

CURRICULIM VITAE: Ilya Kapovich

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I. Personal History and Professional Experience

A. Personal background

- **Age:** 51 years old
- **Place of birth:** Khabarovsk, Russia
- **Citizenship:** U.S.A. (since 2009)
- **Family status:** Single
- **Kapovich family history (in Russian)**
<https://etazhi-lit.ru/publishing/literary-kitchen/494-katya-kapovich-moya-semya-i-dveri.html>
- **Wikipedia:** https://en.wikipedia.org/wiki/Ilya_Kapovich
- **Hobbies:** Swimming, mushroom hunting

A. Educational Background

- B.Sc. in Mathematics (with honors), Novosibirsk State University (Russia), June 1992
- Ph.D. in Mathematics, City University of New York Graduate Center, June 1996

B. List of Academic Positions since Final Degree

- Hill Assistant Professor, Rutgers University, New Brunswick, New Jersey, 1996-97
- Lady Davis Post-Doctoral Fellow, Hebrew University, Jerusalem, Israel, 1997-1998
- Hill Assistant Professor, Rutgers University, New Brunswick, New Jersey, 1998-2000

- Assistant Professor, Department of Mathematics, University of Illinois at Urbana-Champaign, 2000-2006
- Associate Professor, Department of Mathematics, University of Illinois at Urbana-Champaign, 2006-2012
- Professor, Department of Mathematics, University of Illinois at Urbana-Champaign, 2012–August 2018
- Professor, Department of Mathematics and Statistics, Hunter College of CUNY, August 2018 – present

C. Other Professional Employment

- Administrator of the MAGNUS electronic archive in Geometric Group Theory, City College of CUNY, 1994-96
- Visiting Scholar, Australian Special Year in Geometric Group Theory, January-February 1996
- Teaching an experimental Rutgers Calculus course at Highland Park High School, Highland Park, New Jersey, Fall 1999
- Visiting Scholar, DIMACS Center for Discrete Mathematics and Theoretical Computer Science, New Brunswick, New Jersey, February 2002
- Visiting Scholar, University of Geneva, Switzerland, June-July 2003
- Visiting Scholar, McGill University, Montreal, Canada, summer 2003
- Research Fellow, Max Planck Institute of Mathematics, Bonn, Germany, summer 2004
- Visiting Researcher, University of Chicago, October 2004 (while on leave as a CAS Beckman fellow)
- Visiting Researcher, Special Year In Geometric Group Theory, Centre de Recerca Matemàtica, Barcelona, November 2004 (while on leave as a CAS Beckman fellow)
- Humboldt Research Fellow, Frankfurt University, Spring 2006 (while on leave at University of Illinois at Urbana-Champaign)
- Visiting Researcher, Université de Provence, Marseille, September 2007
- Visiting Researcher for the MSRI special semester in Geometric Group Theory, October-November 2007
- Visiting Scholar, Université de Provence, Marseille, May-June 2008, June-July 2013
- Visiting Researcher, Max-Planck Institute, Bonn, June 2009
- Visiting Researcher, Max-Planck Institute, Bonn, Fall 2010

- Ada Peluso Visiting Professor, CUNY Hunter College, Spring 2017
- Adjunct Professor, Department of Mathematics, University of Illinois at Urbana-Champaign, August 2018 – present

D. Honors and Recognition

- Alfred P. Sloan Foundation Doctoral Dissertation Fellowship, 1994-95
- NATO Science Fellowship, National Science and Research Council of Canada, 1996-1997 (awarded but declined)
- Lady Davis Post-Doctoral Fellowship, Hebrew University of Jerusalem, 1997-1998
- University of Illinois at Urbana-Champaign Center for Advanced Study Beckman Fellow, 2004-05
- Humboldt Foundation Research Fellowship, Spring 2006
- AMS Invited Address, AMS meeting at Courant Institute, New York, March 15-16, 2008
- University of Illinois at Urbana-Champaign Center for Advanced Study Associate, 2012-13 academic year
- Fellow of the American Mathematical Society (inaugural class), 2012 - present

E. Grants Received since 2000

- U.S.-Israel Binational Science Foundation Research Grant #1999298; 2000-2002
- University of Illinois at Urbana-Champaign Research Board Research Grant; 2000-2001
- University of Illinois at Urbana-Champaign Research Board Research Grant; 2001-2002
- University of Illinois at Urbana-Champaign Research Board Research Grant; 2002-2003
- University of Illinois at Urbana-Champaign Research Board Research Grant; 2003-2004
- National Science Foundation Research Grant (co-PI), DMS#0404991; 2004-2007
- University of Illinois at Urbana-Champaign Research Board Research Grant; 2004-2005
- National Security Agency Research Grant (co-PI), DMA#H98230-04-1-0115; 2004-2005
- University of Illinois at Urbana-Champaign Research Board Grant; 2005-06
- National Science Foundation individual research grant (PI), DMS-0603921; 2006-09
- University of Illinois at Urbana-Champaign Research Board Research Grant (PI); 2007-2008
- University of Illinois at Urbana-Champaign-CNRS Collaborative Agreement grant, 2007-08

