

**CURRICULUM VITÆ**  
**Rostislav Ivanovich GRIGORCHUK**

**Texas A&M University**  
Department of Mathematics  
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USA

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**CURRENT POSITION**

Texas A&M University, Department of Mathematics, Distinguished Professor.

**EDUCATION**

Habilitation, Mathematics	1985
<b>Steklov Institute of Mathematics</b>	
Thesis: “ <i>Groups with intermediate growth function and their applications</i> ”	
Ph.D., Mathematics	1978
<b>Moscow Lomonosov State University</b>	
Thesis: “ <i>Banach means on homogeneous spaces and random walks</i> ”	
B.Sc., M.Sc., Mathematics (with honors)	1970 - 1975
<b>Moscow Lomonosov State University</b>	

**PROFESSIONAL CAREER**

**Texas A&M University, College Station, TX**

Department of Mathematics, Professor	2002-2008, Distinguished Professor	2008 - current
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**Russian Academy of Science, Steklov Mathematical Institute, Moscow**

Department of Ordinary Differential Equations. Leading researcher	1995 - current
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Moscow Lomonosov State University, Department of Dynamical Systems, Professor.	2001 - 2002
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**Moscow State University of Transportation, Department of Mathematics**

Chair	1992 - 1995
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Professor	1987 - 1995
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Associate Professor	1983 - 1987
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Assistant Professor	1978 - 1983
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## TITLES and AWARDS

Leroy P. Steele Prize for Seminal Contribution to Research	2015
Bogolyubov Prize of Ukrainian Academy of Science	2015
Invited Professor at University of Geneva:	March, April 2013, 2014, 2015
Fellow of American Mathematical Society	2012
Association of Former Students Distinguished Achievement Award in Research, Texas A&M University	2009
Award of Russian Academy of Science and the MAIK Publishing for the best publication of scientific paper in 2001, 2002	2002
The Award for Best Scientific Results from the Russian Academy of Science	1999, 2001
Fellow of the Asymptotic Group Theory Programm in the Institute of Advance Studies in the Hebrew University of Jerusalem	2000
Award “The best scientific result for 2000 in the Steklov Institute of Mathematics”	2000
Award “The best scientific result for 1999 in the Russian Academy of Science”	1999
State Award “Outstanding scientist of Russia”	1994-96, 1997-99
London Mathematical Society Visiting Professor Award	1994, 2000
Prize of Russian Foundation “Mathematics”	1992
Fulbright Senior Fellowship at Columbia University, USA	1991
Professor in Mathematics, awarded by Department of Education of USSR	1987
Doctoral dissertation (Russian equivalent of French or German Habilitation ) Steklov Mathematical Institute	1985
Thesis: “ <i>Growth functions of finitely generated groups and it applications</i> ”	
Award of Moscow Mathematical Society	1980
Award of Moscow Lomonosov State University for the Best Diploma Research Paper	1975

## GRANTS

“Groups of intermediate growth”, Supported by: National Science Foundation	2012-2015.
“Collaborative grant”, Supported by Simons Foundation,	2011-2012.
“Algebraic, combinatorial, spectral and algorithmic properties of groups generated by finite automata”, Supported by: National Science Foundation	2006-2008
“FRG: Asymptotic and Probabilistic Methods in Geometric Group Theory”, Supported by: National Science Foundation	2005-2007
“Algebraic, geometric and combinatorial properties of branch groups”, Supported by: National Science Foundation	2002-2005
“Spectral and asymptotic properties of branch groups” Supported by: Swiss National Foundation for Scientific Research	2000-2002
“Ihara zeta function of infinite graphs and groups” Supported by: CNRS of France	2001-2002
“Algorithmic and rigidity properties of Branch Groups” Supported by: Royal Society	2000
“Groups generated by finite automata and its applications” Supported by: Leading Scientific Schools of the Russian Federation, project 00-15-96107 of Russian Academy of Science,	2000-2002
Leading Scientific Schools of the Russian Federation	1998-2000
Russian Fund for Fundamental Research	1993-95, 1996-1998

**EDITORIAL BOARDS**

Editor-in-Chief: Groups, Geometry and Dynamics  
 Geometriae Dedicata  
 Journal of Modern Dynamics  
 International Journal of Algebra and Computation  
 Journal of Algebra and its Applications  
 Matematicheskie Zametki (Mathematical Notes) 1991-2002  
 Ukrainian Mathematical Journal (Honorary Member)  
 Matematichni Studii  
 Algebra and Discrete Mathematics

