

CURRICULUM VITAE

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PERSONAL INFORMATION

Born: November 18, 1976, Moscow

Citizenship: Russian Federation

ACADEMIC DEGREES

Ph.D., 2001 Mathematics, Lomonosov Moscow State University.
Advisor: Valery V. Ryzhikov. Thesis: "Special representations, constructions and algebraic properties of dynamical systems with invariant measure".

EDUCATION

1992–1997 Graduate student (with Gold Medal).
Department of Mechanics and Mathematics,
Lomonosov Moscow State University.

1997–2000 Postgraduate student.
Chair of Functional Analysis and Theory of Functions,
Department of Mathematics and Mechanics,
Lomonosov Moscow State University.

AREA OF SPECIALIZATION

Dynamical systems, ergodic theory and ODE. Analysis and number theory.
Discrete geometry.

EXPERIENCE

2000–present Assistant Professor.
Chair of Dynamical Systems,
Department of Mathematics and Mechanics,
Lomonosov Moscow State University.

Courses and Seminars

The French-Russian Mathematics Laboratory in Moscow,
 Independante University of Moscow, MCCME:

- Course on "Spectral theory of Dynamical Systems" (for M. Sc. and Ph. D. students)
- Course on "Functional Analysis and Applications"

Lomonosov Moscow State University, Dept. of Mathematics and Mechanics:

- Course on "Dynamical systems and ergodic theory" (for M. Sc. and Ph. D. students)
- Course on "Ordinary differential equations"

SCIENTIFIC PUBLICATIONS

- A. A. Prikhod'ko. Lower bounds for symbolic complexity of iceberg dynamical systems. ArXiv: 1201.5757. *Submitted*
- A. A. Prikhod'ko. On group actions with simple Lebesgue spectrum. ArXiv: 1111.0230.
- A. A. Prikhod'ko, On ergodic properties of "iceberg" transformations. I: Approximation and spectral multiplicity. ArXiv:1008.4301. *Submitted*
- A. A. Prikhod'ko, On flat trigonometric sums and ergodic flow with simple Lebesgue spectrum. ArXiv:1002.2808. *Submitted*
- El Abdalaoui, E.H.; Parreau, F.; Prikhod'ko, A.A. A new class of Ornstein transformations with singular spectrum. *Ann. Inst. Henri Poincare, Probab. Stat.* 42, No.6, 671–681 (2006).
- A. A. Prikhod'ko, Introduction to ergodic theory; spectral theory of dynamical systems. Spring 2002. *IUM lecture notes*.
- A. A. Prikhod'ko, Stochastic constructions of flows of rank 1. *Sbornik: Mathematics* (2001), 192(12):1799.
- A. A. Prikhod'ko, Stochastic Constructions of Mixing Systems of Positive Local Rank. *Russian Math. Notes*, vol.69, no.1–2, 2001.
- A. A. Prikhod'ko, V. V. Ryzhikov, Disjointness of the convolutions for Chacon's automorphism. *Colloq. Math.* 84/85 (1) (2000), 67-74.
- A. A. Prikhod'ko, Ergodic Joinings of $GL(n, \mathbb{Z})$ -Action on n -Torus. *J. Dynam. Control Systems*, vol.5 (1999), no.3, 385–396.
- A. A. Prikhod'ko, Partitions of the phase space of a measure preserving \mathbb{Z}^d -action into towers. *Russian Math. Notes*, vol.65, no.5, 1999.
- A. A. Prikhod'ko, Joinings of the action of the group $GL(n, \mathbb{Z})$ on the n -dimensional torus. *Russian Math. Notes*, vol.63, no.2, 1998.
- A. A. Prikhod'ko, A. V. Egorov, Arithmetic theory of brick tilings. *Sbornik: Mathematics* (1998), 189(12):1765.
- A. A. Prikhod'ko, Special representations of \mathbb{Z}^n -actions. *J. Dynam. Control Systems*, vol.2 (1996), no.2, 239–253.
- A. A. Prikhod'ko, V. V. Ryzhikov, On maximal Rokhlin–Halmos–Alpern lemma. *Lomonosov MSU "Vestnik", Math., Mechanics*, vol.58, no.3, 1996.
- A. A. Prikhod'ko, Special representation of an aperiodic automorphism of a Lebesgue space. *Russian Math. Notes*, vol.58, no.2, 1995.