- University of Illinois at Urbana-Champaign Research Board grant (PI), 2008-09
- National Science Foundation individual research grant (PI), DMS-0904200, 2009-2013
- University of Illinois at Urbana-Champaign Research Board grant (PI), award no. 10180, 2010-2011
- Simons Foundation Collaboration grant, 2013-2014
- University of Illinois at Urbana-Champaign Research Board grant (PI), award no. RB14001, 2013-2014
- National Science Foundation individual research grant (PI), DMS-1405146, 2014-2018
- University of Illinois at Urbana-Champaign Research Board Grant (PI), award no. RB15190, 2015-2016
- National Science Foundation conference grant “Conference on Groups and Computation” (co-PI), DMS-1719710 (2017-2018)
- National Science Foundation individual research grant (PI), DMS-1710868 (2017-2020); transferred to Hunter College as DMS-1905641 (2019-2022)
- PSC-CUNY Research Foundation grant, award # 62559-00-50, 2019-2022

F. Invited Lectures and Invited Conference Presentations since 2000

- AMS meeting at Columbia University, New York; November 2000
- “Geometric groups on the Gulf” Group Theory Conference, New Orleans; January 2001
- CUNY Geometric and Computational Group Theory Week, invited mini-course “Boundaries of hyperbolic groups”, April 2001
- AMS meeting, Hoboken, New Jersey; April 2001
- University of Chicago “Geometry and Topology” seminar; May 2001
- University of South Alabama colloquium, May 2001
- Montreal Low-dimensional Topology and Group Theory Conference, July 2001
- Albany Group Theory Conference; October 2001
- Wasatch Topology Conference, Park City, December 2001
- Geometric Groups on the Gulf Conference, New Orleans, March 2002
- Geometric topology and geometric group theory conference, Gainesville, Florida; March 2002
- International Conference on Modern Algebra, Vanderbilt University, May 2002

- Workshop "Elementary theory of free groups and related topics", McGill University, August 2002
- Geometric Groups on the Gulf Conference, Pensacola, November 2002
- Special joint session of American Mathematical Society and the Association of Symbolic Logic "On interactions between Logic, Group Theory and Computer Science", Baltimore, January 2003
- Topology and Geometric Group Theory Seminar, Cornell, March 2003
- AMS special session on Combinatorial Group Theory, New York, April 2003
- International Conference on Group Theory: combinatorial, geometric, and dynamical aspects of infinite groups, Gaeta, Italy, June 2003
- Albany Group Theory Conference, October 2003
- Geometric Groups on the Gulf Coast, Mobile, February 2004
- New York Group Theory seminar, February 2004
- AMS special session on asymptotic and probabilistic group theory, Athens, Ohio, March 2004
- CUNY Graduate Center Algebra and Cryptography Seminar, May 2004
- International conference on Geometric Group Theory, Random Walks and Harmonic Analysis, Cortona, Italy, June 2004
- Frankfurt University colloquium, July 2004
- Bonn University Differential Geometry Seminar, July 2004
- Bonn University Topology Seminar, August 2004
- McGill University Geometric Group Theory Seminar, September 2004
- Carleton University Algebra Seminar, September 2004
- University of Chicago Geometry and Topology Seminar, October 2004
- University of Illinois at Chicago Topology seminar, October 2004
- Special session of the American Mathematical Society meeting "Topological aspects of group theory" dedicated to Ross Geoghegan 60s birthday, Nashville, October 2004
- Centre de Recerca Matemàtica at Barcelona seminar, November 2004
- University of Toulouse (France) Topology Seminar, November 2004
- Canadian Mathematical Society meeting, Special Session on Interactions between algebra and computer science, December 2004

- Columbia University Geometry and Topology seminar, March 2005
- Special session of the American Mathematical Society meeting “Curvature in group theory and combinatorics”, Santa Barbara, April 2005
- American Institute of Mathematics Workshop ”Boundaries in Geometric Group Theory”, Palo Alto, June 2005
- Conference “Asymptotic and probabilistic methods in geometric group theory”, Geneva, Switzerland, June 2005
- Geometry Seminar, University of Münster, Germany, July 2005
- Frankfurt University Colloquium, July 2005
- AMS Special session on geometric methods in group theory, Lincoln, October 2005
- Conference “Geometric and Probabilistic Methods in Group Theory” (main talk), Texas A&M, November 2005
- Princeton University Geometry and Topology Seminar, November 2005
- University of Geneva, Group Theory Seminar, February 2006
- University of Marsielle-III, Group Theory and Dynamics Seminars, March 2006
- Bremen International University Colloquium, March 2006
- Oberwolfach Institute, Germany, Geometric Group Theory Workshop, April 2006
- CRM-Barcelona, Geometric Group Theory Workshop, May 2006
- Dortmund University, Group Theory Seminar, June 2006
- Max Plank Institue, Geometric Group Theory and geometric Topology Workshop, Bonn, July 2006
- Conference “Geometric and Asymptotic Group Theory”, Manresa (Barcelona), Spain, August-September 2006 (main speaker)
- AMS Special Session on Geometric and Topological methods in Group Theory, New Orleans, January 2007
- Geometric Groups on the Gulf Coast Conference, New Orleans, January 2007
- Special week on the Outer Space and the Teichmüller space (main talk), Marseille, France, February 2007
- 6-th annual Bloomington Geometry Workshop (main talk), Indiana University, April 2007
- Cornell Topology Festival (main talk), Cornell University, May 2007.