**Volume editor for:**

“Dynamical Systems, Automata, and Infinite Groups”, Proceedings of the Steklov Institute of Mathematics, V.231, no. 4 2000.  
 Algebra and Discrete Mathematics, no.1 (2005), Special issue devoted to Professor Yuriy Drozd.  
 Groups, Geometry and Dynamics, V.1, no.4. 2007. Special Issue in honor of the retirement of Avinoam Mann.  
 Geometriae Dedicata, Proceedings of the conference “Geometric and Probabilistic Methods in Group Theory and Dynamical Systems”, College Station, November 2005, In Geometriae Dedicata 124 (2007).  
 Algebra and Discrete Mathematics, no.4 (2009), Special issue devoted to Professor Leonid Kurdachenko.  
 Groups, Geometry and Dynamics, V.4, no.4. (2010). Special Issue in remembering of Wilhelm Magnus.  
 Contemporary Mathematics v.567, Dynamical systems and Group Actions, 2012. Special issue devoted to 70th of Anatole Stepin.

**National Professional Committees**

Russian National Committee VAK (1995–2004)

Referee for:

National Science Foundation  
 National Security Agency  
 European Research Council  
 Switzerland National Science Foundation  
 Israel Science Foundation  
 Science and Engineering Research Canada  
 Marie Curie fellowship proposal with the European Commission’s 6th Framework Program  
 Pierre Deligne Competition for young mathematicians in Russia, Ukraine and Belarus  
 US-NTSA Award for Ukrainian Mathematicians

**Departmental Activities**

Head, Seminar ”Groups and Dynamics”  
 Member, PhD Committees  
 Powell Chair Committee  
 Post-Docs Committee

**FIELDS of INTEREST**

Group Theory, Dynamical Systems, Low dimensional Topology, Discrete Mathematics, Abstract Harmonic Analysis, Random Walks, Invariant Means, Bounded Cohomology,  $L^2$ -invariants.

**ADVISOR, MENTOR AND CO-MENTOR FOR:**

(Co-mentor) L. Beklaryan (habilitation, current affiliation: Russian Academy of Sciences Central Economics and Mathematics Institute, Moscow, professor)

(Co-mentor) V. Nekrashevych, (habilitation, current affiliation: Texas A&M University, Professor)

(Co-mentor) A. Vdovina (habilitation, current affiliation: University of Newcastle upon Tyne, Professor)

(Co-mentor) L.Bartholdi (Ph.D., current affiliation: University of Goettingen, Professor)

(Co-mentor) R. Mikhailov (Ph.D., current affiliation: Steklov Institute of Mathematics, Moscow, Leading researcher)

(Co-mentor) A. Rozhkov (Ph.D., current affiliation: Ural State University, Chelyabinsk, Russia, professor)

(Co-mentor) E. Pervova (Ph.D., current affiliation: "Marie Curie Incoming International Fellowship", Italy)

(Co-mentor) Yu. Leonov (Ph.D., current affiliation: Odessa State University, Ukraine, Associate professor)

(Co-mentor) I. Lysionok (M.S., current affiliation: Steklov Institute of Mathematics, Moscow, Leading researcher)

(Co-mentor) A. Bufetov (M.S., current affiliation: CNRS, Marceille, Leading Researcher)

(Co-mentor) A. Zuk (Ph.D., current affiliation: Institut de Mathématiques, Université Paris 7, Professor)

(Co-mentor) T. Ceccherini-Silberstein (Ph.D., current affiliation: Università degli Studi del Sannio, Professor)

R. Zatorskii, (Habilitation, Current affiliation: Precarpathian National University of Vasil Stefanik, Ukraine, Professor).

I. Kirchey ( Current affiliation: Lviv National University of Ivan Franko, Ukraine, Pro)ffessor.

A. Boltenev (M.S.)

(Co-mentor) T. Vovkivskii (M.S.)

I. Bondarenko (Ph.D. Current affiliation: Kyiv National Taras Shevchenko University, Ukraine, Assistant Professor).

Yevgen Muntyan (Ph.D. Microsoft).

Dmytro Savchuk (Ph.D. Current affiliation: University of South Florida, Tampa, Assistant Professor).

