

Vasiliy Neckrasov

PhD student of Brandeis University

email: vneckrasov@gmail.com, vneckrasov@brandeis.edu

Born: August 24, 1998—Moscow, Russia

[Papers of arXiv](#)

[ORCID profile](#)

[Google Scholar profile](#)

Education

- 2022 – present Brandeis University
Department of mathematics, PhD student
Advisor — Dmitry Kleinbock.
- 2016 – 2022 Lomonosov Moscow State University, Faculty of Mechanics and Mathematics,
Department of Number Theory
Advisor — Nikolay Moshchevitin.
- 2015 – 2016 AESC MSU — Kolmogorov’s boarding school of Moscow State University

Mathematical interests

Diophantine approximations; homogeneous dynamics and ergodic theory; Schmidt’s games and variations; parametric geometry of numbers

Publications/preprints

- 2026 Dmitry Kleinbock, Vasiliy Neckrasov, Bounded trajectories of quasi-rays on homogeneous spaces and Diophantine approximation with weight functions, [preprint on ArXiv](#), submitted.
- 2026 Leo Hong, Dmitry Kleinbock, Vasiliy Neckrasov, Uniform Diophantine approximation with restrictions via total density of collections of subspaces, [preprint on ArXiv](#), submitted.
- 2026 Vasiliy Neckrasov, Khintchine-type theorems for weighted uniform inhomogeneous approximations via transference principle, *Mathematika*, 72: e70089 (2026).
- 2025 Nikolay Moshchevitin, Vasiliy Neckrasov, Metric theory of inhomogeneous Diophantine approximations with a fixed matrix, [preprint on ArXiv](#), submitted.
- 2025 Vasiliy Neckrasov, Eric Zhan, On Nontrivial Winning and Losing Parameters of Schmidt Games, *Results Math* 80, 236 (2025).
- 2022 Vasiliy Neckrasov, On some properties of irrational subspaces, *Uniform Distribution Theory Journal*, Volume 17 (2022), no. 1, pp. 89-104.

Talks

- 02/15/2026 *How (not) to cut squares into triangles?*, Harvard-MIT Math Tournament (talk targeted at high school students).
- 09/30/2025 *Zero-one laws for uniform inhomogeneous Diophantine approximations*, New England Dynamics and Number Theory seminar.
- 06/05/2025 *Metric Diophantine approximations with a fixed matrix*, Online Seminar in Diophantine Approximation and Related Topics.
- 11/10/2024 *Geometry and Dynamics of Continued Fractions*, Harvard-MIT Math Tournament (talk targeted at high school students).

- 02/02/2023 *Completely irrational subspaces and their Diophantine properties*, New England Dynamics and Number Theory seminar.
- 04/13/2020 *Multidimensional p -adic approximations*, Research seminar of the Number Theory Department, MSU.

Conferences

- April 2024 Workshop on Dynamical Systems and Related Topics, University of Maryland
- February 2023 Diophantine Analysis, Dynamics and Related Topics, Technion, Haifa (Israel)
- August 2019 Baikal Number Theory, Olkhon island (Russia)
- April 2017 Mini-conference "Diophantine problems" in occasion of Prof. Nikolay Moshchevitin's 50 birthday, MIPT, Dolgoprudny (Russia)

Research with high school students/undergrads

- 2025 MIT PRIMES — Mentor (project "Totally dense collections of subspaces" with Leo Hong), [paper](#)
- 2023 MIT PRIMES — Mentor (project "Schmidt Diagrams" with Eric Zhan), [paper](#)

Educational work

- 2023-present Instructor — undergraduate Calculus, Multivariable calculus, Diff. equations classes, Brandeis University
- 2024 Instructor — Number theory, Awesomemath summer olympiad program
- 2022-present Teaching assistant/Grader/Math tutor, Brandeis university
- 2017 – 2022 Instructor/team coach at AESC MSU — Kolmogorov's boarding school of Moscow State University
- 2020 – 2021 Teaching assistant/team coach, Lyceum "Second school"
- 2017 – 2018 Instructor, Association of Olympiad Winners