- August 18-22, 2007: AIM Workshop on Generic Case Complexity, Palo Alto
- August 27 - August 31, 2007: Conference “Combinatorial and Geometric Group Theory with Applications”, Dortmund, Germany. (An invited main talk).
- September 2007, “Words” workshop at CIRM, Luminy, Marseille
- September 2007: two seminar talks at Universite de Provence, Marseille, France.
- October 23-November 9, 2007: visitor at the Mathematical Sciences Research Institute (MSRI), Berkeley; seminar talk
- December 14-17, 2007: Fields Institute Workshop in Asymptotic Group Theory and Cryptography, Ottawa. (invited hour talk)
- March 14-16, 2008: **AMS Invited Address** at the AMS meeting at the Courant Institute, New York
- March 28-30, 2008: Special Session in Geometric Group Theory, AMS meeting in Baton Rouge, LA
- May 26-30, 2008: Conference “Discrete Groups and Geometric Structures” Kortrijk, Belgium
- June 2008: University of Geneva Geometry and Topology Seminar.
- June 2008: A talk in the Group Theory seminar at the University of Marseille-I.
- June 23-27: Workshop “Topics in Geometric Group Theory: Random groups and random graphs”, Bedlewo, Poland (two invited talks).
- December 2008: Wasatch Topology Conference, Salt Lake City (main talk)
- January 2009: International conference “Dynamics of $Aut(F_n)$ actions on representation varieties”, Sde-Boker, Israel (main talk)
- April 2009: SUNY Binghamton Math Colloquium
- June 1-5, 2009: International Geometry and Topology Conference, Münster, Germany (plenary talk)
- June 2009, Max Planck Institute in Bonn, Topology Seminar
- June 2009, Dortmund University, Group Theory Seminar
- October 2009: Clay Institute Workshop on Outer Space, main talk
- March 2010: Group Theory Workshop at Diablerets, Switzerland; main talk
- September 2010: University of Marseille -III, Geometry Seminar
- University of Kiel colloquium, October 2010

- University of Goettingen colloquium, November 2010
- Max Planck Institute of Mathematics (Bonn), Differential Geometry Oberseminar, November 2010
- Max Planck Institute of Mathematics (Bonn), Topology Seminar, December 2010
- December 2010: Karlsruhe Geometric Group Theory Seminar
- April 2011, Cornell Topology Seminar
- October 2011, Special Session on Geometric Group Theory, AMS meeting, Lincoln, Nebraska
- November 2011, AIM “Square” Workshop on $Out(F_n)$, American Institute of Mathematics
- December 2011, Wasatch Topology Conference, Park City, Utah
- March 2012, New York Group Theory Seminar
- April 2012, 11-th Annual Bloomington Geometry Workshop, Indiana University
- Workshop ”Geometric Group Theory, Hyperbolic Dynamics and Symplectic Geometry”, Oberwolfach, July 2012
- Invited mini-course ”Geodesic currents and Outer space”, Duesseldorff, Germany, July 2012
- Conference ”Conference Geometric and Combinatorial Group Theory with Applications (GAGTA6)”, Duesseldorff, Germany, July 25-August 3, 2012
- October 2012, 70th Annual Algebra Day (plenary talk), Ottawa
- October 2012, University of Illinois at Urbana-Champaign Math 499 talk
- November 2012, Conference “Automorphisms of free groups” (main talk), CRM, Barcelona
- December, 2012, Wasatch Topology Conference (main talk), Salt Lake City, Utah
- February 2013, University of Michigan mathematics colloquium (cancelled for medical reasons)
- March 2013, University of Texas - Austin, Group Actions and Dynamics Seminar
- June 2013: Invited mini-course ”Geodesic currents on free groups”, Marseille, France, as a part of the special program ”Geometry of Outer Space”
- September 2013, AIM “Square” Workshop on $Out(F_n)$, American Institute of Mathematics
- December 2013, University of Illinois at Urbana-Champaign Group Theory Seminar
- May 2014, Workshop on automorphisms of free groups, Marseille

