

CV

ALEXEI LATYNTSEV

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<https://alyoshalatyntsev.github.io/>

Research

Algebraic geometry, geometric representation theory, enumerative invariants.

Personal

Born 15th October 1995. British and Russian citizenship.

Education

- **PhD in Mathematics**, Oxford University, Christ Church College 2018–2022
Supervised by Dominic Joyce
- **MA in Mathematics**, Cambridge University, Trinity College, Distinction 2017–2018
Master's thesis: \mathcal{D} -modules, supervised by Ian Grojnowski
- **BA in Mathematics**, Cambridge University, Trinity College, First Class 2014–2017

Employment

- **Postdoc**, Centre for Quantum Mathematics, SDU 2022–2025

Awards & Grants

- EPSRC scholarship 2018–2022
- Senior Scholar, Trinity College 2016, 2017
- Junior Scholar, Trinity College 2015
- Mathematics Essay Prize, Trinity College 2015, 2016

Papers

OSp Latyntsev, A., de Hority, S. Orthosymplectic modules of cohomological Hall algebras. arXiv:2501.06643
2025

Conc Aranha, D., Khan, A.A., Latyntsev, A., Park, H. and Ravi, Charanya, 2024, The stacky concentration theorem. arxiv:2407.08747 2024

FQG Latyntsev, A., 2023. Factorisation quantum groups. arXiv:2312.07274 2023

Loc Aranha, D., Khan, A.A., Latyntsev, A., Park, H. and Ravi, Charanya, 2022. Virtual localization revisited. arXiv preprint arXiv:2207.01652. 2022

CV Latyntsev, A., 2021. Cohomological Hall algebras and vertex algebras. arXiv:2110.14356 2021

To appear imminently (~ 1 week):

CY3 Jindal, S., Kaubrys, S., Latyntsev, A. Vertex quantum groups for deformed CY3 completions and the Drinfeld coproduct on Yangians.

To appear imminently:

Eu Latyntsev, A. Virtual Euler classes for Artin stacks.

Bos Latyntsev, A., de Hority, S. Factorisation bosonisation.

In preparation:

CD Latyntsev, A. and Niu, W. Chiral Drinfeld Doubling

Bos Latyntsev, A. and Giri, V. The Liouville quantum gravity CFT and vertex algebras.

Teaching

- Lecturer for the course *Differential Equations*, SDU 2024
- Lecturer for the course *W Algebras*, Centre for Quantum Mathematics, SDU 2023
- Teaching Assistant and Tutor, Oxford University 2018–2022
Courses: *Algebraic topology*, *Algebraic curves*, *Set theory*, *Category theory*, *Conformal field theory*, *Galois theory*, *Algebraic geometry*, *Representation theory*, *Analysis I*
- Lecturer in Mattekollo Summer School: *Spectral Graph Theory* and *Percolation and Phase Change Phenomena* 2024
- Counselor, PROMYS program 2016–2018

Community

- Founder and Co-Organiser, Factorisation Algebras online seminar 2023
- Organiser, Higher Algebra Seminar 2023
- Founder and Co-Organiser, Oxford Physics and Geometry Seminar 2020–2022
- Organiser, Oxford Junior Geometry Seminar 2019–2021
- Organiser, Coulomb Branches Reading Group 2019–2020
- Organiser, Kazhdan-Lusztig equivalences reading group 2020
- Co-Organiser, various reading groups 2018–2019

Invited Research Talks and Research Visits

- Peking University (+visit) 2025
- Perimeter Institute, Mathematical Physics seminar (+visit) 2024
- Edinburgh University Algebra Seminar (+visit) 2024
- Edinburgh University Physics Seminar 2024
- Imperial College Geometry Seminar 2024

- Columbia (visit) 2024
- 8th KTGU Representation Theory conference, Kyoto University 2023
- Perimeter Institute, Mathematical Physics seminar 2022
- KSU, M seminar 2022
- Online Seminar on Representation Theory of Finite-Dimensional Algebras 2022
- Oxford, Geometry seminar 2021
- Edinburgh, Hodge seminar 2021
- Oxford, Junior algebra seminar 2021
- Imperial, CALF seminar 2021
- IHÉS, Adeel Khan's seminar 2021
- Oxford, Frances Kirwan's seminar 2021

Of the order of \sim 50 talks not directly about my research.

Letters of Recommendation

Professors Dominic Joyce, Ian Grojnowski, and Vivek Shende.