

APPLIED STOCHASTIC MODELS AND INFORMATION PROCESSES

memorial seminar dedicated to the 60th birthday of Vladimir Kalashnikov

PROGRAM SCHEDULE (Hotel "Kalevala")

GENERAL INFORMATION

Hotel "Belye Klyuchi": is located in Petrozavodsk, tel (8-8142) 525919; to reach from railway station: trolley bus No 1 (final stop), or route taxi.

Hotel "Kalevala": is located in village "Kosalma", (30 km from Petrozavodsk), tel (8-8142) 550232 and 788614.

How to reach Insitute of Applied Mathematical Research: trolley bus No 1 from railway station (stop "Kirov square"), tel. (8-8142) 781108.

We provide bus for daily trips between hotels "Belye Klyuchi" and "Kalevala." Bus departure from hotel "BK" (to hotel "K"):

Sept. 9 at 9.00;

Sept.10 – Sept. 12 at 8.15.

Bus departure from hotel "K" (to hotel "BK"):

Sept. 9 at 22.30

Sept. 10 at 19.00

Sept. 11 at 18.30

Bus departure from hotel "BK" to hotel "K" Sept. 12 (after conference dinner) at 23.00.

SEPTEMBER 8

Registration: Hotel "Kalevala": 8.00 – 11.00
Hotel "Belye Klyuchi": 7.30 – 10.30.

SEPTEMBER 9

Registration: Hotel "Belye Klyuchi": 7.30 – 9.00
Hotel "Kalevala": 8.00 – 10.30; 13.00 – 15.00.

10.30 – 10.50 **Opening Ceremony** (Hotel "Kalevala"):
Nikolay Kuznetsov, Anatoly Voronin, Anatoly Sorokin, Evsey Morozov

Plenary session Chair: Nikolay Kuznetsov

10.50 – 11.40 Hanspeter Schmidli. *Asymptotics of ruin probabilities for controlled risk processes in the small claim case*

11.40 – 12.10 *Coffee break*

12.10 – 13.00 Vladimir Rykov. *On multi-state reliability systems*

13.15 - 14.45 *Lunch*

Session *Simulation*, Restaurant hall; Chair: Dieter Baum

15.00 – 15.30 Alexander Andronov. *Efficiency Analysis of Queueing Model Validation by Use of Trace-Driven Simulation*

15.30 – 16.00 Victor Nicola. *Efficient Simulation of Buffer Overflow in Queueing Networks*

16.00 – 16.30 Viatcheslav Melas. *On simulating finite Markov chains by the splitting and roulette approach*

16.30 – 17.00 *Coffee break*

17.00 – 17.30 Michele Pagano. *Efficient Rare Events Simulation of Gaussian Processes*

17.30 – 17.45 Irina Aminova. *New numerical results on weakly regenerative simulation of tandem networks*

17.45 – 18.00 Alexander Belyy. *Queueing network simulation based on quasi-weak regeneration*

Session *Actuarial and Finance Mathematics*, Talking hall,
Chair: Jan Grandell

15.00 – 15.30 Victor Korolev. *Optimization problems for the parameters of risk processes*

15.30 – 16.00 Nikolai Kolev. *Volodya, I miss you. Two Correlated Collective Risk Models*

16.00 – 16.30 Alexander Nagaev. *Prosperity paradox of risk theory*

16.30 – 17.00 *Coffee break*

17.00 – 17.30 Dimitrios Konstantinides and Gurami Tsitsiashvili. *Two-sided Bounds for Ruin Probability under Constant Interest Force*

17.30 – 18.00 Gurami Tsitsiashvili. *Quality Properties of Risk Models Under Stochastic Interest Force*

19.00 – 20.00 *Dinner*

20.00 – 22.00 *Welcome party (Hotel "Kalevala")*

SEPTEMBER 10

Plenary Session Chair: Richard Serfozo

10.00 – 10.50 Vladimir Bening and Victor Korolev. *Law of Large Numbers and Central Limit Theorem for generalized risk processes*

10.50 – 11.40 Evsey Morozov. *Weak Regeneration for Modeling of Queuing Processes*

