

**Workshop "Quantum Information, Statistics, Probability" with a special session dedicated to Alexander Holevo's 75th birthday, September 12-14, 2018, Steklov Mathematical Institute**

Provisional schedule

Wednesday, September 12

9.50-10.00	Opening	
10.00-10.40	G.M. D'Ariano	Information-theoretical principles for quantum theory and quantum field theory
10.40-11.20	V. Giovannetti	Gaussian quantum channels: bounds and capacities
11.20-11.45	Break	
11.45-12.15	A. Winter	Uniform continuity bounds for entropies and quantum evolutions in infinite dimension
12.15-12.45	M.M. Wilde	Energy-constrained private and quantum capacities of quantum channels
12.45-13.15	M.E. Shirokov	Strong convergence of quantum channels: continuity of the Stinespring dilation and discontinuity of the unitary dilation
13.15-14.45	Lunch	
14.45-15.15	R. Renner	Entropy accumulation
15.15-15.45	A. Barchielli	Quantum measurement uncertainty relations: the relative entropy formulation
15.45-16.15	G. Chiribella	Communication through quantum channels in indefinite causal order
16.15-16.30	Break	
16.30-17.00	I.V. Volovich	Randomness and thermalization in classical and quantum mechanics
17.00-17.30	A.N. Pechen	Some topics in quantum control
17.30-18.00	A.S. Trushechkin	Security of quantum key distribution with detection-efficiency mismatch: Tight bounds
18.30-20.00	Reception	

Thursday, September 13

10.00-10.30	R.F. Werner	The role of quantum classical hybrid systems in the theory of measurement
10.30-11.00	A.S. Holevo	Generators of quantum 1-dimensional diffusions
11.00-11.30	T. Heinosaari	Incompatibility: recent results and open questions
11.30-11.45	Break	
11.45-12.15	V.I. Man'ko	Probability representation of quantum states as renaissance of hidden variables-god plays coins
12.15-12.45	S.N. Filippov	Entanglement dynamics in quantum Gaussian channels
12.45-13.15	G.G. Amosov	On the structure of operator graphs generated by covariant resolutions of identity
13.15-14.45	Lunch	
14.45-15.15	A.I. Lvovsky	Connecting discrete and continuous-variable quantum information
15.15-15.45	E.R. Lubenets	New upper bounds on the maximal violation of Bell inequalities by a multipartite quantum state

15.45-16.15	V.Zh. Sakbaev	Analogs of Lebesgue measure on infinite dimensional spaces and semigroups associated with random walks
16.15-16.30	Break	
16.30-17.00	A.M. Chebotarev	Exactly solvable problems of irreversible quantum evolution
17.00-17.30	G.B. Lesovik	Quantum H-theorem and irreversibility in quantum mechanics
17.30-18.00	E.A. Turilova	Choquet order and Jordan maps
18.30-20.00	Special session	“My arrow of time” (Some photos)

Friday, September 14

10.00-10.30	An.V. Bulinski	On Markov and Non-Markov Dynamics of Open Quantum Systems
10.30-11.00	Yu.V. Kurochkin	From quantum information theory to practice: urban quantum cryptography
11.00-11.30	E.O. Kiktenko	Using quantum cryptography in the Byzantine generals problem
11.30-11.45	Break	
11.45-12.15	O. Hirota	Quantum sensors for automotive based on entanglement phenomena

12.15-12.45	Yu.I. Bogdanov	The Fisher information matrix in the tasks of precision-guaranteed tomography of quantum states
12.45-13.15	L. Fedichkin	Non-unitary quantum walks
13.15-14.45	Lunch	
14.45-15.15	S.N. Molotkov	About one quantum true random number generator
15.15-15.45	D.A. Kronberg	On eavesdropping in quantum cryptography: active beam splitting attack applied to coherent one-way QKD protocol
	Closing	

Contact information:

+7 916 323 76 33 Maxim Shirokov

+7 919 721 64 83 Grigori Amosov