Rostyslav Kravchenko (Ph.D. Current affiliation: Assistant Visiting Professor, University of Chicago)

**Current Ph.D. students**

Mustafa Benly

Dilber Kocak

**Postdoctoral scholars** (Mentor) Russ Thomas

(Co-mentor) D. D'Angeli

(Co-mentor) A. Donno

B. Petrenko (current affiliation: SUNY, Brockport, Assistant Professor)

J. Belk (current affiliation: Bard College, NY Assistant Professor)

Y. Vorobets (current affiliation: Texas A&M University, Associate Professor)

M. Vorobets (current affiliation: Texas A&M University, Senior Lecture)

(Co-mentor) F. Dahmani (current affiliation: Université Paul Sabatier, Toulouse, Maitre de Conférences, Professor)

C. Thomas (current affiliation: Massachusetts College of Liberal Arts, North Adams, Professor)

**INVITED PROFESSOR at**

MSRI Berkeley	1989, 2000
Max-Planck Institute, Bonn	1988, 1990, 1994, 1999, 2003, 2006
Columbia University, New York	1991
University of Manitoba	1990
University of Geneva	1995, 1996, 1997, 1998, 1999, 2000, 2002, 2003
University of Rome "La Sapienza"	1992, 1994, 1996, 1999, 2002
Hebrew University of Jerusalem	1996, 2000
Ecole Normale Superieure, Lyon	1996, 2002
ETH Zurich	1997, 1999
IHES, Paris	1998
University of Neuchatel	1998
Royal Institute of Technology, Stokholm	1999
University of Birmingham	2001
The Institut Henri Poincare, Paris	2006
The Institute of Mathematics, Auckland	2007
Isaac Newton Institute for Mathematical Sciences, Cambridge	2007
The Erwin Shrodinger Institute for Mathematical Phycs, Vienna, Austria	2007
University of Geneva, Geneva	2008
IHÉS, Bures-sur-Yvette	2008
University Paris 13,	2010
University Paris Sud 11 (Orsay),	2011

**PLENARY and INVITED TALKS AT CONFERENCES**

<b>International Congress of Mathematics, Kyoto</b>	1990
Meeting of the London Mathematical Society	1993
Meetings in Oberwolfach	1991,1993, 1995, 1999, 2001
<i>International Conferences in Algebra, Analysis and Probability:</i>	
National Algebraic Conference, Minsk, Belorussia	1983
National Algebraic Conference, Kishinev, Moldova	1985
National Algebraic Conference, Lvov, Ukraine	1987
International Algebraic Conference in memory of Malcev, Novosibirsk	1989
International Conference in memory of Shirshov, Barnaul	1992
Conference in Group Theory, Edinburgh, UK	1993, 1998
Conference in Profinite Groups, Durham, UK	1994, 1996
Algebra and Topology Conference dedicated to the 60-th birthday of H. Zieshang, Bochum, Germany	1996
European Summer School on Geometric Group Theory, Crete, Greece	1996
St. Andrews Group Theory Conference, Bath, UK	1997
Euroconference Group Theory: From Finite to Infinite, Castelvecchio Pascoli, Italy	1997
International Conference in memory of Gluskin, Slaviansk, Ukraine,	1997
Combinatorial Group Theory, McGill University, Montreal	1997

