

CURRICULUM VITAE  
VOLODYMYR V. NEKRASHEVYCH

**Official address:**

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**Current position:** Professor at Texas A&M University.

**Research interests:**

Group theory (groups generated by finite automata, self-similar and branch groups; hyperbolic groups); Dynamical systems (holomorphic dynamics; groups, inverse semigroups and groupoids acting on the Cantor set); Operator algebras (algebras associated to self-similar group actions, hyperbolic dynamical systems and tilings).

**Education and degrees:**

- 2006 Habilitation (Doctor of Sciences) defended in Kyiv Taras Shevchenko University. Thesis title: “*Self-similar groups*”;
- 1998 Ph.D. defended in Kyiv Taras Shevchenko University. Thesis title: “*Metric properties of non-amenable groups*”. Supervisor: Prof. Vitaliy I. Sushchansky;
- 1997 M.S. in Mathematics (with honors).

**Professional career:**

- from 2009 Professor at Texas A&M University;
- 2005–2009 Associate Professor at Texas A&M University;
- 2003–2005 Visiting Assistant Professor at International University Bremen (Germany);
- 1997–2005 Assistant Professor, Kyiv National Taras Shevchenko University, Mechanics and Mathematic faculty (Ukraine).

**Research visits:**

- 1998, May — Wrocław University (Poland);
- 1999, February — Brasília University (Brazil);
- 1999, May — Geneva University (Switzerland);
- 1999, June–July — Wrocław University (Poland);
- 2000, May — Geneva University (Switzerland);
- 2000, August — Brasília University (Brazil);
- 2001, March — Royal Technical Institute in Stockholm (Sweden);
- 2001, May–June — Geneva University (Switzerland);

2001, June — ETH Zürich (Switzerland);  
2002, (Humboldt fellowship, 1 year) — Düsseldorf Heinrich Heine University;  
2002, July — Università degli Studi di Roma - La Sapienza, (Italy);  
2003, June — Geneva University (Switzerland);  
2004, June — Ecole Polytechnique Federale Lausanne and Geneva University (Switzerland);  
2005, Mai — Uppsala University (Sweden);  
2007, Mai — Isaac Newton Institute for Mathematical Sciences, Cambridge, (UK);  
2007, July — Erwin Schrödinger Institute, Vienna (Austria).  
2008, May — Brasília University (Brazil);

**Grants and Awards:**

2007 — “Groups generated by automata”, NSF conference travel grant DMS-0757988, February 1, 2008 – January 31, 2009;  
2006 — “Iterated Monodromy Groups”, NSF grant DMS-0605019, September 1, 2006 – August 31, 2009;  
2001 — Alexander von Humboldt fellowship;  
2000 — award of Kyiv Taras Shevchenko University for young scientists;  
1999 — Kasa Mianowskiego grant (Poland);  
1998 — award of Petryshyn foundation for young mathematicians;  
1998 — International Soros Science Foundation grant for high school teachers;

**Organized conferences:**

2008 — Co-organizer of “Groups Generated by Automata”, Ascona, Switzerland;  
2008 — Co-organizer of special session “Group Theory” at Joint AMS International Meeting Rio de Janeiro, Brazil.

## Participated conferences:

- 1996 — International Conference in memory of Kravchuk, Kyiv, Ukraine;
- 1996 — IV International Conference “*Groups and Group Rings*”, Lubin Velykyj, Ukraine;
- 1997 — International Conference in Algebra in Memory of Gluskin, (plenary talk), Slovjansk, Ukraine;
- 1998 — VI International Conference “*Groups and Group Rings*”, Wisła, Poland;
- 1998 — International Conference in Memory of Pontryagin, Moscow, Russia;
- 1999 — VII International Conference “*Groups and Group Rings*”, (invited talk), Bialystok, Poland;
- 1999 — Symposium on Computation in Group Theory and Geometry, (invited talk), Warwick University, England;
- 2000 — XVI Escola de Algebra, Brasilia, Brazil;
- 2000 — “*Ergodic theory and dynamical systems*”, Katsyveli, Ukraine;
- 2000 — Russian-Swedish conference “*Combinatorics, Dynamics, Probability*” Stockholm, Sweden;
- 2001 — “*Random walks and geometry*”, workshop, Vienna, Austria;
- 2001 — Third International Algebraic Conference in Ukraine, (invited talk), Sumy, Ukraine;
- 2001 — International Conference on Functional Analysis, Kyiv, Ukraine;
- 2002 — Workshop “*Discrete groups and geometric structures with applications*”, Crystallographic groups and their generalizations III, Kortrijk, Belgium;
- 2002 — International Conference on Semigroups and Groups in Honor of the 65th Birthday of John Rhodes, Porto, Portugal;
- 2002 — Conference on Harmonic analysis, (invited talk), Luxembourg and Metz, France;
- 2003 — Oberwolfach meeting “*Profinite Groups and Discrete Subgroups of Lie Groups*” Germany;
- 2003 — International Conference “*GROUP THEORY: combinatorial, geometric, and dynamical aspects of infinite groups*”, (plenary talk), Gaeta, Italy;
- 2003 — IV International Algebraic conference in Ukraine, (invited talk), Lviv, Ukraine;
- 2004 — “*Analysis and Geometry on Random Structures*”, Lille, France;
- 2004 — “*Geometric Group Theory, Random Walks and Harmonic Analysis*”, Cortona, Italy;
- 2004 — “*Groups acting on rooted trees and  $CAT(0)$  spaces*”, (invited talk), Orsay, France;
- 2005 — “*Groups and Group Rings XI*”, (invited talk), Będlewo, Poland;
- 2005 — “5th International Algebraic Conference in Ukraine”, (plenary talk), Odessa, Ukraine;
- 2005 — “Geometric and Probabilistic Methods in Group Theory and Dynamical Systems”, (plenary talk), College Station, Texas;
- 2005 — “Algebra and Discrete Mathematics”, (invited talk), Kiev, Ukraine;
- 2006 — Holomorphic dynamics workshop. In celebration of John Milnor’s 75th birthday, (invited talk), Toronto, Canada;
- 2006 — “ $G^3$  conference — Geometric Group Theory on the Gulf Coast Conference”, (invited talk), Mobile, Alabama;