GRANTS and AWARDS

- President grant for young scientists — Ph. D., 2001–2002.

Current grants

- Russian grant for support of leading scientific schools NSh-8508.2010.1
- RFFI grant No. 11-01-00759-a “Combinatorial and analytic methods in combinatorial number theory and dynamical systems”

CONFERENCES ORGANIZED

- I. G. Petrovskii 100 conference, Lomonosov Moscow State University, 2001
- V. M. Alexeyev memorial conference, Steklov Mathematical Institute, Russian Academy of Science, 2002

CONFERENCES and SCIENTIFIC COMMUNICATIONS

- International Conference “Flows on surfaces, symbolic dynamics and dynamics in moduli spaces” dedicated to the 75th birthday of D.V. Anosov, December 5 - 9, 2011, Poncelet Laboratory, Moscow, Russia
- International conference “Differential Equations and Related Topics” dedicated to I.G. Petrovskii anniversary, May 29 – June 4, 2011. Moscow, Russia.
- L’Université de Rouen, Laboratoire de Mathématiques Raphaël Salem, October 20 – November 13, 2010. Rouen, France.
- Conference on spectral theory in dynamics, October 4–8, 2010. Warszawa, Poland.
- Dynamical Systems Meeting, Lower Silesia, May 23–29, 2010. Trzebiezowice, Poland.
- Lomonosovskie chtenia, Moscow State University, April 16–22, 2010. Moscow, Russia.
- Topology, Geometry, and Dynamics: Rokhlin Memorial, January 11-16, 2010. Saint Petersburg, Russia.
- Voronezh Winter Math. School, January 2003. Voronezh, Russia.
- Conference “Ergodic Theory and Dynamical Systems”, l’Université Paris XIII, 2001. Paris, France.
- Session résidentielle, Systèmes dynamiques : l’Odyssée dynamique, CIRM, 29 janvier – 2 mars 2001. Marseille, France.
- Swedish-Russian conference “Combinatorics, Dynamics, Probabilities”, Stockholm, Royal Institute of Technology (KTH), October 3–7, 2000.
- Conference “Ergodic Theory and Dynamical Systems”, 2000. Toruń, Poland.
- Conference and Ukrainian-US Workshop “Dynamical Systems and Ergodic Theory”, August 21 – 30, 2000. Katsiveli (Crimea), Ukraine.

Forthcoming conferences

- Chercheur CNRS. L’Université de Rouen, Laboratoire de Mathématiques Raphaël Salem, April 2 – June 30, 2012. Rouen, France.
- Workshop in Ergodic Theory and Dynamical Systems. University of North Carolina, 22–25 March 2012, Chapel Hill, USA.
- Ergodic Theory and Dynamical Systems: Perspectives and Prospects. Warwick Mathematical Institute, 16–20 April 2012, United Kingdom.

SELECTED TALKS

- On stochastic constructions of mixing flows of positive local rank, Séminaire de Systèmes Dynamiques, l’Université Pierre et Marie CURIE, Paris VI, 1999.

- Algebraic properties of brick tilings and ergodic theory, l'Odyssee dynamique, CIRM, Marseille, 2 mars 2001.
- On spectral properties of iceberg transformations, Séminaire de Systèmes Dynamiques, l'Université Pierre et Marie CURIE, Paris VI, November 2, 2010.
- On Littlewood-type polynomials and exponential sums and applications to spectral theory, Le groupe de travail Probabilités, Théorie Ergodique et Systèmes Dynamiques, LMRS, l'Université de Rouen, November 8, 2010.
- The problem of flatness for polynomials and exponential sums and applications to ergodic theory, Séminaire de Théorie des Nombres de Caen, Laboratoire de Mathématiques Nicolas Oresme, l'Université de Caen, November 5, 2010.
- Littlewood-type polynomials and spectral theory of dynamical systems, International conference "Differential Equations and Related Topics", Lomonosov Moscow State University, May 29 – June 4, 2011.
- On Littlewood polynomials on the real line, Seminar on functional analysis, Lomonosov Moscow State University, December 2, 2011.
- An example of computing the symbolic complexity, and applications to spectral theory, St. Petersburg Seminar on Representation Theory and Dynamical Systems, January 4, 2012.

31.01.2012
Moscow, Russia
Alexander Prikhod'ko