International Algebraic Conference in memory of Kurosh, Moscow	1998
International Conference in memory of Pontryagin, Moscow	1998
Discrete Groups and Lattices, Bielefeld, Germany	1999
“On branch groups”, Conference on group theory MSRI, Berkeley, CA, USA	January 2000
“Asymptotic properties of branch groups”, Conference on Asymptotic group theory, Jerusalem, Israel	April 2000
“Ideas and problems of the theory of branch groups”, Haifa, Israel	May 2000
“Groups generated by finite automata”, Conference on groups and semigroups, Lincoln, NE, USA	June 2000
“On the spectrum of the lamplighter group”, Conference on $L^2$ -invariants, Münster, Germany	June 2000
“Probabilities on groups and the Atiyah Conjecture”, Probabilistic methods in Group Theory, New York	December 2000
“Invariant means and growth” North British Workshop on Functional Analysis, Edinburgh	May 2001
“Invariant means and spectra” North British Workshop on Functional Analysis, Edinburgh	May 2001
“From fractal groups to fractal sets”, Conference Fractal in Graz, Graz, Austria,	June 2001
“Spectral theory of graphs related to fractal groups”, Conference Random Walks, Vienne, Austria	July 2001
“Spectra of fractal groups and and Schreier graphs”, Conference on Functional Analysis, Kyiv, Ukraine	September 2001
“Groups generated by finite automata and the Atiyah conjecture”, Algebraic Conference, Kyiv, Ukraine	September 2001
“From fractal groups to fractal sets” Frontiers in Mathematics, Texas A&M University, College Station, TX	October 2001
“Random walks on groups and the Atiyah conjecture on $L^2$ -Betti numbers” Frontiers in Mathematics, Texas A&M University, College Station, TX	October 2001
“Growth in groups and amenability” Frontiers in Mathematics, Texas A&M University, College Station, TX	October 2001
“Invariant means and growth” North British Functional Analysis Seminar	2001
“Automata groups - other direction and open problems” Workshop (Rencontres Mathematiques) on Groups of Automata, Lyon, France	May 2002
“Algorithmic problem for branch groups” Discrete Groups and Geometric Structures, with Applications, at K.U. Leuven Campus Kortrijk, Belgium	May 2002
“Groups generated by finite automata and amenability” Workshop on Groups and Model Theory at Mons-Hainaut University, Belgium	May 2002
“Analysis on graphs arising from fractal groups” Conference on Analysis on Graphs and Metric Spaces, Paris, France	June 2002
“Fractal groups generated by finite automata arising in holomorphic dynamics”	

Conference on Analysis and Probability on Fractals, Cornell University, Ithaca NY	June 2002
“On spectral problems and two-dimensional dynamical systems associated with some self-similar structures”, Waves in Periodic and Random Media, Mount Holyoke College, South Hadley, MA	June 2002
“Quasiregular representations of branch groups and Gelfand Pairs” Conference in Harmonic Analysis organized by University of Rome “Tor Vergata” and University of Bari, Island Tremini, Italy	June 2002
“Algorithmic problems and presentations of groups generated by finite automata” International Conference on Semigroups and Groups in Honor of the 65th Birthday of John Rhodes, Porto, Portugal	June 2002
“The Ihara zeta function, the KNS spectral measure and integrable maps”, Conference on Dynamical Systems in memory of V.A. Alekseev, Moscow	December 2002
International Conference on Group Theory: combinatorial, geometric and dynamical aspects of infinite groups, Italy	June 2003
Probability in Mathematics. In Honor of Hillel Furstenberg, Israel	June 2003
Kolmogorov and Contemporary Mathematics. Moscow, Russia	June 2003
Groups and Probability. Budapest, Hungary	2003
Algebra day in Ottawa, Canada	September 2003
“On the friendly competitor of Thomson groups”, 40 Years of Thompson Groups, Palo Alto, California	January 2004
“A minimality property of certain branch groups”, $G^3$ Geometric Groups Theory on the Gulf Coast, Mobile, Alabama	February 5-8, 2004
“Branch groups and spectral theory”, Conference on $L^2$ -Invariants, Measure Theory and Geometric Group Theory, Munster, Germany	March 2004
“Kolmogorov Complexity, Growth and Algorithmic Problems”, invited address at AMS meeting, Athens, Ohio	March 2004
“Groups of branch type and finitely presented groups”, Topological Fest., Cornell	May 2004
“The Ihara zeta function for infinite graphs”, Analysis and Geometry on Random Structures, Lille, France,	May 24-28, 2004
“Branch groups and Kolmogorov complexity”, 250 anniversary of Moscow University, Jerusalem, Israel	June 2004
“Groups, finite automata and spectra, LMS Northern regional meeting”, Newcastle, England	June 2004
“Kolmogorov complexity, amenability and growth in groups”, Workshop on Group Theory, Newcastle, England	June 2004
“The development of amenability in the past 50 years”, Geometric group theory, Random walks and Harmonic Analysis, Cortona, Italy	June 2004
“Automata groups and dynamics on trees”, Advanced Course on Automata Groups, Barselona, Spain	July 2004
“Algorithmic problems for branch groups”, University of Geneva, Switzerland	September 2004
“Algorithmic problems for branch groups and groups generated by finite automata”, Albany Group Theory Conference, Albany, New York	October 2004
“Presentations of automata groups and subgroups in direct products”,	

