**XXXI International Seminar on Stability Problems for Stochastic Models**
**23 — 27 April, 2013**
**Moscow, Russia**

# PRELIMINARY PROGRAM

## Monday, 22 April

10.00-17.00 *Registration (room №241)*

## Tuesday, 23 April

9.00-10.00 *Registration (room №241)*

10.00-10.30 *Opening (lecture room №1)*

10.30-11.15 **Invited Lecture: Alexander Bulinski** (Russia)
Asymptotic behavior of statistics employed for high-dimensional data analysis

11.15-12.00 *Coffee break*

12.00-12.20 **Vladimir Goryainov** (Russia)
Asymptotic properties of sign estimation of the autoregressive field's coefficients

12.20-12.40 **Vladimir Chichagov** (Russia)
Asymptotic of the mean absolute error of UNVUE and MLE in the case of one-parameter exponential family lattice distributions

12.40-13.00 **Geoffrey Decrouez** (Australia)
Confidence intervals for means of lattice-valued random variables constructed using split sample methods

13.00-15.00 *Lunch*

15.00-15.20 **M. Ivette Gomes** (Portugal)
Reduced-bias mean-of-order-p extreme value index estimation

15.20-15.40 **Nadezhda Gribkova** (Russia)
On a Bahadur-Kiefer representation of von Mises statistic type for intermediate sample quantiles

15.40-16.00 **Alexey Kharin** (Belarus)
Robustness of sequential decision making on parameters of stochastic data under distortions

16.00-16.20 *Coffee break*

16.20-16.40 **Andrey Gorshenin** (Russia)
Stochastic approach for big data analysis

16.40-17.00 **Andrey Gorshenin** (Russia)
On information technology for the plasma turbulence research

17.00-17.20 **Andrey Savchenko** (Russia)
Adaptive segmentation of piecewise stationary stochastic processes based on the statistical testing for homogeneity

17.30-20.00 *Welcome party*

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## Wednesday, 24 April

9.30.-10.20 **Invited Lecture: Vladimir Senatov** (Russia)
On an approach to approximation in the CLT

10.20-10.40 **Shakir K. Formanov** (Uzbekistan)
Integro-local limit theorem for sums of independent random variables in scheme of series

10.40-11.00 **Ben Berckmoes** (Belgium)
Stein's method and a quantitative Lindeberg CLT for the Fourier transforms of random vectors

11.00-11.20 **Alina Bazarova** (Austria)
Trimming of dependent sequences and applications

11.20-12.00 *Coffee break*

12.00-12.20 **Irina Shevtsova** (Russia)
Some Moment Inequalities of Probability Theory

12.20-12.40 **Vadim Demichev** (Russia)
A moment inequality for a certain class of weakly dependent random fields

12.40-13.00 **Alexander Zeifman** (Russia)
The rate of convergence for a class of Markovian queues

13.00-15.00 *Lunch*

15.00-15.20 **Margarita Dranitsyna** and **Grigory Klimov** (Russia)
Reduced-bias mean-of-order-p extreme value index estimation

15.20-15.40 **Miroslav Goncharenko, Maksim Khaziakhmetov, Semen Nikiforov** and **Tatyana Zakharova** (Russia)
Localisation of brain activity regions using MEG-signals

15.40-16.00 **Sergey Sedov** (Uzbekistan)
Threshold theorems for generalized epidemic size in a new Markovian epidemic model with immunization

16.00-16.20 *Coffee break*

16.20-16.40 **Hanna Livinska** (Ukraine)
Gaussian limits for multi-channel stochastic networks

16.40-17.00 **Alexey Tikhomirov** (Russia)
Lower bounds on the convergence rate of the Markov symmetric random search

17.00-17.20 **Alexander Kolnogorov** (Russia)
Parallel minimax control in the two-armed bandit problem, one arm known

17.20-17.40 **Elena Dyakonova** (Russia)
Branching processes in random environment

## Thursday, 25 April

9.30-10.00 **Film: Andrey Kolmogorov - 110 years since the birthday**

10.00-10.15 **Ekaterina Bulinskaya** (Russia)
Systems with several replenishment sources

10.15-10.30 **Larisa Afanasyeva** and **Elena Bashtova** (Russia)
Large deviations for queueing system with a regenerative input flow

10.30-10.45 **Andrey Tkachenko** (Russia)
Multichannel queuing systems with bounded waiting time and regenerative input flow

10.45-11.00 **Vladimir Rykov** (Russia)
On Markov reliability model of a system, operating in Markov random environment

11.00-11.15 **Dmitry Kozyrev** (Russia)
Analysis of a repairable redundant system with PH distribution of restoration times of its elements

11.15-11.45 *Coffee break*

11.45-12.00 **Sándor Baran** (Hungary, Germany)
Optimal design for parameters of a shifted Ornstein-Uhlebeck sheet

