

# Dmitry Zaporozhets

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## Personal

Born on August 10, 1979.

2 children, 10 and 7 y.o.

Russian Federation Citizen.

## Education and Degrees

2018: Academic rank of Professor of the Russian Academy of Sciences

2017: Habilitation in Mathematics and Physics (Probability Theory and Mathematical Statistics), St. Petersburg Department of Steklov Mathematical Institute

2005: Ph.D. in Mathematics and Physics (Probability Theory and Mathematical Statistics), St. Petersburg Department of Steklov Mathematical Institute

2001: Specialist Degree in Mathematics, St. Petersburg State University

## Employment

St.Petersburg Department of Steklov Mathematical Institute, 2004–present (current position: Senior Research Fellow)

## Honors and Awards

2014: Prize of the Government of St. Petersburg for outstanding scientific achievements in the field of science and technology

1995: International Mathematical Olympiad, Gold Medal

## Publications

- [1] F. Götze, A. Gusakova, and D. Zaporozhets. Random affine simplexes. *Adv. in Appl. Probab.*, 56(1), 2019.
- [2] Z. Kabluchko, V. Vysotsky, and D. Zaporozhets. A multidimensional analogue of the arcsine law for the number of positive terms in a random walk. *Bernoulli*, 25(1):521–548, 2019.
- [3] Z. Kabluchko and D. Zaporozhets. Angles of the Gaussian simplex. *Zap. Nauchn. Sem. POMI*, 476:79–91, 2018.

- [4] F. Götze, A. Gusakova, Z. Kabluchko, and D. Zaporozhets. Distribution of complex algebraic numbers on the unit circle. *Zap. Nauchn. Sem. POMI*, 474:90–107, 2018.
- [5] M. Ibragimov, I. and Lifshits, A. Nazarov, and D. Zaporozhets. On the History of St. Petersburg School of Probability and Mathematical Statistics: II. Random Processes and Dependent Variables. *Vestnik SPbGU*, 63(3).
- [6] Z. Kabluchko, Ch. Thäle, and D. Zaporozhets. Beta polytopes and Poisson polyhedra: f-vectors and angles. *Preprint, arXiv:1805.01338*, 2018.
- [7] V. Vysotsky and D. Zaporozhets. Convex hulls of multidimensional random walks. *Trans. Amer. Math. Soc.*, 370:7985–8012, 2018.
- [8] Z. Kabluchko and D. Zaporozhets. Expected volumes of Gaussian polytopes, external angles, and multiple order statistics. *Preprint, arXiv:1706.08092*, 2017. [To appear in *Trans. Amer. Math. Soc.*].
- [9] Z. Kabluchko and D. Zaporozhets. Absorption probabilities for Gaussian polytopes, and regular spherical simplices. *Preprint, arXiv:1704.04968*, 2017.
- [10] F. Götze, D. Kaliada, and D. Zaporozhets. Joint distribution of conjugate algebraic numbers: A random polynomial approach. *Preprint, arXiv:1703.02289*, 2017.
- [11] Z. Kabluchko, V. Vysotsky, and D. Zaporozhets. Convex hulls of random walks: Expected number of faces and face probabilities. *Adv. Math.*, 320:595–629, 2017.
- [12] Z. Kabluchko, G. Last, and D. Zaporozhets. Inclusion-exclusion principles for convex hulls and the Euler relation. *Discrete Comput. Geom.*, 58(2).
- [13] V. Kabluchko, Z. Vysotsky and D. Zaporozhets. Convex hulls of random walks, hyperplane arrangements, and Weyl chambers. *Geom. Funct. Anal.*, 27(4).
- [14] F. Götze, D. Kaliada, and D. Zaporozhets. Distribution of complex algebraic numbers. *Proc. Amer. Math. Soc.*, 145(1).
- [15] Z. Kabluchko and D. Zaporozhets. Intrinsic volumes of Sobolev balls with applications to Brownian convex hulls. *Trans. Amer. Math. Soc.*, 368:8873–8899, 2016.
- [16] F. Götze, D. Kaliada, and D. Zaporozhets. Correlation functions of real zeros of random polynomials. *Zap. Nauchn. Sem. POMI*, 454:102–111, 2016. [English translation: *J. Math. Sci.*, 229:6 (2018), 664670].
- [17] F. Götze, D. Kaliada, and D. Zaporozhets. Correlations between real conjugate algebraic numbers. *Chebyshevskii Sb.*, 16(4).
- [18] F. Götze and D. Zaporozhets. Discriminant and root separation of integral polynomials. *Zap. Nauchn. Sem. POMI*, 441:144–153, 2015. [English translation: *J. Math. Sci.*, 219:5 (2016), 700–706].
- [19] Z. Kabluchko and D. Zaporozhets. Asymptotic distribution of complex zeros of random analytic functions. *Ann. Probab.*, 42(4):1374–1395, 2014.
- [20] Z. Kabluchko and D. Zaporozhets. Roots of random polynomials whose coefficients have logarithmic tails. *Ann. Probab.*, 41(5):3542–3581, 2013.
- [21] I. Ibragimov and D. Zaporozhets. On distribution of zeros of random polynomials in complex plane. In *Prokhorov and Contemporary Probability Theory, Springer Proceedings in Mathematics & Statistics*, volume 33, pages 303–323, 2013.