AMS Meeting, Nashville, Tennessee	October 2004
“Algebraic, algorithmic, and spectral properties of automata groups”, CMS Meeting, Montreal, Canada	December 2004
“Kaplanskii problem on Jacobson radical”, Talk at Algebra seminar at University of California in San Diego	March 2005
“Amenability and Self-similar groups” at special section ‘Discrete groups’ at AMS meeting in Lubbock, Texas	April 2005
“Spectra of groups, graphs and amenability”, Probability and Mathematical Physics, Conference dedicated to S.Molchanov, Montreal, Canada	June 2005
“Branchness and self-similarity in group theory”, 5-th International Algebraic Conference, Odessa, Ukraine	July 2005
“On self-similarity and branchness in group theory”, Groups St. Andrews, St. Andrews, UK 2005	July-August 2005
“C*-algebras related to self-similar groups and asymptotic Ramanujan graphs”, Operator Algebras and Mathematical Physics, Bucharest, Romania	August 2005
“Hanoi Towers groups”, Topological and Geometric Methods in Group Theory, Oberwolfach, Germany	April 2006
“Hanoi Tower Groups and Schreier Graphs”, Combinatorial and geometric group theory, Nashville, Tennessee	May 2006
“Hanoi Towers Groups and spectral analysis”, The 10-th Midrasha in Asymptotic Group Theory, Jerusalem, Israel	May 2006
“Profinite Self-Similar Groups”, Pro-p Extensions of Global Fields and pro-p Groups, Oberwolfach, Germany	May 2006
“The spectrum of Hanoi Towers game on three pegs”, Noncommutative and Matrix valued Analysis, Institut Henri Poincare, Paris, France	June 2006
“Spectral analysis of Ukranian automatic groups and semigroups”, P vs NP Workshop, University of California, Berkeley	June 2006
“Amenability, Liouville property and ergodicity of boundary actions”, Semi-annual Workshop in Dynamical Systems and Related Topics, Penn State University	October 2006
“Discrete amenable groups – a survey”, Amenability of Groups and Algebras, Canberra, Australia	January 2007
“The Spectra of Schreier Graphs of Self-similar Groups and Dynamics of Multidimensional Rational Mappings 1 and 2”, Partial Differential Equations: Analysis, Applications, and Inverse Problems, Cophthorne Waitangi Resort, New Zealand	January 2007
“On classification of groups generated by finite automata and some questions of analysis related to such groups”, Winter School “Methods of Algebra and Analysis in Contemporary Mathematics”, Chernivtsi, Ukraine	February 2007
“Amenability, branchness and Hanoi towers game”, Meeting of Kyiv Mathematical Society, Kyiv, Ukraine	February 2007
“The beginning of the Atlas of self-similar groups”, Totally Disconnected Groups, Graphs and Geometry Workshop, Heinrich-Fabri-Institut Blaubeuren, Germany	May 2007
“On Brian Hartley question about maximal subgroups in branch groups”, Antalya Algebra Days IX, Antalya, Turkey	May 2007
“Schur Complement and Schreier graphs”, Analysis on Graphs and Applications, Cambridge, UK	June 2007



