Combinatorics, Dynamics, Probabilities

Swedish-Russian conference

3-7 October 2000

Stockholm, Royal Institute of Technology

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Program

Tuesday, October 3, Kollegiesalen

Time	Title	Lecturer
8.30-9.00	Registration	
9.00	Opening	
9.20-10.10	Random matrices, random growth and random tilings (I)	Kurt Johansson KTH Stockholm
	coffee break	
10.40-11.30	Flows on surfaces and related geometric questions (I)	Dmitry Anosov Steklov Institute, Moscow
11.40-12.30	Brownian limits for combinatorial problems (I)	Svante Janson Uppsala University
	lunch	
14.00-14.30	The random assignment problem	Svante Linusson University of Linköping
14.40-15.00	Limit theorems for partitions	Yuri Yakubovich Steklov Institute, St.Petersburg
15.05-15.25	Topological entropy for random dynamical systems and the analog of Misiurewicz-Przytycki theorem	Alexei Fishkin Moscow State University
15.30-15.50	On smooth models of dynamical systems with discrete spectrum	Alexander Prikhod'ko Moscow State University
	coffee break	
16.20-16.40	Building the tree of life	Niklas Eriksen KTH Stockholm
16.45-17.05	Graphs with large girth	Maxim Vsemirnov Steklov Institute, St.Petersburg
17.15-17.35	A generalization of the law of large numbers for random matrices	Stefan Israelsson Uppsala University
17.40-18.00	The equivalence of notions of entropy for diadic sequences of partitions	Alexander Gorbulskij St.Petersburg State University

Wednesday, October 4, Kollegiesalen

Time	**Title**	**Lecturer**
9.00-9.50	Trends in percolation theory (I)	Olle Häggström, Chalmers UT and Göteborg University
10.00-10.50	Ergodicity and conservativity: random walks, Brownian motion, geometric flows (I)	Vadim Kaimanovich Université de Rennes, France
	coffee break	
11.20-11.50	Percolation diffusion	Torbjörn Lundh, Chalmers UT and Göteborg University
12.00-12.30	Explicit isoperimetric constants for planar graphs and applications to percolation theory	Johan Jonasson, Chalmers UT and Göteborg University
	lunch	
14.00-14.20	New applications of Bohnenblust-Spitzer combinatorial identity: joint distributions for random walks and a three-term Szego formula	Dimitri Gioev KTH Stockholm
14.25-14.45	Global bifurcations on the Klein bottle. Unimodal case	Anton Borisyuk Moscow State University
14.55-15.15	Geometry and analysis of de Rham's curve	Pavel Nikitin St.Petersburg State University
15.20-15.40	On a relation between time average and minimal attractors	Pavel Bachurin Moscow State University
	coffee break	
16.10-16.30	On invariant manifolds in singularly perturbed systems	Olga Anosova Moscow State University
16.35-16.55	Discrete quasi-periodic Schrödinger equations	Kristian Bjerklöv KTH Stockholm
17.05-17.25	An isotopic classification of spatial 3-valent graphs	Vitali Kurlin Moscow State University
17.30-17.50	On uniqueness of solution of Riemann-Hilbert problem: analytical classification of Fuchsian singular points	Victor Kleptsyn Moscow State University

Thursday, October 5, Kollegiesalen

Time	**Title**	**Lecturer**
9.00-9.50	Random matrices, random growth and random tilings (II)	Kurt Johansson
10.00-10.50	Brownian limits for combinatorial problems (II)	Svante Janson
	coffee break	
11.20-11.50	Schreier graphs of self-similar group actions on the Cantor set	Volodymyr Nekrashevich Kiev University, Ukraine
12.00-12.30	On the fine structure of stationary measures in IFS which contract-on-average	Nikita Sidorov U.Sc.Tech. in Manchester, UK
12.40-13.00	Orbits of Zariski dense semigroups of SL(n,Z)	Roman Muchnik Yale University, USA

Afternoon free

Friday, October 6, Kollegiesalen

Time	Title	Lecturer
9.00-9.50	Flows on surfaces and related geometric questions (II)	Dmitry Anosov
	coffee break	
10.20-11.10	The problem of reversibility and polymorphisms which are quasisimilar to automorphisms	Anatoly Vershik Steklov Institute, St.Petersburg
11.20-12.30	Problem session	
	lunch	
14.00-14.20	Euler characteristic of the space of real meromorphic functions	Sergei Shadrin Moscow Independent University
14.25-14.45	Combinatorics of boundary singularities B_n^l of k-immersions and Bernoulli-Euler updown numbers	Oleg Karpenkov Moscow Independent University
14.55-15.15	Dini continuous probability weights and exact dimension of invariant measures	Anders Öberg University of Umeå
15.20-15.40	Interval dynamics and a model for drilling wells	Georgi Chakvetadze Steklov Institute, Moscow
	coffee break	
16.10-16.30	Examples of dynamical systems in finite field extensions of the p-adic numbers	Robert Nyqvist Växjö University
16.35-16.55	Heisenberg group over a field of finite characteristic and its factor-representations	Konstantin Kokhas St.Petersburg State University
17.00-17.20	A classification problem of manifolds with torus actions and given orbit space	Natalia Dobrinskaya Moscow State University
17.30-17.50	On non-existence of an iterative morphism which defines an Arshon sequence	Sergey Kitaev, Chalmers UT and Göteborg University
17.55-18.15	Countable symbolic systems	Sergey Shapovalov Moscow State University
19.00	Conference Dinner	

Saturday, October 7, E2 auditorium

Time	Title	Lecturer
9.00-9.50	Ergodicity and conservativity: random walks, Brownian motion, geometric flows (II)	Vadim Kaimanovich
10.00-10.50	Trends in percolation theory (II)	Olle Häggström
	coffee break	
11.20-11.50	Combinatorics of totally positive varieties	Michael Shapiro KTH Stockholm
12.00-12.20	Ergodic theorems for free group actions	Alexander Bufetov Princeton University, USA
	lunch	
14.00-14.20	Several ways to construct a normal form in the free solvable group	Sergey Dobrynin St.Petersburg State University
14.25-14.45	Metric properties of representations of the affine group	Mikhail Gorbulskij St.Petersburg State University
14.50-15.10	On the asymptotic behaviour of solutions to an ODE arising in cosmology	Hans Ringström KTH Stockholm
15.15-15.35	Some new examples in analytic ergodic theory	Maria Saprykina KTH Stockholm
15.45-16.05	Intrinsically hyperbolic maps and some properties of partially hyperbolic systems	Anton Gorodetski Moscow Independent University