## PUBLICATIONS

## **RECENT PREPRINTS**

 Ptolemy relation and Friends, https://amathr.org/ptolemy-relation-and-friends/AMR review, arXiv:2302.06379.

## PUBLISHED PAPERS

- [2] (with O. Karpenkov, K. Serhiyenko, P. Tumarkin) 3D Farey graph, lambda lengths and SL<sub>2</sub>tilings, arXiv:2306.17118, accepted to Geometriae Dedicata.
- [3] (with P. Tumarkin, E. Yildirim), Polytopal realizations of non-crystallographic associahedra, accepted by Algebraic Combinatorics.
- [4] (with P. Tumarkin) Cluster algebras of finite mutation type with coefficients, Journal of Combinatorial Algebra, 8 (2024), no. 3/4, pp. 375–418.
- [5] (with P. Lampe) Exhange graphs for mutation-finite non-integer quivers, Journal of Geometry and Physics, (2023) 188, 29 pages.
- [6] (with P. Tumarkin) Mutation-finite quivers with real weights, Forum of Mathematics, Sigma (2023) 11: e9, 22 pages.
- [7] (with I. Canakci, A. Garcia Elsener, P. Tumarkin) Friezes for a pair of pants, Seminaire Lotharingien de Combinatoire (2022) 86B: 32, 12 pages.
- [8] (with J. W. Lawson, M. Shapiro and P. Tumarkin) Cluster algebras from surfaces and extended affine Weyl groups, Transform. Groups. 26 (2021), 501–535.
- [9] (with I. Canakci) Infinite rank surface cluster algebras, Advances in Mathematics 352 (2019): 862–942.
- [10] (with P. Tumarkin) Geometry of mutation classes of rank 3 quivers, Arnold Mathematical Journal, (2019) 5(1): 37–55.
- [11] (with P. Tumarkin) Acyclic cluster algebras, reflection groups and curves on a punctured disc, Advances in Mathematics 340 (2018) 855–882.
- [12] (with P. Tumarkin) Bases for cluster algebras from orbifolds, Advances in Mathematics, 318 (2017), 191–232.
- [13] (with S. Natanzon) Double pants decompositions revisited. Moscow Math. J., 17(1): 51–58.
- [14] (with P. Tumarkin) Coxeter groups, quiver mutations and geometric manifolds, J. London Math. Soc., 94 (2016), 38–60.
- [15] (with P. Tumarkin) Coxeter groups and their quotients arising from cluster algebras, Int. Math. Res. Notices (2016), 5135–5186.
- [16] (with J. Fintzen and P. Tumarkin) (2014). Reflection subgroups of odd-angled Coxeter groups. Journal of Combinatorial Theory, Series A 126 (2014), 92–127.
- [17] (with M. Shapiro, H. Thomas and P. Tumarkin) Growth rate of cluster algebras. Proc. London Math. Soc. 109 (2014), 653–675.
- [18] (with P. Tumarkin) Essential hyperbolic Coxeter polytopes. Israel Journal of Mathematics 199 (2014), 113–161.

- [19] (with M. Shapiro and P. Tumarkin) Cluster algebras and triangulated orbifolds. Advances in Mathematics 231 (2012), 2953–3002.
- [20] (with S. Natanzon) Moduli via double pants decompositions. Differential Geometry and its Applications 30 (2012), 490–508.
- [21] (with M. Shapiro and P. Tumarkin) Cluster algebras of finite mutation type via unfoldings. Int. Math. Res. Notices 8 (2012), 1768–1804.
- [22] (with M. Shapiro and P. Tumarkin) Skew-symmetric cluster algebras of finite mutation type. J. Eur. Math. Soc. 14 (2012), 1135–1180.
- [23] (with P. Tumarkin) Hyperbolic subalgebras of hyperbolic Kac-Moody algebras. Transform. Groups 17 (2012), 87–122.
- [24] (with S. Natanzon) Labeled double pants decompositions. Moscow Math. J. 11 (2011), 505–519.
- [25] (with S. Natanzon) Double pants decompositions of 2-surfaces. Moscow Math. J. 11 (2011), 231– 258.
- [26] (with M. D. Sikiric and P. Tumarkin) Automorphism group of root systems matroids. Europ. J. Combin 32 (2011), 383–389.
- [27] (with P. Tumarkin) Reflection subgroups of Coxeter groups. Trans. Amer. Math. Soc. 362 (2010), 847–858.
- [28] (with P. Tumarkin) On Coxeter polytopes with a unique pair of disjoint facets. J. Combin. Theory A 116 (2009), 875–902.
- (with A. Retakh and P. Tumarkin) Regular subalgebras of affine Kac-Moody algebras. J. Phys. A: Math. Theor. 41 (2008) 365204 (16pp).
- [30] (with P. Tumarkin) On Coxeter polytopes with mutually intersecting facets. J. Combin. Theory A 115 (2008), 121–146.
- [31] (with P. Tumarkin) On compact hyperbolic d-polytopes with d + 4 facets. Trans. Moscow Math. Soc. 69 (2008), 105-151.
- [32] (with P. Tumarkin) On simple ideal Coxeter hyperbolic polytopes. Izv. Math. 72 (2008), 113–126.
- [33] (with P. Tumarkin) Euclidean simplices generating discrete reflection groups. Europ. J. Combin. 28 (2007), 1056–1067.
- [34] (with P. Tumarkin and T.Zehrt) On hyperbolic Coxeter n-polytopes with n+2 facets. Adv. Geom. 7 (2007), 177–189.
- [35] (with P. Tumarkin) Reflection subgroups of Euclidean reflection groups. Sb. Math. 196 (2005), 1349–1369.
- [36] Coxeter decompositions of hyperbolic tetrahedra. J. Math. Sci. 128 (2005), 3504–3514.
- [37] Coxeter decompositions of hyperbolic pyramids and triangular prisms. Math. Notes 75 (2004), 583–593.
- [38] Lambert cube generating a discrete reflection group. Math. Notes 75 (2004), 250–258.
- [39] Spherical simplices generating discrete reflection groups. Sb. Math. 195 (2004), 585–598.
- [40] (with P. Tumarkin) Reflection subgroups of reflection groups. Funct. Anal. Appl. 38 (2004), 313– 314.

- [41] Coxeter decompositions of spherical simplices with fundamental dihedral angles. Russian Math. Surveys 57 (2002), 420–421.
- [42] Coxeter decompositions of hyperbolic simplices. Sb. Math. 193 (2002), 1867–1888.
- [43] Coxeter decompositions of hyperbolic polygons. Europ. J. Combin. 19 (1998), 801–817.
- [44] On Thurston signatures. Russian Math. Surveys 52 (1997), 826–827.

## OTHER PREPRINTS

- [45] (with P. Tumarkin) A series of word-hyperbolic Coxeter groups. arxiv:math.GR/0507389.
- [46] (with P. Tumarkin) Three symmetries groups. Bielefeld, no. 98-104.