“Non-elementary amenability and nonamenability” (two talks), Workshop on Algebraic, Geometric and Probabilistic Aspects of Amenability, Vienna, Austria	June 2007
“On Dehn functions of infinitely presented groups”, Profinite and asymptotic group theory, Levico Terme, Italy	September 2007
“On Dehn functions of infinitely presented groups”, Conference Dedicated to the 100-th Anniversary of W. Magnus, New York	September 2007
“Self-similar groups, operator algebras and Schur complement”, XXVIII Congress in Harmonic Analysis, Perugia, Italy	May 2008
“Self-similar groups, operator algebras and Shur complements”, International Conference “Differential Equations and Topology” Dedicated to the Centennial Anniversary of L.S. Pontryagin, Moscow State University, Moscow, Russia	June 2008
“On subgroup structure of a 3-generated 2-group of intermediate growth”, Profinite and Asymptotic Group Theory, Oberwolfach, Germany	June 2008
“The beginning of the classification of self-similar groups”, Group theory and complexity, Steklov Mathematical Institute, Moscow, Russia	July 2008
“On Dehn functions of infinite presentations of groups”, Geometric and Asymptotic Group Theory with Applications, Stevens Institute of Technology	March 2009
“Ergodic properties of boundary actions, growth and Nielsen-Schreier theory”, Group Theory, Number Theory and Geometry Conference on the occasion of Fritz Grunewald’s 60th Birthday, Oxford	April 2009
“Hanoi Tower game and self-similar groups”, Joint Meeting of the 61st British Mathematical Colloquium and the 22nd Annual Meeting of the Irish Mathematical Society, National University of Ireland Galway	April 2009
“Ergodic properties of boundary actions and Nielsen-Schreier theory”, International Conference on Geometric and Combinatorial Methods in Group Theory and Semigroup Theory, University of Nebraska, Lincoln	May 2009
“Development of the theory of amenable groups in the last 80 years”, the Conference Dedicated to 75-th Anniversary of Steklov Mathematical Institute, Moscow, Russia	June 2009
“The paradoxical and non-paradoxical in group theory and the Hanoi Towers game”, Groups and Models: Cherlin Bayrami, Bilgi University, Istanbul	June 2009
“Ergodicity of boundary action, Hopf decomposition and Schreier-Nielsen method”, Dynamical Numbers: Interplay between Dynamical Systems and Number Theory, Max Planck Institute for Mathematics, Bonn	June 2009
“Torsion images of Coxeter groups and Wiegold proble”, Geometry, Topology and Computation in Groups, Diablerets, Switzerland	March 2010
“Torsion images of Coxeter group”, Groups and Their Actions, Bedlewo, Poland	August 2010
“Wiegold problem and Torsion images of Coxeter groups”, Actions and Invariants of Residually Finite Groups: Asymptotic Methods, Oberwolfach, Germany	September 2010
“Torsion images of Coxeter groups and Wiegold proble”, Rome, Italy	September 2010
“Free vs nonfree actions of self-similar group”, Workshop on Group Actions and Dynamics, Montreal, Canada	October 2010
“On Wiegold proble”, Groups and Dynamics, Santiago, Chile	December 2010
“On Milnors problem of growth of groups”, Frontiers in Complex Dynamics, Banff, Canada	February 2011

- “Free vs. nonfree actions on a boundary of a rooted tree and a Schreier dynamical systems”,  
 Group Actions on Probability Spaces, Texas A&M University, College Station, TX March 2011
- “Manifestations of the Lamplighter”, Topology Festival, Cornell University May 2011
- “The algebraic aspects of amenability”,  
 Conference on Algebra and Applications in honor of Prof. Said Sidki, Caldas Novas, Brazil May 2011
- “On the Gap Conjecture Concerning Group Growth”,  
 Geometric and Analytic Aspects of Group Theory, Institut Mittag-Leffler, Sweden 2012
- “Free and totally nonfree actions”,  
 Invariant Random Subgroups, Sde-Boker, Israel, February 2012
- “Schreier Dynamical Systems, totally non-free actions, and self-similar  $C^*$ -algebras”,  
 Program: Interactions Between Ergodic Theory, Number Theory and  
 Noncommutative Geometry, Columbus, Ohio May 2012
- “On the Gap Conjecture Concerning Group Growth”,  
 Conference “Words and Growth”, Institute for Advance Studies,  
 Hebrew University of Jerusalem, Israel June 2012
- “Topological full groups of minimal Cantor systems are embeddable into finite groups”,  
 International Mathematical Conference on occasion 70th anniversary of  
 Professor Vladimir V. Kirichenko, Mykolaiv, Ukraine June 2012
- “The subgroup structure of certain amenable groups and the relative gradient rank”,  
 Golod-Shafarevich groups and algebras and rank gradients, Vienna August 2012
- “The relative rank gradient and the subgroup structure of certain amenable groups”,  
 Group Theory on the Hudson, Hoboken, NJ September 2012
- “On Gap Conjecture Concerning Group Growth”, Group Theory, Combinatorics, and Computing,  
 Florida Atlantic University, Boca Raton, Florida October 2012
- “On random groups of intermediate growth”, Rice Dynamics Meetings May 2013
- Joint AMS-Romanian meeting , Alba Julia, Romania June 2013,
- The 9th International Algebraic Conference, Lviv, Ukraine July 2013,
- Group Theory, Measure, and Asymptotic Invariants, Oberwolfach, Germany August 2013
- Geometric and Analytic Group Theory, Ventotene, Italy September 2013
- Texas Geometry and Topology Conference, College Station, Texas October 2013
- “Invariant random subgroups of groups of the lamplighter type and some geometric groups”,  
 Asymptotic properties of groups, IHP, Paris March 2014.
- “On the spaces of groups and subgroups and the concept of invariant random subgroup”,  
 Geometric and Algorithmic Problems for Groups and Rings, Cuernavaca, Mexico January 2014
- “From Fractal Groups to Fractal Sets and Spectra”,  
 Fractal Geometry and Stochastics V, Tabarz (Thuringian forest, Germany) March 2014
- “Invariant random subgroups of groups of lamplighter type and of hyperbolic groups”,  
 Representations, Dynamics, Combinatorics:  
 in the Limit and Beyond, St. Petersburg, Russia July 2014
- “Invariant Random Subgroups and nonfree actions of groups”,  
 Geometrie et Systemes Dynamiques, Strasbourg, France February 2015
- “Spectrum of Schreier graphs of a group of intermediate growth, Lysenok’s substitution  
 and Schroedinger-Jacoby operators”,  
 Groups, Symbolic dynamics and Combinatorics of Words in Groups, ENS, Paris June 2015
- “Absolutely nonfree actions, random subgroups, and factor representations”,