- June 2014, Topological Methods in Group Theory (a conference in honor of Ross Geoghegan's 70th birthday), Columbus, Ohio; plenary talk
- October 2014, Princeton University Topology Seminar
- October 2014, Memorial Seminar for Gilbert Baumslag, CUNY Graduate Center, New York
- December 2014, Geometric and Combinatorial Group Theory (conference in honor of Eliyahu Rips), Hebrew University, Jerusalem; plenary talk
- March 2015, University of Toronto Geometry and Topology Seminar
- May 2015, Workshop on Mapping Class Groups and $Out(F_N)$, University of Texas, Austin (invited hour talk)
- June 2015, International Conference on Boundaries and Ergodic Geometry, University of Notre Dame (invited hour talk)
- July 2015, Conference "Impact of Geometric Group Theory", CIRM, Marseille, France (invited hour talk)
- October 2015, AIM "Square" Workshop on $Out(F_n)$, American Institute of Mathematics
- December 2015, conference "Geometry of moduli space for low dimensional manifolds" at RIMS, Kyoto University (two one-hour talks)
- January 2016, UCSB Topology Seminar
- January 2016, McGill University Geometric Group Theory Seminar
- Bill Perry Lectures in Mathematics, Eastern Illinois University, March 2016
- "Geometric and Asymptotic Group Theory with Applications (GAGTA-10)", Stevens Institute of Technology, June 2016
- UC Berkeley Math Colloquium, October 2016
- UC Santa Barbara Topology Seminar, October 2016
- MSRI Member Seminar, October 2016
- MSRI working seminar on $Out(F_n)$ -complexes, October 2016
- Hunter College of CUNY, colloquium, February 2017
- New York Group Theory Seminar, February 2017
- Rutgers University Algebra Seminar, March 2017
- CUNY Geometry and Topology Seminar, March 2017
- Redbud Topology Conference, Arkansas, April 2017; main talk

- Conference “Geometric and probabilistic properties of infinite groups”, Lille, France, June 2017; main talk
- Conference “Groups and Computation: Interactions between Geometric Group Theory, Computability, and Computer Science”, Stevens Institute of Technology, June 2017; special presentation on mathematics Wikipedia editing
- “Renaissance Weekend”, Monterey, California; two general audience mathematical talks
- Conference “Moduli Spaces”, Ventotene, Italy, September 2017
- Joint AMS-MAA Meeting, San Diego, January, 2018 (45 minute talk)
- AMS Meeting at Vanderbilt University, Nashville, April 2018 (45 minute talk)
- Vanderbilt University, Math Colloquium, October 2018
- Conference “Elementary Theory of Groups and Group Rings and Related Topics”, New York City and Fairfield University, November 2018
- Temple University Colloquium, February 2019
- Schloss Dagstuhl Workshop - “Algorithmic Problems in Group Theory”, March 2019
- Conference “Boundaries of Random Walks and Applications”, Bowdoin College, June 2019
- CUNY Graduate Center Colloquium, October 2019
- McGill University Geometric Group Theory Seminar, March 11, 2020
- Conference “Geometric Measure Theory and Geometric Analysis in Moscow”, Moscow State University and Steklov Institute, September 15, 2020 (via Zoom)
- North British Geometric Group Theory Workshop, November 11, 2020 (via Zoom)
- Queens University colloquium, November 2021
- Penn State Geometry and Topology Seminar, April 2022

F. Offices Held in Professional Societies

- Chair, Committee on Publications of the American Mathematical Society 02/01/2018-01/31/2019
- Chair, AMS Committee on the Human Rights of Mathematicians, 02/01/2020-01/31/2021
- Coalition Council member, AAAS Science and Human Rights Coalition, American Association for the Advancement of Science, 02/01/2019-01/31/2021
- Steering Committee member, AAAS Science and Human Rights Coalition, American Association for the Advancement of Science, 11/01/2020-10/31/2023

G. Editorships of Journals or Other Learned Publications

- Editorial Board, LMS Journal of Computation and Mathematics; 2010 – 2015

II. Publications and Creative Works

A. Doctoral Thesis Title

- *Quasiconvex subgroups of one-relator groups with torsion*, (Gilbert Baumslag, advisor) City University of New York Graduate Center, 1996

B. Books

- Frederique Bassino, Ilya Kapovich, Markus Lohrey, Alexei Miasnikov, Cyril Nicaud, Andrey Nikolaev, Igor Rivin, Vladimir Shpilrain, Alexander Ushakov, Pascal Weil, *Complexity and Randomness in Group Theory. GAGTA BOOK 1*, De Gruyter, 2020; ISBN 9783110667028

C. Articles in Journals (in print or accepted)

1. Ilya Kapovich, *A non-quasiconvex subgroup of a hyperbolic group with an exotic limit set*, New York Journal of Mathematics (electronic) **1** (1994/95), 184–195
2. Ilya Kapovich, *Small cancellation groups and translation numbers*, Transactions of the American Mathematical Society **349** (1997), no. 5, 1851–1875
3. Ilya Kapovich and Hamish Short, *G Grrenberg’s Theorem for quasiconvex subgroups of hyperbolic groups*, Canadian Journal of Mathematics **48** (1996), no. 6, 1224–1244
4. Ilya Kapovich, *Amalgamated products and the Howson property*, Canadian Mathematical Bulletin **40** (1997), no. 3, 330–340
5. Ilya Kapovich, *Quasiconvexity and Amalgams*, International Journal of Algebra and Computation **7** (1997), no. 6, 771–811
6. Ilya Kapovich, *One-relator groups and the Howson property*, Communications in Algebra **27** (1999), no. 3, 1057–1072
7. Ilya Kapovich and Richard Weidmann, *On the structure of two-generator hyperbolic groups*, Mathematische Zeitschrift **231** (1999), no. 4, 783–801
8. Ilya Kapovich and Richard Weidmann, *Two-generator groups acting on trees*, Archive der Mathematik (Basel) **73** (1999), no. 3, 172–181
9. Ilya Kapovich, *A non-quasiconvexity embedding theorem for word-hyperbolic groups*, Mathematical Proceedings of the Cambridge Philosophical Society **127** (1999), no. 3, 461–486
10. Ilya Kapovich and Daniel Wise, *Equivalence of some residual properties for word-hyperbolic groups*, Journal of Algebra **223** (2000), no. 2, 562–583