- 2006 — “Asymptotic Methods in Groups and Algebras”, (an invited series of three talks), Sao Paulo, Brasil;
- 2006 — “Combinatorial and geometric group theory” (invited talk), Vanderbilt University, Nashville, TN;
- 2006 — “Selfsimilar groups and conformal dynamics” (invited talks), American Institute of Mathematics, Palo Alto, California;
- 2006 — “Analysis and Probability on Fractals” AMS Eastern Section Meeting, University of Connecticut;
- 2006 — “Special Session on Complexity and Computability in Analysis, Geometry, and Dynamics” CMS Winter 2006 Meeting, Toronto, Canada;
- 2007 — “Groupes 2007. Hyperbolicity and convergence groups” (invited talk) February Luminy, France;
- 2007 — “Special Session on Operator Algebras” AMS Western Section Meeting Tucson, AZ;
- 2007 — “Analysis on Graphs and its Applications”, Isaac Newton Institute for Mathematical Sciences, Cambridge, UK;
- 2007 — “Analysis on Graphs and Fractals” (invited talk), Cardiff, UK;
- 2007 — “Groups and their actions” (invited talk), Bedlewo, Poland;
- 2007 — “A celebration of group theory” (invited talk) New York;
- 2007 — “Dichotomy Amenable/Nonamenable in Combinatorial Group Theory” (invited talk), Palo Alto, CA;
- 2007 — “Topics in Geometric Group Theory” (invited talk), MSRI, Berkeley, CA.
- 2008 — “Groups generated by Automata”, Ascona, Switzerland.
- 2008 — “Groups and Dynamics” (invited talk), IIIème Cycle Romand de Mathématiques Spring School at Les Diablerets, Switzerland.
- 2008 — “Discrete Structures in Conformal Geometry and Dynamics”, Spring Central Section AMS Meeting, Bloomington, IN.
- 2008 — AMS Joint International Meeting Rio de Janeiro, Brazil.
- 2008 — “3rd Conference on Analysis and Probability on Fractals”, Cornell University, Ithaca, NY.
- 2008 — “Profinite and asymptotic group theory”, Oberwolfach meeting, Oberwolfach, Germany.
- 2008 — “Self-Similarity and Branching in Group Theory”, Banff, Canada.
- 2009 — Special Session on Geometric Group Theory, 2009 Spring Central Sectional Meeting of AMS, Urbana, IL.
- 2009 — “Geometric and Combinatorial Methods in Group Theory and Semigroup Theory”, Lincoln, NE.
- 2009 — “Advances in Low Dimensional Dynamics”, Stony Brook, NY.
- 2009 — “Boundarie” Graz, Austria.
- 2009 — “Workshop on Fractals and Tilings”, Strobl, Austria.
- 2009 — “Groups St Andrews 2009 in Bath”, Bath, England.
- 2009 — “El Tercer Congreso Latino Americano de Matemáticos” Santiago de Chile.

**Seminar and Colloquium talks:**

Kyiv Taras Shevchenko University;  
Mathematical Institute of Ukrainian Academy of Sciences;  
Wrocław University (Poland);  
Geneva University (Switzerland);  
Brazilia University (Brasil);  
Royal Technical Institute in Stockholm (Sweden);  
Düsseldorf Heinrich Heine University (Germany);  
Univesità degli Studi di Roma (Italy);  
Université des Sciences et Technologies de Lille I (France);  
International University Bremen (Germany);  
ETH Zürich (Switzerland);  
Texas A&M University (USA);  
SUNY Stony Brook (USA);  
Uppsala University (Sweden);  
Vanderbilt University (Nashville, USA);  
Rice University (Houston, USA);  
Colloquium of Kyiv Mathematical Society (Kyiv, Ukraine).

**Teaching at Summer Schools:**

- 2004 — “*Self-similar groups*” a cycle of 5 lectures at “Autour de groupes agissant sur des arbres 3ème cycle romand ` Villars” (Villars, Switzerland);
- 2004 — “*Automata groups and holomorphic dynamics*” a cycle of 4 lectures at “Advanced Course on Automata Groups” (Barcelona, Spain);
- 2006 — “*Holomorphic Dynamics and Group Theory*” a cycle of 3 lectures at IV-th Summer School “Algebra, Topology, Functional and Stochastic Analysis” (Kozyova, Ukraine);
- 2007 — “*Contracting groups*” a minicourse of 5 lectures at “Amenability”, a semester at Erwin Schroedinger Institute, Vienna, Austria.
- 2009 — “*Iterated monodromy groups*” a minicourse of 4 lectures at “Groups St Andrews 2009 in Bath”, Bath, England.