate of Poisson Regression Function

Wednesday, October 11, 2023 2:05 PM (15 minutes)

Primary author: BABILUA, P.

Co-author: NADARAYA, E.A.

Presenters: NADARAYA, E.A.; BABILUA, P.

Session Classification: Session 3

Contribution ID: 32

Type: **not specified**

Waiting Times of Circle Maps With Some Irrational Rotational Number

Wednesday, October 11, 2023 2:35 PM (15 minutes)

Primary author: KARIMOV, J.

Presenter: KARIMOV, J.

Session Classification: Session 4

Contribution ID: 33

Type: **not specified**

Escape rate for the chaotic maps

Wednesday, October 11, 2023 2:55 PM (15 minutes)

Primary author: ESANBOYEVA, M.

Presenter: ESANBOYEVA, M.

Session Classification: Session 4

Contribution ID: 34

Type: **not specified**

On inequalities for the probability of ruin

Wednesday, October 11, 2023 3:15 PM (15 minutes)

Primary author: ATAKHUZHAEV, A.A.

Co-author: KHODZHIBAEV, V.R.

Presenters: ATAKHUZHAEV, A.A.; KHODZHIBAEV, V.R.

Session Classification: Session 4

Contribution ID: 35

Type: **not specified**

The asymptotic of the probability of falling into zero of a multi-type branching process with immigration

Wednesday, October 11, 2023 3:35 PM (15 minutes)

Primary author: MASHRABBOEV, A.

Presenter: MASHRABBOEV, A.

Session Classification: Session 4