11.40 – 12.10 *Coffee break*

Session *Networks*, Restaurant hall; Chair Viatcheslav Melas

12.10 – 12.40 Andrey Lyakhov. *Estimation of Maximal TCP/IP Traffic Rate over 802.11 Network with Hidden Stations*

12.40 – 13.10 Maxim Kovalev, Vasili Sedunov and Leonid Shlumper. *Self-Adopting Hybrid Simulation Models of Heterogeneous Telecommunication Networks*

13.10 – 13.40 Olga Bogoiavlenskaia. *Markovian Model of Internetworking Flow Control*

Session 2, Talking hall; Chair Alexander Nagaev

12.10 – 12.40 Yuri Khokhlov. *The new variant of multivariate generalization of the generalized Poisson distribution*

12.40 – 13.10 Oleg Gulinski. *Large deviations in quantum statistical mechanics*

13.10 – 13.40 Sergey Klovov. *On sub-exponential mixing rate for a class of SDEs*

14.00 – 15.30 *Lunch*

15.30 – 18.30 *Excursion: waterfall Kivach and health resort "Martsialnye Vody"*

19.00 – 20.00 *Dinner*

SEPTEMBER 11

Plenary Session, Chair: Elart Von Collani

10.00 – 10.50 Richard Serfozo. *Reversible Markov Processes on General Spaces: Spatial Birth-Death and Queueing Processes*

10.50 – 11.40 Ingemar Kaj. *A survey of scaling limit results for long-memory arrival processes*

11.40 – 12.10 *Coffee break*

Session *Queueing*, Restaurant hall; Chair: Ilkka Norros

12.10 – 12.40 Alexander Dudin. *Matrix queueing theory*

12.40 – 13.10 Dmitry Efrosinin and Vladimir Rykov. *Numerical analysis of optimal control policies for queueing systems with heterogeneous servers*

13.10 – 13.40 Alexander Zeifman. *Quasi-ergodic nonstationary queues*

Session 2, Talking hall; Chair: Pavel Bocharov

12.10 – 12.40 Christiane Coccozza-Thivent. *The help of regenerative and semi-regenerative methods for studying a preventive maintenance model*

12.40 – 13.10 Elart von Collani. *Quantification by Stochastic Models*

13.10 – 13.40 Barbara González-Arévalo. *Performance of the leaky bucket system with long-range dependent input traffic*

14.00 – 15.15 *Lunch*

Session *Queuing*, Restaurant hall; Chair: Alexander Dudin

15.30 – 16.00 Victor Ivnitski and Oleg Ivnitski. *Queuing system with “generalized processor-sharing” and dependence of service rate on residual work*

16.00 – 16.30 Ilkka Norros and Paavo Salminen. *On a storage model with local time input*

16.30 – 17.00 Pavel Bocharov. *On queueing networks with signals*

17.00 – 17.30 *Coffee break*

17.30 – 18.00 Alexander Pechinkin. *Queue MAP/G/1 with inverse discipline and probabilistic priority*

Session 2, Talking hall; Chair: Michele Pagano

15.30 – 16.00 Hannu Reittu and Ilkka Norros. *On large random graphs of the “Internet type”*

16.00 – 16.30 Dieter Baum. *No-Waiting Stations with Spatial Arrival Processes and Customer Motion*

16.30 – 16.45 Denis Zhuravlev. *Disorder time determination for the Pareto distribution function using the method of cumulative sums*

16.45 – 17.00 Elena Cherepanova. *Limit distribution of number of chains in random forest*

17.00 – 17.30 *coffee break*

17.30 – 17.45 Sergei Stafeev. *On the identifiability of a two-factor model with correlated residuals*

17.45 – 18.00 Tatiana Myllari. *The limit theorems for the number of particles of a given outdegree in a random forest*

19.00 – 20.00 *Dinner*

SEPTEMBER 12

Plenary Session: Chair Ingemar Kaj

10.00 – 10.50 Jan Grandell. *Risk theory and geometric sums*

10.50 – 11.40 Jean-Louis Bon. *Geometric Sums in Reliability Evaluation of Regenerative Systems*

12.00 – 13.00 *Lunch*

13.15 – 19.00 *Excursion in Kizhi*

19.00 – 23.00 *Conference dinner (hotel "Belye Klyuchi")*

SEPTEMBER 13 *Departure*