- [22] Z. Kabluchko and D. Zaporozhets. Random determinants, mixed volumes of ellipsoids, and zeros of Gaussian random fields. *Zap. Nauchn. Sem. POMI*, 408:187–196, 2012. [English translation: *J. Math. Sci.*, 199:2 (2014), 168173].
- [23] M. Reitzner, E. Spodarev, and D. Zaporozhets. Set Reconstruction by Voronoi cells. *Adv. in Appl. Probab.*, 44(4):938–953, 2012.
- [24] F. Götze and D. Zaporozhets. On the distribution of complex roots of random polynomials with heavy-tailed coefficients. *Teor. Ver. Primen.*, 56(4):812–818, 2011. [English translation: *Theory Probab. Appl.*, 56:4 (2011), 696–703].
- [25] I. Ibragimov and D. Zaporozhets. On random surface area. *Zap. Nauchn. Sem. POMI*, 384:154–175, 2010. [English translation: *J. Math. Sci.*, 176:2 (2011), 190–202].
- [26] N. Slobodianik, D. Zaporozhets, and N. Madras. Strong limit theorems for the Bayesian scoring criterion in Bayesian networks. *J. Mach. Learn. Res.*, 10:1511–1526, 2009.
- [27] D. Zaporozhets and A. Nazarov. What is the least expected number of real roots of a random polynomial? *Teor. Ver. Primen.*, 53(1):40–58, 2008. [English translation: *Theory Probab. Appl.*, 53:1 (2009), 117–133].
- [28] D. Zaporozhets. An example of a random polynomial with unusual behavior of roots. *Teor. Ver. Primen.*, 50(3):549–555, 2005. [English translation: *Theory Probab. Appl.*, 50:3 (2006), 529–535].
- [29] D. Zaporozhets. Random polynomials and geometric probability. *Dokl. Akad. Nauk*, 400(3):299–303, 2005. [English translation: *Doklady Mathematics*, 73:1 (2005), 53–57].
- [30] D. Zaporozhets. On distribution of the number of real zeros of a random polynomial. *Zap. Nauchn. Sem. POMI*, 320:133–146, 2006. [English translation: *J. Math. Sci.*, 137:1 (2006), 4525–4530].
- [31] D. Zaporozhets. On computing of expected volume of random manifold. *Zap. Nauchn. Sem. POMI*, 311:133–146, 2004. [English translation: *J. Math. Sci.*, 133:3 (2006), 1282–1289].