11. Ilya Kapovich, *Mapping tori of endomorphisms of free groups*, Communications in Algebra **28** (2000), no. 6, 2895–2917
12. Ilya Kapovich and Daniel Wise, *Failure of Co-Hopf property for subgroups of hyperbolic groups*, Israel Journal of Mathematics **122** (2001), 125–147
13. Ilya Kapovich, *The Combination Theorem and Quasiconvexity*, International Journal of Algebra and Computation **11** (2001), no. 2, 185–216
14. Ilya Kapovich *Subgroup properties of residually free groups*, Transactions of the American Mathematical Society **354** (2002), no. 1, 335–362; Erratum: **355** (2003), no. 3, 1295–1296
15. Ilya Kapovich and Alexei Myasnikov, *Stallings foldings and the subgroup structure of free groups*, Journal of Algebra **248** (2002), no. 2, 608–668
16. Ilya Kapovich, *A note on the Poenaru condition*, Journal of Group Theory **5** (2002), no. 1, 119–127
17. Ilya Kapovich, *The non-amenability of Schreier graphs for infinite index quasiconvex subgroups of hyperbolic groups*, l’Enseignement Mathematique **48** (2002), no. 3-4, 359–375
18. Ilya Kapovich, *The Frattini subgroup for subgroups of hyperbolic groups*, Journal of Group Theory **6** (2003), no. 1, 115–126
19. Ilya Kapovich and Richard Weidmann, *Nielsen methods and subgroups of hyperbolic groups*, Geometriae Dedicata **98** (2003), no. 1, 95–121
20. Ilya Kapovich, Alexei Myasnikov, Paul Schupp and Vladimir Shpilrain, *Generic-case complexity, decision problems in group theory and random walks*, Journal of Algebra **264** (2003), no. 2, 665–694
21. Ilya Kapovich and Paul Schupp, *Bounded rank subgroups of Coxeter groups, Artin groups and one-relator groups with torsion*, Proceedings of the London Mathematical Society **88** (2004), no. 1, 89–113
22. Ilya Kapovich and Richard Weidmann, *Freely indecomposable groups isometrically acting on hyperbolic spaces*, International Journal of Algebra and Computation **14** (2004), no. 2, 115–171
23. Ilya Kapovich and Paul Schupp, *Relative hyperbolicity and Artin groups*, Geometriae Dedicata **107** (2004), no. 1, 153–167
24. Ilya Kapovich, Alexei Myasnikov, Paul Schupp and Vladimir Shpilrain, *Average-case complexity and decision problems in group theory*, Advances in Mathematics **190** (2005), no. 2, 343–359
25. Ilya Kapovich and Paul Schupp, *Genericity, the Arzhantseva-Ol’shanskii Method and the Isomorphism Problem for One-Relator Groups*, Mathematische Annalen **331** (2005), no. 1, 1–19

26. Ilya Kapovich, Richard Weidmann and Alexei Myasnikov, *Foldings, graphs of groups and the membership problem*, International Journal of Algebra and Computation **15** (2005), no. 1, 95–128
27. Ilya Kapovich and Richard Weidmann, *Keinian groups and the rank problem*, Geometry and Topology **9** (2005), 375–402
28. Ilya Kapovich and Richard Weidmann, *Acylindrical accessibility for groups acting on \mathbb{R} -trees*, Mathematische Zeitschrift **249** (2005), no. 4, 773–782
29. Ilya Kapovich, Paul Schupp and Vladimir Shpilrain, *Generic properties of Whitehead’s Algorithm and isomorphism rigidity of random one-relator groups*, Pacific Journal of Mathematics, **223** (2006), no. 1, 113–140
30. Ilya Kapovich, *The frequency space of a free group*, International Journal of Algebra and Computation (special Grigorchuk’s 50’s birthday issue), **15** (2005), no. 5-6, 939–969
31. Ilya Kapovich and Paul Schupp, *Delzant’s T -invariant, Kolmogorov complexity and one-relator groups*, Commentarii Mathematici Helvetici **80** (2005), no. 4, 911–933
32. Vadim Kaimanovich, Ilya Kapovich and Paul Schupp, *The Subadditive Ergodic Theorem and generic stretching factors of free group automorphisms*, Israel Journal of Mathematics **157** (2007), 1–46
33. Ilya Kapovich, Gilbert Levitt, Paul Schupp and Vladimir Shpilrain, *Translation equivalence in free groups*, Transactions of the American Mathematical Society **359** (2007), no. 4, 1527–1546
34. Ilya Kapovich and Tatiana Nagnibeda, *The Patterson-Sullivan embedding and minimal volume entropy for outer space*, Geometric and Functional Analysis, **17** (2007), no 4, 1201–1236
35. Ilya Kapovich, *Clusters, currents and Whitehead’s algorithm*, Experimental Mathematics **16** (2007), no. 1, 67–76
36. Ilya Kapovich, Igor Rivin, Paul Schupp and Vladimir Shpilrain, *Densities in free groups and \mathbb{Z}^k , Visible Points and Test Elements*, Math. Research Letters **14** (2007), no. 2, 263–284
37. Ilya Kapovich and Martin Lustig, *The actions of $Out(F_k)$ on the boundary of Outer space and on the space of currents: minimal sets and equivariant incompatibility*, Ergodic Theory and Dynamical Systems, **27** (2007), no. 3, 827–847
38. Ilya Kapovich and Paul Schupp, *On group-theoretic models of randomness and genericity*, Groups, Geometry and Dynamics **2** (2008), no. 3, 383–404
39. Ilya Kapovich and Igor Rivin, *On the absence of McShane-type identities for the outer space*. Journal of Algebra **320** (2008), no. 10, 3659–3670

