

MIKHAIL V. BELOLIPETSKY
LIST OF PUBLICATIONS

Journal Papers

- [1] *Estimates for the number of automorphisms of a Riemann surface*, Sib. Math. J. **38** (1997), no. 5, 860–867.
- [2] *On Wiman bound for arithmetic Riemann surfaces*, with Grzegorz Gromadzki, Glasgow Math. J. **45** (2003), 173–177.
- [3] *Cells and representations of right-angled Coxeter groups*, Selecta Math., N. S. **10** (2004), 325–339.
- [4] *On volumes of arithmetic quotients of $SO(1, n)$* , Ann. Scuola Norm. Sup. Pisa Cl. Sci. (5) **3** (2004), 749–770.
- [5] *A bound for the number of automorphisms of an arithmetic Riemann surface*, with Gareth A. Jones, Math. Proc. Camb. Phil. Soc. **138** (2005), 289–299.
- [6] *Automorphism groups of Riemann surfaces of genus $p + 1$, where p is prime*, with Gareth A. Jones, Glasgow Math. J. **47** (2005), 379–393.
- [7] *The mass of unimodular lattices*, with Wee Teck Gan, J. Number Theory **114** (2005), 221–237.
- [8] *Finite groups and hyperbolic manifolds*, with Alex Lubotzky, Invent. Math. **162** (2005), 459–472.
- [9] *Counting maximal arithmetic subgroups* (with an appendix by Jordan Ellenberg and Akshay Venkatesh), Duke Math. J. **140** (2007), no. 1, 1–33.
- [10] *Addendum to: On volumes of arithmetic quotients of $SO(1, n)$* , Ann. Scuola Norm. Sup. Pisa Cl. Sci. (5) **6** (2007), 263–268.
- [11] *Finiteness of arithmetic hyperbolic reflection groups*, with Ian Agol, Peter Storm and Kevin Whyte, Groups Geom. Dyn. **2** (2008), 481–498.
- [12] *On fields of definition of arithmetic Kleinian reflection groups*, Proc. Amer. Math. Soc. **137** (2009), 1035–1038.
- [13] *Counting arithmetic lattices and surfaces*, with Tsachik Gelander, Alex Lubotzky and Aner Shalev, Ann. of Math. (2) **172** (2010), 2197–2221.
- [14] *Systoles of hyperbolic manifolds*, with Scott Thomson, Algebr. Geom. Topol. **11** (2011), 1455–1469.
- [15] *Finiteness theorems for congruence reflection groups*, Transform. Groups **16** (2011), 939–954.
- [16] *Manifolds counting and class field towers*, with Alex Lubotzky, Adv. Math. **229** (2012), 3123–3146.
- [17] *On volumes of arithmetic quotients of $PO(n, 1)^\circ$, n odd*, with Vincent Emery, Proc. Lond. Math. Soc. (3), **105** (2012), 541–570.
- [18] *On 2-systoles of hyperbolic 3-manifolds*, Geom. Funct. Anal., **23** (2013), 813–827.
- [19] *Cells in Coxeter groups, I*, with Paul Gunnells, J. Algebra, **385** (2013), 134–144.
- [20] *Reflective and quasi-reflective Bianchi groups*, with John Mcleod, Transform. Groups, **18** (2013), 971–994.
- [21] *On fields of definition of arithmetic Kleinian reflection groups. II*, with Ben Linowitz, Int. Math. Res. Notices (2014), Vol. 2014, 2559–2571.
- [22] *Kazhdan–Lusztig cells in planar hyperbolic Coxeter groups and automata*, with Paul Gunnells and Richard Scott, Internat. J. Algebra Comput. **24** (2014), no. 5, 757–772.
- [23] *Hyperbolic manifolds of small volume*, with Vincent Emery, Doc. Math., **19** (2014) 801–814.

- [24] *Kazhdan–Lusztig cells in infinite Coxeter groups*, with Paul Gunnells, *J. Gen. Lie Theory Appl.*, **9** (2015), no. S1, Art. ID S1-002, 4 pp.
- [25] *Arithmetic hyperbolic reflection groups*, *Bull. Amer. Math. Soc. (N.S.)* **53** (2016), no. 3, 437–475.
- [26] *Counting isospectral manifolds*, with Benjamin Linowitz, *Adv. Math.* **321** (2017), 69–79.
- [27] *Counting non-uniform lattices*, with Alex Lubotzky, *Israel J. Math.* **232** (2019), 201–229.
- [28] *Free subgroups of 3-manifold groups*, with Cayo Dória, *Groups Geom. Dyn.* **14** (2020), 243–254.
- [29] *A bound for diameter of arithmetic hyperbolic orbifolds*, *Geom. Dedicata* **214** (2021), 295–302.
- [30] *How to see the eight Thurston geometries*, with Tiago Novello, Vinícius da Silva and Luiz Velho, *Ensaios Matemáticos*, **37** (2021), 101–151.
- [31] *Counting Salem numbers of arithmetic hyperbolic 3-orbifolds*, with Matilde Lalín, Plinio G. P. Murillo and Lola Thompson, *Bull. Braz. Math. Soc., New Series*, **53** (2022), 553–569 .
- [32] *Thickness of skeletons of arithmetic hyperbolic orbifolds*, with Hannah Alpert, *J. Topol. Anal.*, **14** (2022), 749–765.
- [33] *Lower bounds for volumes and orthospectra of hyperbolic manifolds with geodesic boundary*, with Martin Bridgeman, *Algebr. Geom. Topol.*, **22** (2022), 1255–1272.
- [34] *Effective bounds for Vinberg’s algorithm for arithmetic hyperbolic lattices*, with Michael Kapovich, *São Paulo J. Math. Sci.*, online first (2023), 11 pp.

