# Alexandr Grebennikov

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Am Campus 1, Klosterneuburg, Austria

**Citizenship:** Russian
**Date of birth:** 1 September 2000
**Languages:** Russian (native), English (C1)

## Education

**ISTA (Institute of Science and Technology Austria)** — Klosterneuburg, Austria
*PhD in Mathematics* — *2024 – present*
*Advisor: Matthew Kwan*

**IMPA (Instituto de Matematica Pura e Aplicada)** — Rio de Janeiro, Brazil
*Master degree in Mathematics, GPA:* 4.0/4.0 — *2022 – 2024*
*Advisor: Mikhail Belolipetsky*

**Saint Petersburg State University** — Saint Petersburg, Russia
*Bachelor degree in Mathematics, GPA:* 5.0/5.0 — *2018 – 2022*
*Advisor: Anastasia Stavrova*

## Talks and presentations

**Contributed talk at Random Structures and Algorithms conference** — August 2025
*Title: Geometric Littlewood–Offord problems via lattice point counting*

**Talk at ISTA Number Theory seminar** — July 2025
*Title: Littlewood–Offord problem for polynomials of bounded Chow rank*

**Poster presentation at Brazilian School of Combinatorics** — September 2023
*Title: Edge-disjoint rainbow triangles in colorings of $K_n$*

**Talk at IMPA Geometry seminar** — September 2023
*Title: Multiplicities in the length spectrum and growth rate of Salem numbers*

## Publications and preprints

1. A. Grebennikov and M. Kwan, Geometric Littlewood-Offord problems via lattice point counting, arXiv:2505.24699, submitted.
2. A. Grebennikov, L. Mattos and T. Szabó, On almost Gallai colourings in complete graphs, arXiv:2503.17334, submitted.
3. A. Grebennikov and J. P. Marciano, $C_{10}$ has positive Turán density in the hypercube, J. Graph Theory **109** (2025), 31–34.
4. A. Grebennikov, Multiplicities in the length spectrum and growth rate of Salem numbers, Bull. Braz. Math. Soc. (N.S.) **55** (2024), Paper No. 25, 21 pp..
5. A. Grebennikov, Non-surjective Milnor patching diagrams, arXiv:2306.13180, submitted.
6. A. Grebennikov, A. Sagdeev, A. Semchankau and A. Vasilevskii, On the sequence $n!$ mod $p$, Rev. Mat. Iberoam. **40** (2024), 637–648.

7. A. Grebennikov and G. Y. Panina, A note on the concurrent normal conjecture, Acta Math. Hungar. **167** (2022), 529–532.

8. A. Grebennikov, X. Isaeva, A. V. Malyutin, M. Mikhailov and O. R. Musin, Logarithmic algorithms for fair division problems, SIAM J. Discrete Math. **38** (2024), 2926–2939.

9. D. Badulin, A. Grebennikov and K. V. Vorob'ev, On the palindromic Hosoya polynomial of trees, MATCH Commun. Math. Comput. Chem. **88** (2022), 471–478.

## Competition achievements

### Mathematics

- International Mathematical Competition for University Students (IMC): 2022 — Grand Grand First Prize (1st-2nd place); 2021 — Grand First Prize (2nd place)
- Russian National High-school Olympiad in Mathematics 2017, Winner
- Jury member, International Mathematical Olympiad (IMO) 2020

### Programming

- ICPC Brazil Finals 2023, 3rd place and gold medal (team)
- ICPC World Finals 2019, participant (team)
- ICPC Northern Eurasia Regional Contest 2018, 10th place and bronze medal (team)