40. Ilya Kapovich and Paul Schupp, *Random quotients of the modular group are rigid and essentially incompressible*, Journal für die Reine und Angewandte Mathematik” (Crelle’s Journal), **628** (2009), 91–119
41. Ilya Kapovich and Martin Lustig, *Geometric Intersection Number and analogues of the Curve Complex for free groups*, Geometry and Topology **13** (2009), 1805–1833
42. Ilya Kapovich and Martin Lustig, *Intersection form, laminations and currents on free groups*, Geometric and Functional Analysis, **19** (2010), no. 5, 1426–1467
43. Ilya Kapovich and Martin Lustig, *Domains of proper discontinuity on the boundary of Outer space*, Illinois Journal of Mathematics **54** (2010), no. 1, special issue dedicated to the mathematical contributions of Paul Schupp
44. Ilya Kapovich, *On mathematical contributions of Paul E. Schupp*, Illinois Journal of Mathematics **54** (2010), no. 1, special issue dedicated to the mathematical contributions of Paul Schupp
45. Ilya Kapovich and Martin Lustig, *Ping-pong and Outer space*, Journal of Topology and Analysis **2** (2010), 173–201
46. Ilya Kapovich and Martin Lustig, *Stabilizers of \mathbb{R} -trees with free isometric actions of F_N* , Journal of Group Theory, **14** (2011), no. 5, pp. 673–694
47. Ilya Kapovich, *Random length-spectrum rigidity for free groups*, Proceeding of the American Mathematical Society, **140** (2012), no. 5, 1549–1560
48. Mathieu Carette, Stefano Francaviglia, Ilya Kapovich and Armando Martino, *Spectral rigidity of automorphic orbits in free groups*, Algebraic and Geometric Topology **12** (2012), 1457–1486; *Corrigendum to ”Spectral rigidity of automorphic orbits in free groups”*, Algebraic and Geometric Topology **14** (2014), no. 5, pp. 3081–3088
49. Ilya Kapovich and Anton Lukyanenko, *Quasi-isometric co-Hopficity of non-uniform lattices in rank-one semi-simple Lie groups*, Conformal Geometry and Dynamics, **16** (2012), 269–282
50. Ilya Kapovich and Tatiana Nagnibeda, *Subset currents on free groups*, Geometriae Dedicata **166** (2013), 307–348
51. Ilya Kapovich, *Algorithmic detectability of iwip automorphisms*, Bulletin of the London Mathematical Society **46** (2014), no. 2, pp. 279–290
52. Ilya Kapovich and Kasra Rafi, *On hyperbolicity of free splitting and free factor complexes*, Groups, Geometry and Dynamics, **8** (2014), no. 2, 391–414
53. Ilya Kapovich and Martin Lustig, *Invariant laminations for irreducible automorphisms of free groups*, Quarterly Journal of Mathematics **65** (2014), no. 4, pp. 1241–1275
54. Spencer Dowdall, Ilya Kapovich, and Christopher Leininger, *Unbounded asymmetry of stretch factors*, Comptes Rendus Mathematique, **352** (2014), no. 11, 885–887

