

Daniil Kliuev

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Personal information

Date of birth **22 April 1996**

Place of birth **Saint Petersburg, Russia**

Marital status **Married**

Languages **Russian, English**

Education

2019–present **MIT**, *Graduate student*, Mathematics department

2014–2019 **St Petersburg State University**, *Undergraduate student*, Faculty of mathematics and mechanics

gpa: 5.0

2009–2014 **St. Petersburg Lyceum 239**, *High School*

2002–2009 **School 141**, *Elementary and middle school*

Research interests

Representation Theory, Mathematical Physics

Talks

2023 **Analytic Langlands correspondence for $\mathrm{PGL}(2, \mathbb{C})$** , *University of Louisiana*
November 6

2023 **Analytic Langlands correspondence for $\mathrm{PGL}(2, \mathbb{C})$** , *MIT*
October 27

2023 **Analytic Langlands correspondence for $\mathrm{PGL}(2, \mathbb{C})$** , *UC Berkeley*
October 3

2023 **Invariant positive forms on generalized Weyl algebras**, *Lie Theory and its Applications in Physics*, Varna, Bulgaria

2023 **Positive definite invariant forms for generalized Weyl and q -Weyl algebras**, *University of Münster*, Germany

2020 **Unitarizable Harish-Chandra bimodules for deformations of Kleinian singularities**, *Lie Algebras, Algebraic Groups and Invariant Theory*, Moscow, Russia

- 2018 **Deformations of Pairs of Kleinian singularities**, *Lie Algebras, Algebraic Groups and Invariant Theory*, Samara, Russia
- 2017 **Deformations of Pairs of Kleinian singularities**, *Student Colloquium at Chebyshev Laboratory*, Saint Petersburg, Russia
- 2017 **Deformations of Pairs of Kleinian singularities**, *Geometry, Physics and Representation Theory Seminar at Northeastern University*, Boston
- 2017 **Kleinian singularities and their applications**, *Geometry 2017 Summer School*, Saint Petersburg, Russia

Schools and conferences

- 2023 **Geometric Representation Theory and W-algebras**, *Edinburgh, UK*
- 2023 **LMS-Bath Summer School on Geometric and Categorical Representation theory**, *Bath, UK*
- 2023 **Lie Theory and its Applications in Physics**, *Varna, Bulgaria*
- 2022 **Quantized symplectic singularities and applications to Lie theory**, *MIT*
- 2022 **On the crossroads of algebra, geometry and physics**, *Yale*
- 2020 **Lie Algebras, Algebraic Groups and Invariant Theory**, *Moscow, Russia*
- 2019 **Skoltech International Summer School on Mathematical Physics**, *Moscow, Russia*
- 2018 **Lie Algebras, Algebraic Groups and Invariant Theory**, *Samara, Russia*
- 2017 **Transformation Groups 2017**, *Moscow, Russia*
- 2017 **Geometry 2017 Summer School**, *Saint Petersburg, Russia*
- 2017 **Lie Algebras, Algebraic Groups and Invariant Theory**, *Moscow, Russia*
- 2016 **Algebra and Geometry**, *Yaroslavl, Russia*
- 2015 **Modern Mathematics**, *Dubna, Russia*

Undergraduate thesis

Harish-Chandra modules and bimodules over quantizations of Kleinian singularities, *advisor: Ivan Losev*

Competitions

- 2015, 2017, 2018 **IMC in Blagoevgrad**, *Grand grand first prize*, First place
International math competition for university students
- 2015–2016 **Vojtěch Jarník IMC**, *Winner in Category I*, 1-2 place
International math competition for university students
- 2012–2014 **IMO**, *Gold, Silver, Gold medal resp.*
International math olympiad for high-school students

Teaching activities

- 2023 **Recitation leader for 18.06 (Linear algebra) at MIT**
2018, 2019 **Math school, Sochi, Russia**
2014-2016 **Math summer school, Leningrad Oblast, Russia**
2014-2015 **Math center, St. Petersburg, Lyceum 239**

Work experience

- 2017–2019 **Chebyshev Laboratory, Research assistant**, Mathematical research laboratory,
<http://chebyshev.spbu.ru/en/>

Papers

- 2023 **Unitarizability of Harish-Chandra bimodules over generalized Weyl and q -Weyl algebras**, *preprint*, arXiv:2307.06514
- 2022 **Multiplication Kernels for the Analytic Langlands Program in Genus Zero**, *joint with S. Raman*, *preprint*, arXiv:2212.06932
- 2021 **Twisted traces and positive forms on generalized q -Weyl algebras.**, *SIGMA 18 (2022), 009, 28 pages*
- 2020 **Twisted Traces and Positive Forms on Quantized Kleinian Singularities of Type A**, *joint with P. Etingof, E. Rains, D. Stryker*, *SIGMA 17 (2021), 029, 31 pages*
- 2020 **On unitarizable Harish-Chandra bimodules for deformations of Kleinian singularities**, *International Mathematical Research Notices*, <https://doi.org/10.1093/imrn/rnab174>
- 2018 **Deformations of pairs of Kleinian singularities**, *accepted to IMRN*, arXiv:1805.08197