12.00-12.15 **Oleg Rusakov** and **Daniil Apleev** (Russia)
Sums of independent poissonian subordinators and a family of Ornstein-Uhlenbeck type processes

12.15-12.30 **Yury Khokhlov** (Russia)
Multivariate fractional Levy motion

12.30-12.45 **Pavel Sapozhnikov** (Russia)
On some invariant under group of affine transformations optimal criteria

12.45-13.00 **Tatjana Borodina** and **Mikhail Tikhov** (Russia)
Kernel quantile estimators in dose-effect relationships over indirect data

13.00-14.30 *Lunch*

## SECTION A:

14.30-14.50 **Jolanta K. Misiewicz** (Poland)
Poisson processes under generalized convolution

14.50-15.10 **Barbara Jasiulis-Godyn** (Poland)
Generalized convolutions in the non-commutative probability

15.10-15.30 **Igor Zolotukhin** (Russia)
Class of random vectors with strictly geometric stable
marginal distributions

15.30-16.00 *Coffee break*

16.00-16.20 **Lenka Slámová** (Czech Republic)
Discrete analogues of stable distributions

16.20-16.40 **Maria Veretennikova** (United Kingdom)
Control fractional dynamics

16.40-17.00 **Olga Yanushkevichiene** (Lithuania)
The Zolotarev polynomials revisited

17.00-17.20 **Dedi Rosadi** (Indonesia)
Generalized Symmetric Covariation Coefficients for Random Variables with Finite First Moments: simulation and application for Indonesia stock market

## SECTION B:

14.30-14.50 **Alexey Ivanov** and **Peter Shnourkoff** (Russia)
A continuous inventory optimal control problem for discrete semi-Markov model

14.50-15.10 **Veronika Pisarenko** and **Peter Shnourkoff** (Russia)
Trajectory analysis of control process for optimal control of investments in the model of a three-sector economy

15.10-15.30 **Daniil Novikov** and **Peter Shnourkoff** (Russia)
Development of mathematical model for description of grain market of Russia

15.30-16.00 *Coffee break*

16.00-16.20 **Vladimir Klosinskiy** and **Peter Shnourkoff** (Russia)
The preliminary analysis and the data processing, intended for creation of a mathematical market model of grain crops in Russia

16.20-16.40 **Elizaveta Pantyukhova** and **Peter Shnourkoff** (Russia)
Developing a new approach to the problem of optimal control in the open dynamical model of a three-sector economy

16.40-17.00 **Dmitry Vovk** and **Peter Shnourkoff** (Russia)
Development of the semi-Markov stock management model with a discrete set of states and a random delay of delivery

17.30-20.00 *Conference Dinner*

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# Friday, 26 April

10.00-10.20 **Igor Zolotukhin** (Russia)
Stochastic model for dynamics of financial flows in savings-and-loans institutions

10.20-10.40 **Narine Karapetyan** (Russia)
Dividend payments in discrete time model

10.40-11.00 **Alexander Gromov** (Russia)
Optimal investment strategy in the risk model with capital injections

11.00-11.45 *Coffee break*

12.00-12.20 **Alexander Koldanov** (Russia)
Market network construction: choice a measure of association and probability of the errors

12.20-12.40 **Petr Koldanov** (Russia)
Tests of the Neyman structure for the marker graph construction

12.40-12.55 **Murad Agalarov** and **Yaver Agalarov** (Russia)
Task access procedures in multiprocessor system

12.55-13.10 **Ivan Zaryadov** and **Rostislav Razumchik** (Russia)
Stationary waiting time in queuing system with negative customers, bunker and phase-type service times under Last-LIFO-FIFO discipline

13.10-13.25 **Yulia Dubinina** (Russia)
Ruin probability estimation in the model with investments

13.25-14.30 *Lunch*

14.30-14.45 **Alexander Dombrovskiy** (Russia)
Percentage of prolongation of an insurance portfolio as an indicator of its structure deterioration

14.45-15.00 **Maxim Filippov** (Russia)
Modelling of fractional Levy motion

15.00-15.15 **Arthur Khafizov** (Russia)
Pair trading

15.15-15.30 **Ekaterina Smirnova** (Russia)
The estimation of ruin probability in multivariate collective risk model

15.30-16.00 *Coffee break*

16.00-16.15 **Ivan Shestakov** (Russia)
Portfolio of options with dependent underlying assets

16.15-16.30 **Elena Puzikova** (Russia)
The estimation of financial stability of insurance company

16.30-16.45 **Olga Rumyantseva** (Russia)
Modeling of multivariate Cox process

16.45-17.00 **Mohammed Al-Nator**, **Sophia Al-Nator** and **Yuri Kasimov** (Russia)
Choice of optimal portfolio with transaction costs for one-period deterministic model