

Kristina Oganessian

PhD Student

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Work and education

- 2022-pres **Laboratory “High-dimensional approximation and applications”**, Russia, [link](#).
- 2020-pres **Moscow Center for fundamental and applied mathematics**, Lomonosov Moscow State University, Russia.
- 2019-pres **PhD Student**, Centre de Recerca Matemàtica and Universitat Autònoma de Barcelona, Spain.
- 2019-pres **PhD Student**, Lomonosov Moscow State University, Russia.
- 2013-2019 **MSc in Mathematics**, Lomonosov Moscow State University, Russia.

Research Interests

Harmonic analysis, Number theory, Combinatorics

Publications

- 03/2023 K. Oganessian, “Bounds for the number of multidimensional partitions”, [arxiv](#).
- 01/2023 M. I. Dyachenko, K. A. Oganessian, “Counterexamples to the Hardy–Littlewood theorem for generalized monotone sequences”, *Math. Notes*, 113(3) (2023), 458–463, [DOI](#).
- 09/2022 K. Oganessian, “Two-dimensional Hardy–Littlewood theorem for functions with general monotone Fourier coefficients”, [arXiv](#).
- 08/2022 K. Oganessian, “Cosine polynomials with restrictions on their algebraic representation”, *J. Approx. Theory*, 281—282 (2022), 105802, [DOI](#), [arXiv](#).
- 07/2021 K. Oganessian, “John–Nirenberg inequality for Riemann type series”, [arXiv](#).
- 01/2021 K. Oganessian, “Uniform convergence criterion for non-harmonic sine series”, *Sb. Math.*, 212(1) (2021), 70–110, [DOI](#), [arXiv](#).
- 10/2020 K. Oganessian, “The sets of positivity of sine series with monotone coefficients”, *Acta Math. Hungar.*, 162(2) (2020), 705–721, [DOI](#).
- 03/2020 K. Oganessian, “A functional inequality for sine series”, *Math. Notes*, 107(3) (2020), 531–533, [DOI](#).
- 04/2018 K. Oganessian, “The measure of the set of zeros of the sum of a nondegenerate sine series with monotone coefficients in the closed interval $[0, \pi]$ ”, *Math. Notes*, 103(4) (2018), 621–625, [DOI](#).
- 01/2018 K. Oganessian, “Generalized double Fourier sine series”, *Moscow Univ. Math. Bull.*, 73(1) (2018), 9–16, [DOI](#).

Conference talks

- 11/2022 **Second conference of international mathematical centers**, Lomonosov Moscow State University, Russia.
- 08/2022 **Applied functional analysis**, Banff International Research Station, Mexico.
- 08/2021 **Conference of international mathematical centers**, Sochi, Russia
- 01/2021 **Modern methods of theory of functions and related problems**, Voronezh, Russia.
- 11/2020 **Möbius Contest**, Independent University of Moscow, Russia.
- 01/2020 **Modern problems of theory of functions and their applications**, Saratov, Russia.
- 11/2019 **Möbius Contest**, Independent University of Moscow, Russia.
- 05/2019 **Modern problems of mathematics and mechanics**, Lomonosov Moscow State University, Russia.

Seminar talks

- 03/2023 **Barcelona analysis seminar**, Centre de Recerca Matemàtica, Spain.
- 11/2022 **Seminar on theory of functions of a real variable**, Lomonosov Moscow State University, Russia.
- 11/2022 **Harmonic analysis seminar**, Centre de recherches mathématiques, Canada.
- 11/2021 **Barcelona analysis seminar**, Centre de Recerca Matemàtica, Spain.
- 11/2020 **Seminar on theory of functions of a real variable**, Lomonosov Moscow State University, Russia.
- 04/2020 **Modern problems of number theory**, Steklov Mathematical Institute of Russian Academy of Science, Russia.
- 03/2020 **Seminar on theory of functions of a real variable**, Lomonosov Moscow State University, Russia.
- 03/2018 **Seminar on geometrical approximation theory**, Lomonosov Moscow State University, Russia.
- 03/2018 **Seminar on theory of orthogonal and trigonometric series**, Lomonosov Moscow State University, Russia.
- 11/2017 **Seminar on theory of functions of a real variable**, Lomonosov Moscow State University, Russia.
- 04/2017 **Seminar on theory of orthogonal and trigonometric series**, Lomonosov Moscow State University, Russia.

Conferences and research programs

- 11/2022 **Second conference of international mathematical centers**, Moscow, Russia.
- 07/2022 **Complex Analysis, Spectral Theory and Approximation meet in Linz**, Linz, Austria.
- 06/2022 **Hypatia Graduate Summer School**, Centre de Recerca Matemàtica, Barcelona, Spain.
- 06/2022 **Workshop on harmonic analysis and related topic**, Barcelona, Spain.

- 06/2022 **11th International Conference on Harmonic Analysis and Partial Differential Equations**, El Escorial, Spain.
- 09-12/2021 **Research in pairs program**, Centre de Recerca Matemática, Barcelona, Spain.
- 08/2021 **Conference of international mathematical centers**, Sochi, Russia.
- 01/2021 **Modern methods of theory of functions and related problems**, Voronezh (online), Russia.
- 01/2020 **Modern problems of theory of functions and their applications**, Saratov, Russia.
- 06/2019 **Approximation, sampling, and compression in high dimensional problems**, Cambridge, United Kingdom.

Awards and Distinctions

- 2021 **Winner** of the **Prize for young mathematicians of Russia**, Sochi, Russia.
- 2020 **Winner** of the **XXIV Möbius Contest**, Moscow, Russia.
- 2019 **Second prize** in the **Russian Competition of Theses in Mathematics**, Nizhny Novgorod, Russia.
- 2017 **First prize** in the **International Mathematics Competition for University Students (IMC)**, Blagoevgrad, Bulgaria.
- 2015, 2018 **Second prize** in the **International Mathematics Competition for University Students (IMC)**, Blagoevgrad, Bulgaria.
- 2013 **Medalist** of the **Russian National olympiad in Mathematics** (top 35 in Russia), Sarov, Russia.

Grants

- 2022-pres Russian Science Foundation, no. 22-21-00545.
- 2021-pres Russian Science Foundation, no. 21-11-00131.
- 2022-2023 Russian Federation Governmental Scholarship.
- 2019-pres Foundation for the Advancement of Theoretical Physics and Mathematics "BASIS", no. 19-8-2-28-1 (PI).
- 2021 Prize for young mathematicians of Russia (PI).
- 2021 Scholarship of Lomonosov Moscow State University for considerable achievements in science.
- 2021 Visiting grant, Centre de Recerca Matemática, Barcelona, Spain.
- 2020 Möbius Contest Foundation (PI).
- 2020 Shafarevich individual scholarship (PI).
- 2019 Visiting grant, Isaac Newton Institute, Cambridge, United Kingdom.
- 2017-2018 Russian Foundation for Basic Research, no. 16-01-00350.
- 2015-2019 Scholarship for top 10% of students in Lomonosov Moscow State University.
- 2015 Russian Federation Presidential Prize for talented young people.
- 2014 Scholarship of the Governor of Moscow region.

Teaching and related activities

- 2018-pres Teacher of olympiad mathematics.
- 2014-pres Jury member of the Moscow Mathematical Olympiad.
- 2013-2014 Jury member of the International Mathematical Tournament of Towns.
- 2013-2016 Organizer of the DAFE MIPT Cup in Mathematics and the Intellectual All-around in Zhukovsky.

Languages

- Russian Native
- English Fluent
- Portuguese Fluent
- Spanish Intermediate