Conference Proceedings

- [35] *Some estimates for the number of automorphisms of Riemann surfaces*, Proceedings of XXXIV International Scientific Students Conference, Novosibirsk 1996, p. 9.
- [36] *Arbeitstagung 2003 – Volumes of arithmetic hyperbolic n -manifolds*, Publications of the MPIM in Bonn, report: MPIM2003–60n.
- [37] *On volumes of arithmetic locally symmetric spaces*, from: “Locally Symmetric Spaces” (Organisers: Jürgen Rohlfs and Birgit Speh), Oberwolfach Reports, 2003.
- [38] *Arbeitstagung 2009 – Counting lattices*, Publications of the MPIM in Bonn, report: MPIM2009–40o.
- [39] *Kazhdan–Lusztig cells in infinite Coxeter groups*, with Paul Gunnells, 8 pp., Proceedings of the Workshop on Algebra, Combinatorics and Dynamics (Belfast, August 2009), *J. Gen. Lie Theory Appl.* **9** (2015), no. S1, Art. ID S1-002.
- [40] *Geodesics, volumes and Lehmer’s conjecture*, from: “Low-Dimensional Topology and Number Theory” (Organisers: Paul E. Gunnells, Walter Neumann, Adam S. Sikora, and Don Zagier), Oberwolfach Reports **7** (2010), 2136–2139.
- [41] *Free subgroups of arithmetic 3-manifold groups*, from: “Geometric Group Theory, Hyperbolic Dynamics and Symplectic Geometry” (Organisers: Bernhard Knieper, Leonid Polterovich, Leonid Potyagailo), Oberwolfach Reports, **35** (2012), 46–48.
- [42] *Hyperbolic orbifolds of small volume*, Proceedings of the International Congress of Mathematicians (Seoul, 2014), Vol. II, 837–851.
- [43] *Expansores geométricos* (in Spanish), *Aritmética, grupos y análisis – Actas de la escuela AGRA II, Publicações Matemáticas*, **42** (2020), 284–304.

Other Articles

- [44] *Geometry of Larry Guth* (in Russian), Troitsky Variant Nauka, 6 (300), 2020, p. 7.
- [45] *Ernest Borisovich Vinberg* (in Russian), with D. V. Alekseevsky, S. G. Gindikin, V. G. Kac, D. I. Panyushev, D. A. Timashev, O. V. Shvartsman, A. G. Eliashvili and O. S. Yakimova, Uspekhi Mat. Nauk, Volume 76, Issue 6 (462), pages 181–192 (2021). Translation in Russian Math. Surveys **76** (2021), 1123–1135.

Editorial

- [46] *Mini-workshop: reflection groups in negative curvature*, with Vincent Emery and Ruth Kellerhals, Oberwolfach Rep. **16** (2019), no. 2, 1043–1070.
- [47] *Aritmética, grupos y análisis – Actas de la escuela AGRA II*, with Harald Andrés Helfgott and Carlos Gustavo Moreira, Publicações Matemáticas, **42** (2020), 350 pp.

Submitted

- [48] *Subspace stabilisers in hyperbolic lattices*, with Nikolay Bogachev, Alexander Kolpakov and Leone Slavich, arXiv:2105.06897 [math.GT], 71 pp.
- [49] *Growth of k -dimensional systoles in congruence coverings*, with Shmuel Weinberger, arXiv:2302.03196 [math.GT], 22 pp.
- [50] *Geometry and arithmetic of semi-arithmetic Fuchsian groups*, with Gregory Cosac, Cayo Dória and Gisele Teixeira Paula, arXiv:2310.13151 [math.GR], 18 pp.

Preprints

- [51] *On arithmetic Kleinian groups generated by three half-turns*, arXiv:math.MG/9912071, 13 pp.
- [52] *Singular sets and parameters of generalized triangle orbifolds*, arXiv:math.MG/0103015, 21 pp.
- [53] *Arithmetic Kleinian groups generated by elements of finite order*, arXiv:1610.06147v2 [math.GT], 18 pp.