

Pavel Zakharov

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Education

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| TU Dortmund, Germany, Department of Mathematics, PhD Program | 2023 – present |
| Higher School of Economics, Moscow, Russia, Data Science, Math in Machine Learning, Master Program | 2021 – 2023 |
| Higher School of Economics, Moscow, Russia, Faculty of Computer Science, Applied Mathematics and Informatics, Bachelor Program | 2017 – 2021 |
| Physical-Mathematical School 2007, Moscow, Russia, Graduated with Golden Medal. | 2017 |

Positions

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| TU Dortmund, Department of Computer Science, Research Assistant | 2023 – present |
| University of New South Wales, Research Internship | 2025 |
| HSE University, Laboratory of Theoretical Computer Science, Research Assistant | 2019 – 2023 |
| Yandex LLC, Yandex.Routing, Yandex.Adtech, Software engineer | 2019 – 2020 |

Research

Preprints

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| The number of random 2-SAT solutions is asymptotically log-normal A. Chatterjee, A. Coja-Oghlan, N. Müller, C. Riddlesden, M. Rolvien, P. Zakharov, H. Zhu, To appear in <i>Theory of Computing</i> . | 2024 |
| The random k-SAT Gibbs uniqueness threshold revisited, A. Chatterjee, A. Coja-Oghlan, C. Greenhill, V. Pfenninger, M. Rolvien, P. Zakharov, K. Zampetakis, To appear in <i>Combinatorics, Probability and Computing</i> . | 2025 |

Journal publications

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| WalkSAT is linear on random 2-SAT, P. Berenbrink, A. Coja-Oghlan, C. Cooper, T. Götte, L. Hintze, P. Zakharov, <i>SIAM Journal on Discrete Mathematics</i> 39 (4) (2025) 1939–1952. |
| Fractional colourings of random hypergraphs, D. Shabanov, P. Zakharov, <i>Russian Mathematical Surveys</i> 78 (6) (2023) 183–184. |
| Asymptotic normality of the giant component size in a random bipartite graph, D. Shabanov, P. Zakharov, <i>Trudy MIPT</i> 15 (2023) 23–32 (in Russian). |
| On the maximal cut in a random hypergraph, D. Shabanov, P. Zakharov, <i>Doklady Mathematics</i> 104 (2021) 336–339. |

Conference talks

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| 22nd International Conference on Random Structures and Algorithms, <i>Vienna, Austria.</i> | 2025 |
| 28th International Conference on Randomization and Computation, <i>London, United Kingdom.</i> | 2024 |
| European Conference on Combinatorics, Graph Theory and Applications, <i>Online.</i> | 2021 |

Research grants

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| Co-investigator on "Extremal properties of random graphs". Russian Foundation for Basic Research and Iran National Science Foundation, no. 20-51-56017 | 2020 – 2022 |
| Co-investigator on "Structural properties of random graphs and hypergraphs". Russian Science Foundation, no. 22-21-00411 | 2021 – 2023 |

Teaching

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| <i>Higher School of Economics, Faculty of Computer Science</i> | 2021 – 2024 |
| Theoretical Computer Science — Lecturer, course design | |
| Mathematical Statistics — Design of study materials, tutoring | |
| Algorithms and Data Structures — Design of study materials, tutoring | |
| Theory of Computation — Tutoring | |
| Convex Programming and Approximation Algorithms — Tutoring | |
| Probability Theory — Tutoring | |
| <i>Sberbank</i> | 2021/22 |
| Graph Theory – Tutoring | |

Service and outreach

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| "Combi meets Stat Physics" reading group, UNSW | 2025 |
| Organization | |
| Peer reviewing and subreviewing | |
| Annals of Applied Probability, Combinatorica, Random Structures and Algorithms, STACS | |
| Project programme in mathematics & theoretical computer science, "Sirius" | 2022 |
| Educational Center | |
| Mentor | |
| Mathematics summer school "Kostroma open" | 2017 |
| Invited teacher | |

Other

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| Ilya Segalovich scholarship | 2021-2022 |
| Awarded by Yandex, €10K | |