55. Ilya Kapovich and Martin Lustig, *Cannon-Thurston fibers for iwip automorphisms of F_N* , Journal of the London Mathematical Society, **91** (2015), no. 1, 203–224
56. Ilya Kapovich and Catherine Pfaff, *A train track directed random walk on $Out(F_r)$* , International Journal of Algebra and Computation, **25** (2015), no. 5, pp. 745–798
57. Ilya Kapovich and Martin Lustig, *Patterson-Sullivan currents, generic stretching factors and the asymmetric Lipschitz metric for Outer space*, Pacific Journal of Mathematics, **277** (2015), no. 2, 371–398
58. Spencer Dowdall, Ilya Kapovich, and Christopher Leininger, *Dynamics on free-by-cyclic groups*, Geometry and Topology, **19** (2015), 2801–2899
59. Ilya Kapovich and Richard Weidmann, *Nielsen equivalence in a class of random groups*, Journal of Topology, **9** (2016), no. 2, 502–534
60. Woojin Jeon, Ilya Kapovich, Christopher Leininger, Ken’ichi Ohshika, *Conical limit points and the Cannon-Thurston map*, Conformal Geometry and Dynamics **20** (2016), 58–80
61. Ilya Kapovich, *On purely loxodromic actions*, Monatshefte für Mathematik **181** (2016), no. 1, 89–101
62. Spencer Dowdall, Ilya Kapovich and Samuel J. Taylor, *Cannon-Thurston maps for hyperbolic free group extensions*, Israel Journal of Mathematics **216** (2016), no. 2, 753–797
63. Ilya Kapovich, *An integral weight realization theorem for subset currents on free groups*, Topology Proceedings **50** (2017), 213–236
64. Spencer Dowdall, Ilya Kapovich, and Christopher Leininger, *McMullen polynomials and Lipschitz flows for free-by-cyclic groups*, Journal of the European Mathematical Society (JEMS) **19** (2017), no. 11, 3253–3353
65. Spencer Dowdall, Ilya Kapovich, and Christopher Leininger, *Endomorphisms, train track maps, and fully irreducible monodromies*, Groups, Geometry and Dynamics **11** (2017), no. 4, 1179–1200
66. Michael Hull and Ilya Kapovich, *Counting conjugacy classes in $Out(F_N)$* , Bulletin of Australian Mathematical Society **97** (2018), no 3, 412–421
67. Ilya Kapovich and Mark Bell, *Detecting fully irreducible automorphisms: a polynomial time algorithm*, Experimental Mathematics **28** (2019), no. 1, 24–38
68. Neha Gupta and Ilya Kapovich, *The primitivity index function for a free group, and untangling closed curves on hyperbolic surfaces. With an appendix by Khalid Bou-Rabee*, Mathematical Proceedings of the Cambridge Philosophical Society **166** (2019), no. 1, 83–121
69. Yael Algom-Kfir, Ilya Kapovich, Catherine Pfaff, *Stable Strata of Geodesics in Outer Space*, International Mathematics Research Notices (IMRN), (2019) 2019, no. 14, 4549–4578

70. Ilya Kapovich, Joseph Maher, Catherine Pfaff, and Samuel J. Taylor, *Random outer automorphisms of free groups: Attracting trees and their singularity structures*, Trans. Amer. Math. Soc. **375** (2022), no. 1, 525–557.
71. Ilya Kapovich, Joseph Maher, Catherine Pfaff, and Samuel J. Taylor, *Random trees in the boundary of outer space*, Geom. Topol. **26** (2022), no. 1, 127–162
72. Ilya Kapovich, *Primitivity rank for random elements in free groups*, Journal of Group Theory **25** (2022), no. 5, 823–835.

C. Bulletins, Reports, or Conference Proceedings (in print or accepted)

1. Ilya Kapovich, *Detecting quasiconvexity: algorithmic aspects*, in “Geometric and computational perspectives on infinite groups”, 91–99, DIMACS Series in Discrete Mathematics and Theoretical Computer Science, **25**, American Mathematical Society, Providence, RI, 1996
2. Ilya Kapovich and Nadia Benakli, *Boundaries of hyperbolic groups*, in “Combinatorial and Geometric Group Theory” (R.Gilman, et al, Editors), Contemporary Mathematics **296**, pp. 39-94, American Mathematical Society, Providence, RI, 2002
3. Ilya Kapovich, *Currents on free groups*, Proceedings of the special session on Topological Methods in Group Theory dedicated to Ross Geoghegan’s 60s birthday, AMS meeting in Nashville, TN (October 2004), American Mathematical Society, Contemporary Mathematics series, **394**, 2006, 149–176
4. Ilya Kapovich and Tatiana Nagnibeda, *Geometric entropy of geodesic currents on free groups*, Dynamical Numbers: Interplay Between Dynamical Systems and Number Theory, Contemporary Mathematics series, American Mathematical Society, 2010, pp. 149-176
5. Ilya Kapovich, *Musings on generic-case complexity*, Elementary Theory of Groups and Group Rings, and Related Topics, De Gruyter Proceedings in Mathematics, 2020, pp. 135–148

D. Preprints

1. Ilya Kapovich, *Generic-case complexity of Whitehead’s algorithm, revisited*, preprint, arXiv:1903.07040
2. Ilya Kapovich and Zachary Simon, *Primitivity index bounds in free groups, and the second Chebyshev function*, preprint, arXiv:2021.13655

E. Non-mathematical writing

1. Ilya Kapovich, *The dangers of the “author pays” model in mathematical publishing*, Notices of the American Mathematical Society, **58** (2011), no. 9, 1294-1295
2. Ilya Kapovich, A letter about author fees for research publications, Nature, vol. 489 (2012), Sept 20, p. 367

