

Publications of Viktor Vígh (via independent citations):

- (1) K. J. Böröczky, F. Fodor, and V. Vígh: Approximating 3-dimensional convex bodies by polytopes with a restricted number of edges, *Beiträge Algebra Geom.*, **49** (2008), 177–193.
 - R. V. Efremov, G. K. Kamenev: Optimal growth order of the number of vertices and facets in the class of Hausdorff methods for polyhedral approximation of convex bodies, *Comput. Math. Math. Phys.*, **51** Number 6 (2011), 952–964.
 - G. K. Kamenev: Method for polyhedral approximation of a ball with an optimal order of growth of the facet structure cardinality, *Comput. Math. Math. Phys.*, **54** Number 8 (2014), 1201–1213.
 - G. K. Kamenev: Asymptotic Properties of the Estimate Refinement Method in Polyhedral Approximation of Multidimensional Balls, *Comput. Math. Math. Phys.*, **55** Number 10 (2015), 1619–1632.
 - V. Maroufy, P. Marriott: Computing Boundaries in Local Mixture Models, In: *Geometric Science of Information*. Springer, 2015. pp. 577–585.
 - V. Maroufy: Applications of Geometry in Optimization and Statistical Estimation (PhD thesis), Supervisor: Paul Marriott (University of Waterloo, Canada). (2015)
 - G. K. Kamenev: Efficiency of the estimate refinement method for polyhedral approximation of multidimensional balls, *Comput. Math. Math. Phys.*, **56** Number 5 (2016), 744–755.
- (2) V. Vígh: Typical faces of best approximating polytopes with a restricted number of edges, *Acta Sci. Math. (Szeged)*, **75** (2009), 313–327.
- (3) K. J. Böröczky, F. Fodor, M. Reitzner, and V. Vígh: Mean width of random polytopes in a reasonable smooth convex body, *J. Multivariate Anal.*, **100** (2009), 2287–2295.
 - R. Schneider and W. Weil: Stochastic and Integral Geometry, Springer-Verlag, 2008, pp. 325.
 - D. Hug: Random Polytopes, In: Stochastic Geometry, Spatial Statistics and Random Fields 2013 Asymptotic Methods, Springer-Verlag, 2013, pp. 205–238.
 - Y. Bakhtin: Geometry of large random trees: SPDE approximation (Chapter 12), in Lecture Notes in Mathematics (ISSN: 0075-8434) 2068: pp. 399–440. (2013)
 - I. Ziebarth: Lokales Verhalten konvexer Krper und Approximation (PhD Thesis), Supervisor: Prof. Dr. Daniel Hug (Karlsruher Instituts für Technologie (KIT), Germany). (2014)
- (4) I. Bárány, F. Fodor, and V. Vígh: Intrinsic volumes of inscribed random polytopes in smooth convex bodies, *Adv. Appl. Probab.*, **42** Number 3 (2010), 605–619.
 - P. Calka, T. Schreiber and J. Yukich: Brownian limits, local limits, extreme value and variance asymptotics for convex hulls in the ball, *Ann. Probab.*, **41**, (2013), 50–108.
 - J. Yukich: Limit Theorems in Discrete Stochastic Geometry, In: Stochastic Geometry, Spatial Statistics and Random Fields 2013 Asymptotic Methods, Springer-Verlag, 2013, pp. 239–275.
 - P. Calka, J. Yukich: Variance asymptotics for random polytopes in smooth convex bodies, *Probability Theory and Related Fields* **158** (2014), 435–463.
 - Vikram Vinod Garg: Coupled Flow Systems, Adjoint Techniques and Uncertainty Quantification, PhD dissertation at The University of Texas at Austin (2012).
 - I. Ziebarth: Lokales Verhalten konvexer Krper und Approximation (PhD Thesis), Supervisor: Prof. Dr. Daniel Hug (Karlsruher Instituts für Technologie (KIT), Germany). (2014)
 - D. Hug, M. Reitzner: Introduction to stochastic geometry, In: Stochastic Analysis for Poisson Point Processes (2016) Volume 7, Bocconi & Springer Series, pp. 145–184.