Dynamical Systems and Their Applications, Kyiv, Ukraine June 2015  
 “Random subgroups, totally nonfree actions and factor representations”,  
 Group Representations in Dynamical Systems and Geometry June 29 - July 3, 2015  
 “Spectra of representations associated with group actions, weak branchness,  
 irreducibility, and absolute non-freeness”,  
 Random walks and harmonic functions on groups, EPFL Lausanne (Switzerland) 2015

### Minicourses

“Growth of Groups and Related Topics”, Atlantic Association for Research in the Mathematical  
 Sciences Memorial University of Newfoundland, St. John’s. Newfounland, Canada, May 2012  
 Geneva 2013  
 Geneva 2014

### Colloquium Talks

“Spectra of fractal groups and the Atiyah Conjecture”,  
 University of Nebraska, Lincoln March 6, 2003  
 “Spectra of Groups and Graphs and the Atiyah  
 Conjecture”, University of California, San-Diego March 10, 2003  
 “Spectra of fractal groups and the Atiyah Problem”, Rice  
 University, Houston April 3, 2003  
 “The Ihara zeta function of infinite graphs, the KNS  
 spectral measure and integarble maps”, Vanderbilt University,  
 Nashville April 14, 2003  
 “The spectra of groups generated by finite automata and  
 the Atiyah Conjecture on L2-Betti numbers”, University of  
 Illinois, Urbana-Champaign October 30, 2003  
 “Spectra of Groups Generated by Finite Automata”,  
 Eastern Illinois University, Charleston October 31, 2003  
 “Spectra of groups and dynamical systems”,  
 Penn. State University April 2004  
 “Groups of intermediate growth and dynamics”,  
 Stony Brook, New York May 2004  
 “Algebraic and spectral properties of groups generated by finite automata”,  
 Virginia Polytechnic Institute October 2004  
 “Ihara zeta function for infinite graphs and groups”,  
 University of California in San Diego March 17 2005  
 “Hanoi towers groups and asymptotic characteristics of Schreier graphs”,  
 University of Wisconsin, Madison February 2006  
 “Spectral properties of Hanoi towers groups”, University of Marseille 1, France June 2006  
 “Serre Property (FA) and homomorphic images of branch groups”,  
 University of Florida, Gainesville December 2006  
 “Amenability, branching and Hanoi Towers game”,  
 Rice Univercity, Houston February 2007  
 “The beginning of the Atlas of self-similar groups”,  
 Indiana University Purdue University Indianapolis, Indianapolis November 2007

“On Dehn functions of infinite presentations of groups”, University of Texas, Austin	March 2009
“Amenable groups and growth”, Indiana University Bloomington,	October 2010
“The past and the present of the theory of amenable groups”, Binghamton University	May 2011
“Manifestations of the Lamplighter”, Colloquium talk opening Cornell Topology Festival	May 2011
“Amenable groups and homeomorphisms of a Cantor set”, Rutgers University	September 2011
“Gap Conjecture for group growth and related topics”, Claremont College	March 2012
“Gap Conjecture for group growth and related topics”, Dartmouth College	April 2012
“Growth of random groups of intermediate growth and Gap Conjecture”, University of South Florida, Tampa	January 2013
“Random Groups of Intermediate Growth”, University of Texas at Dallas, Richardson	November 2013
“On Random Groups of Intermediate Growth”, Copenhagen, Denmark	April 2014
“Spectra of Schreier graphs of groups of intermediate growth and Schrodinger operators”, University of Michigan	October 2015