3. Ilya Kapovich, *Standards for publishing errata*, Notices of the American Mathematical Society, **59** (2012), no. 10, p. 1384
4. Ilya Kapovich *Harvard-style open access policies: a legal and ethical quagmire*, an essay, June 2016; <http://www.math.University of Illinois at Urbana-Champaign.edu/~kapovich/op.pdf>
5. Ilya Kapovich, *Open access policies: A legal quagmire*, Science, Vol. 353, Issue 6301, pp. 758–759, Aug 19, 2016
6. Ilya Kapovich, *AMS and ICM 2022*, Notices of the American Mathematical Society, May 2021 issue, to appear

III. Service and other activities

1. Administrator of the MAGNUS Electronic Preprint Archive in Group Theory, City College of CUNY, 1994-1996
2. Teaching an experimental College Calculus course at the Highland Park High School, Highland Park, New Jersey, 1999.
3. Supervision of PhD students (all at University of Illinois at Urbana-Champaign): Lucas Sabalka (PhD May 2006); Brent Solie (PhD May 2012), Gregory Kelsey (PhD May 2012), Patrick Reynolds (PhD May 2012), Brian Ray (PhD May 2014); current students: Caglar Uyanik, Neha Gupta, Elizabeth Field, Heejoung Kim
4. Postgraduate-Scholar Advisees (all at University of Illinois at Urbana-Champaign) : Peter Brinkmann, Charles Patrick Bahls, Dan Farley, John Mackay, Lev Glebsky, Mathieu Carette, Piotr Przytycki, Funda Gultepe
5. Lead organizer of the University of Illinois at Urbana-Champaign Group Theory Seminar, Fall 2000-Spring 2014
6. Co-organizer of the University of Illinois at Urbana-Champaign "Geometry, Group and Dynamics/GEAR Seminar", Fall 2014-present
7. Co-organizer of the VIGRE RAP "Spaces of Non-positive Curvature", 2001-2003
8. Participating as an advisor in the "Geometric Group Theory" REUs at University of Illinois at Urbana-Champaign, 2003-2008
9. University of Illinois at Urbana-Champaign Faculty Senate, 2006-2008, 2008-2010
10. Refereeing over 80 mathematical articles for scholarly journals
11. Refereeing grants proposals for the National Science Foundation, Swiss National Science Foundation, University of Illinois at Urbana-Champaign Research Board and CUNY Research Foundation.
12. Writing over 40 published reviews for the Mathematical Reviews, a reviewing publication of the American Mathematical Society

13. Chair, local organizing committee, AMS Meeting at University of Illinois at Urbana-Champaign in March 27-29, 2009 (this was the largest AMS sectional meeting ever in terms of the number of registered participants).
14. Guest editor, special Paul Schupp issue of the Illinois Journal of Mathematics (published in Spring 2010)
15. Editorial Adviser, LMS Journal of Computation and Mathematics; 2010 - 2015
16. Guest editor, special Wolfgang Haken issue of the Illinois Journal of Mathematics (published in July 2017)
17. Member of the American Mathematical Society Committee on Publications, 2016-2019; Chair 2017-2018
18. Lead organizer of the Four Color Theorem Fest, University of Illinois at Urbana-Champaign, November 2017
19. Setting up and maintaining the Geometric Group Theory mailing list geom-group-theory@lists.illinois.edu for announcements about events and positions of interest to the geometric group theory community around the world
20. Co-organizer and webmaster co-organizer of the regional Geometry, Groups and Dynamics workshops, Fall 20014 –
21. Member of the Steering Committee for the GAGTA (Geometric and Asymptotic Group Theory with Applications) conference series; 2017–2021
22. Member of Committee on Human Rights of Mathematicians, American Mathematical Society, February 1, 2018 through January 31, 2021; Chair of the committee, February 1, 2020-January 31, 2021
23. AMS Representative to the AAAS Coalition on Science and Human Rights, February 1, 2018 through January 31, 2021
24. Co-organizer and webmaster of the New York Group Theory Seminar, grouptheory.org, 2018 – current

IV. Supervision of PhD and Master's students

1. Lucas Sabalka, PhD in Mathematics, 2006, University of Illinois at Urbana-Champaign
2. Gregory Kelsey, PhD in Mathematics, 2011, University of Illinois at Urbana-Champaign
3. Patrick Reynolds, PhD in Mathematics, 2011, University of Illinois at Urbana-Champaign
4. Brent Solie, PhD in Mathematics, 2011, University of Illinois at Urbana-Champaign
5. Brian Ray, PhD in Mathematics, 2014, University of Illinois at Urbana-Champaign

6. Neha Gupta, PhD in Mathematics, 2016, University of Illinois at Urbana-Champaign
7. Caglar Uyanik, PhD in Mathematics, 2017, University of Illinois at Urbana-Champaign;
(jointly supervised by myself and Chris Leininger)
8. Elizabeth Field, PhD in Mathematics, 2020, University of Illinois at Urbana-Champaign
9. Heejoung Kim, current, University of Illinois at Urbana-Champaign
10. Zachary Simon, MSc in Mathematics, 2020, City College of the City University of New York
11. Weiyang Lin, PhD student in Mathematics (current), CUNY Graduate Center