

International Conference
“Irreversibility Problem in Classical and Quantum Dynamical Systems”
(Moscow, December 8–10, 2011)

Program

All sessions take place in the Steklov Mathematical Institute, Conference hall, 8th floor

8th December, Thursday

Session 11:00–13:00

- 11:00–11:30 S.V. Kozyrev (Steklov Mathematical Institute) “Nonlocal lattice model of secondary structures of proteins”
- 11:30–12:00 N.B. Yengibaryan (Institute of Mathematics, Armenia) “Nonuniform semigroups and pseudo-reversible processes in transport theory”
- 12:00–12:30 V.N. Lukash (Lebedev Physical Institute), S.V. Pilipenko (Lebedev Physical Institute) “A solution of the casp problem in relaxed halos of dark matter”
- 12:30–13:00 Ye.I. Zelenov (Steklov Mathematical Institute) “Adelic decoherence”

13:00–14:00 Lunch

Session 14:00–16:00

- 14:00–14:30 B. Nilsson (Linnaeus University, Vaxjo, Sweden) “Decay of entangled photon correlations in hollow waveguides and fibres”
- 14:30–15:00 A.N. Pechen (Steklov Mathematical Institute) “Irreversible dynamics as a tool to increase robustness in quantum control”
- 15:00–15:30 V.Zh. Sakbaev (Moscow Institute of Physics and Technologies) “Variational descriptions of trajectories of the averaged quantum dynamical transformations”
- 15:30–16:00 V.Ye. Tarasov (Moscow University) “Quantum dissipation from power-law memory”

16:00–16:20 Coffee-break

Session 16:20–18:30

- 16:20–16:50 T.V. Dudnikova (Elektrostal Polytechnical Institute) “The derivation of hydrodynamic equations for lattice systems”
- 16:50–17:20 A.S. Trushechkin (Steklov Mathematical Institute) “On derivation of the kinetic Boltzmann equation from the Fokker–Planck–Kolmogorov equation”
- 17:20–17:50 V.V. Vedenyapin, M.A. Negmatov (Keldysh Institute of Applied Mathematics) “Vlasov–Maxwell and Vlasov–Poisson equations and irreversibility problem”
- 17:50–18:10 S.N. Mayburov (Lebedev Physical Institute) “Randomness, irreversibility and information transfer in quantum measurements”
- 18:20–18:30 T.F. Kamalov (Moscow Open University) “Canonical formalism of the higher derivatives”

Party. Round table.

9th December, Friday

Session 10:00-11:00

- 10:00–10:30 V.V. Kozlov (Steklov Mathematical Institute) “On the justification of the Gibbs distribution in quantum statistics”
- 10:30–11:00 L. Accardi (Universita di Roma Tor Vergata) “Nonlinear Gibbs, local KMS and dynamical detailed balance conditions”

11:00–11:30 Coffee-break

Session 11:30–13:00

- 11:30–12:00 I.V. Volovich (Steklov Mathematical Institute) “Non-Newtonian mechanics and irreversibility problem”
- 12:00–12:30 O.G. Smolyanov (Moscow University) “Measures on infinite-dimensional spaces and Bogoliubov equations”
- O.G. Smolyanov, Ye.T. Shavgulidze (Moscow University) “Representations of regularized traces and determinants in the functional integrals”
- 12:30–13:00 I.Ya. Aref'eva (Steklov Mathematical Institute) “Cosmological daemon”

13:00–14:00 Lunch

Session 14:00–16:00

- 14:00–14:30 A.N. Nekrasov (Shemyakin and Ovchinnikov Institute of Bioorganic Chemistry) “A method of the protein informational structure analysis”
- 14:30–15:00 A.S. Bratus' (Moscow University) “Limit behavior of the distributed replicator systems”
- 15:00–15:30 S.A. Smolyansky (Saratov University) “Vacuum particle creation under action of a strong external field: an example of irreversible behavior of the system with the t-invariant kinetic equation of the Vlasov type”
- 15:30–16:00 V.N. Strokov (Lebedev Physical Institute) “Can gravity generate the time arrow?”

16:00–16:20 Coffee-break

Session 16:20–17:50

- 16:20–16:50 F.S. Dzheparov (Alikhanov Institute of Theoretical and Experimental Physics) “Some ergodic problems of spin dynamics”
- 16:50–17:20 M.V. Dolgoplov (Samara University) “Higgs prepotential for models with the extended scalar sector”
- 17:20–17:50 Ya.A. Korennoi, V.I. Man'ko (Lebedev Physical Institute) “Quantum and classical kinetic equations in the tomographic probabilistic representation”

17:50—18:00 Break

- 18:00–18:20 M.G. Ivanov (Moscow Institute of Physics and Technologies) “Quantum locality and the Born rule”
- 18:20–18:40 Ye.V. Piskovsky (Moscow Institute of Physics and Technologies) «Rolling in nonlinear mechanics and elliptic functions»
- 18:40–19:00 E.A. Kurianovich (Steklov Mathematical Institute) “Phase trajectory of the Friedman equation”
- 19:00–19:20 Yu.G. Rudoi (People's Friendship University of Russia) “Stochastization of dynamics of a classical oscillator in the thermostat”
- 19:20–19:40 T. Ishiwatari (Steklov Mathematical Institute) “Studying of correlation functions in waveguides”
- 19:40–20:00 A.I. Mikhailov (Russian Federal Research Institute of Fisheries and Oceanography) “Evolution of the distribution function moments in functional mechanics and the Poincare recurrence theorem”
- 20:00–20:20 G.V. Gorbachev (Steklov Mathematical Institute) “The Friedman cosmology with negative semidefinite potential”