- (5) V. Vígh: Konvex testek közelítése politópokkal (in Hungarian), Ph. D. thesis, pp. 95.
 Online available at: <http://www.math.u-szeged.hu/phd/phdtheses/vigh-viktor-d.pdf>
- (6) F. Fodor and V. Vígh: Disc-polygonal approximations of planar spindle convex sets, *Acta Sci. Math. (Szeged)*, **78** (2012), No. 1-2, 331–350.
- (7) R. Treford and V. Vígh: How to sew in practice?, arXiv manuscript (2011), arXiv:1102.4862, pp. 1–10.
 - Arnau Padrol: Many Neighborly Polytopes and Oriented Matroids, *Discrete and Computational Geometry*, **50** (2013), No. 4, 865–902.
 - Arnau Padrol: Neighborly and almost neighborly configurations, and their duals, PhD dissertation at Universitat Politècnica de Catalunya (2013).
- (8) G. Ambrus, P. Kevei, and V. Vígh: The diminishing segment process, *Stat. Prob. Letters.*, **82** (2012), 191–195.
 - P. Hitczenko, G. Letac: Perpetuity property of the Dirichlet distribution, (2014) *J. Appl. Probab.* **51** (2014), no. 2, 400–416.
 - S. A. McKinlay: From Sojourn Times and Boundary Crossings to Iterated Random Functions, PhD dissertation at The University of Melbourne, supervisor: K. Borovkov, pp. 170. (2015)
 - G. Paouris, P. Pivovarov: Random ball-polyhedra and inequalities for intrinsic volumes, *Monatsh. Math.* (2017) **182**, pp. 709–729, doi:10.1007/s00605-016-0961-6.
- (9) F. Fodor, P. Kevei and V. Vígh: On random disc-polygons in smooth convex discs, *Advances in Applied Probability* **46** (2014), No. 4, 899–918.
 - G. Paouris, P. Pivovarov: Random ball-polyhedra and inequalities for intrinsic volumes, *Monatsh. Math.* (2017) **182**, pp. 709–729, doi:10.1007/s00605-016-0961-6.
- (10) P. Kevei and V. Vígh: On the diminishing process of Bálint Tóth, *Transactions of the AMS* **368** (2016), No. 12, pp. 8823–8848, doi:10.1090/tran/6620.
- (11) G. Fejes Tóth, F. Fodor and V. Vígh: The packing density of the n -dimensional cross-polytope, *Discrete and Computational Geometry* **54** (2015), No. 1, 182–194.
 - M. Dostert, C. Guzmán, F. M. de Oliveira Filho, Frank Vallentin: New Upper Bounds for the Density of Translative Packings of Three-Dimensional Convex Bodies with Tetrahedral Symmetry, *Disc. Comp. Geo.* (2017) pp. 1–33, doi:10.1007/s00454-017-9882-y
 - M. Henk: A Note on Lattice Packings via Lattice Refinements, *Experimental Math.* (2016) pp. 1–9, doi:10.1080/10586458.2016.1208595
- (12) F. Fodor, Á. Kurusa and V. Vígh: Inequalities for hyperconvex sets, *Advances in Geometry* **16** (2016), No. 3, pp. 337–348.
- (13) F. Fodor, V. Vígh and T. Zarnócz: On the angle sum of lines, *Archiv der Mathematik* **106** (2016), No. 1, 91–100.
- (14) F. Fodor, V. Vígh and T. Zarnócz: Covering the sphere by equal zones, *Acta. Math. Hungar.* **149** (2016) vol. 2, pp. 478–489, DOI: 10.1007/s10474-016-0613-2.
- (15) A. Bezdek, F. Fodor, V. Vígh and T. Zarnócz: On the multiplicity of arrangements of equal zones on the sphere, submitted (2017)