

# Pavel Zakharov

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## Education

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

## Research

### Journal publications

<b>SIAM Journal on Discrete Mathematics,</b> P. Berenbrink, A. Coja-Oghlan, C. Cooper, T. Götte, L. Hintze, P. Zakharov, <i>WalkSAT is linear on random 2-SAT.</i>	2025
<b>Russian Mathematical Surveys,</b> D. Shabanov, P. Zakharov, <i>Fractional colourings of random hypergraphs.</i>	2023
<b>Trudy MIPT,</b> D. Shabanov, P. Zakharov, <i>Asymptotic normality of the giant component size in a random bipartite graph.</i>	2023
<b>Dokl. RAN,</b> D. Shabanov, P. Zakharov, <i>On the maximal cut in a random hypergraph.</i>	2021

### Preprints

A. Chatterjee, A. Coja-Oghlan, N. Müller, C. Riddlesden, M. Rolvien, P. Zakharov, H. Zhu, <i>The number of random 2-SAT solutions is asymptotically log-normal.</i> arXiv.2405.03302	2024
A. Chatterjee, A. Coja-Oghlan, C. Greenhill, V. Pfenninger, M. Rolvien, P. Zakharov, K. Zampetakis, <i>The random <math>k</math>-SAT Gibbs uniqueness threshold revisited.</i> arXiv.2506.01359	2025

### Conference talks

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

## **Selected Teaching**

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<b>Convex Programming and Approximation Algorithms</b> Higher School of Economics, Faculty of Computer Science	2023/24
<b>Mathematical Statistics</b> <b>Probability Theory</b> <b>Theoretical Computer Science</b> <b>Theory of Computation</b> Higher School of Economics, Faculty of Computer Science	2022/23
<b>Algorithms and Data Structures</b> <b>Probability Theory and Mathematical Statistics</b> <b>Theoretical Computer Science</b> Higher School of Economics, Faculty of Computer Science	2021/22

## **Service and outreach**

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<b>Peer reviewing and subreviewing</b> Annals of Applied Probability, Combinatorica, Random Structures and Algorithms, STACS	
<b>Mathematics summer school "Kostroma open"</b> Invited teacher	2017
<b>Project programme in mathematics &amp; theoretical computer science, "Sirius"</b> Educational Center Mentor	2022