## CONFERENCE ORGANIZING COMMITTEES

Special Meeting of Moscow Mathematical Society in honor of the 60-th Anniversary of D.V. Anosov, Moscow, Russia	1996
International Conference in Memory of Glushkin, Slaviansk, Ukraine	1997
International Conference in Group Theory, Edinburgh, UK	1998
International Conference in Memory of Pontryagin, Moscow, Russia	1998
International Conference on Functional Analysis, Kyiv, Ukraine	2001
International Conference on Group Theory, Uzhgorod, Ukraine	2001
Workshop on Groups of Automata (Rencontres Mathematiques), Lyon, France	2002
International Algebraic Conference, Lviv, Ukraine	2003
Advanced Course on Automata Groups, Barcelona, Spain	2004
Geometric and Asymptotic Methods in Group Theory, Banff, Canada	2005
5-th International Algebraic Conference in Ukraine, Odesa, Ukraine	2005
Geometric and Probabilistic Methods in Group Theory and Dynamical Systems, College Station, TX	2005
Self-similar Groups, Palo Alto, California	2006
Winter School “Methods of Algebra and Analysis in Contemporary Mathematics”, Chernivtsi, Ukraine	2007
Analysis on Graphs and Fractals, Cardiff, United Kingdom	2007
6-th International Algebraic Conference in Ukraine, Kamyanets-Podilsky, Ukraine	2007
Conference Dedicated to the 100-th Anniversary of W. Magnus, New York	2007
Groups and dynamics, one day workshop, Texas A&M University, College Station, Texas	2007

Groups generated by Automata, Ascona, Switzerland	2008
Workshop on Group Theory and Dynamical Systems, Diableret's, Switzerland	2008
AMS Special Session on Group Theory, First Joint International AMS Meeting with the Sociedade Brasileira de Matematica, Rio de Janeiro, Brazil	2008
Differential equations and topology. International Conference dedicated to the 100-th Anniversary of L. Pontryagin, Moscow, Russia	2008
Group Theory and Complexity, Steklov Institute, Moscow, Russia	2008
Self-Similarity and Branching in Group Theory, Banff, Canada	2008
7-th International Algebraic Conference in Ukraine, Kamyanets-Podilsky, Ukraine	2009
Special session at the First International Meeting of the AMS and the Sociedad de Matematica de Chile, Universidad de la Frontera in Pucon, Pucon, Chile	2010
Dynamical systems, nonlinear analysis and their applications, Yerevan, Armenia	2011
International Mathematical Conference on occasion 70th anniversary of Professor Vladimir V. Kirichenko, Mykolaiv, Ukraine,	2012
International Conference on Algebra dedicated to 100th anniversary of S.M. Chernikov, Kyiv, Ukraine	2012
9-th International Algebraic Conference, Lviv, Ukraine	2013
International Conference "Algebra & Logic, Theory & Application" dedicated to the 80th anniversary of Prof. V.P. Shunkov, Krasnoyars, Russia,	2013
Conference "Actions on rooted trees", Paris, France,	2014

### CHAIR OF SEMINARS

Seminar in group theory (Moscow State University of Transportation, 1986–1995).

Seminar in geometric group theory (Steklov Mathematical Institute, Moscow, 1995–2002).

Seminar on dynamical systems and ergodic theory (Moscow State University of Lomonosov, 1995–2002, co-chair with D. Anosov and A. Stepin).

Groups and Dynamics Seminar (Texas A&M University, College Station, 2002–present).

### PUBLICATIONS of R. GRIGORCHUK

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2. (with D. Segal, A. Shalev, du Sautoy and others) *New Horizons in pro-p Groups*, Birkhäuser (2000).
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9. *On the Burnside problem on periodic groups*, Funkts. Anal. Prilozen. **14**, No 1 (1980) 53-54.
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21. *Superamenability and the problem of embedding of free semigroups*, 10-th USSR Symposium on Group Theory, Gomel, Abstracts (1986).
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23. *Individual Ergodic Theorem for the actions of the free group*, 12-th Workshop on Theory of Operators in Functional Spaces, Tambov, Abstracts **1** (1987).
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