

Adam Dauser

Mathematician · Researcher

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Education

2022– **Ph.D. candidate in Mathematics**
Max Planck Institute for Mathematics and University of Bonn · advisors:
Alexander Ivanov and Peter Scholze

2022 **M.Sc. in Mathematics**
University of Bonn

2020 **B.Sc. in Mathematics (with a minor in economics)**
University of Bonn

2016–2018 **Frühstudium in Mathematics**
Friedrich-Alexander University Erlangen-Nürnberg

Research Interests

Arithmetic Geometry, Geometric Representation Theory, Higher Category Theory, and Six-Functor Formalisms.

Academic Theses

2022– **Categorical Deligne-Lusztig theory**
Ph.D. research project · Max Planck Institute for Mathematics and University
of Bonn · advisors: Alexander Ivanov and Peter Scholze

2021–2022 **Deligne-Lusztig stacks**
M.Sc. thesis · University of Bonn · advisors: Alexander Ivanov and Peter
Scholze

2020 **Poincaré Duality in Étale Cohomology**
B.Sc. thesis · University of Bonn · advisors: Alexander Ivanov and Peter
Scholze

Publications

2025 **Uniqueness of six-functor formalisms**
Joint work with Josefien Kuijper · Preprint, submitted
[arXiv](#) · [PDF](#)

Talks

2026 **Hyodo-Kato cohomology**

- ARGOS seminar: Analytic de Rham stacks, University of Bonn and MPIM
- 2025 **Twisted Six Functor Formalisms**
Mittagsseminar, University of Münster
- 2025 **Higher categorical methods**
IMPRS seminar, Max Planck Institute for Mathematics
- 2025 **Six functor formalism of analytic stacks and examples**
Arakelov Geometry and Condensed Mathematics, Strasbourg · two talks: analytic stacks; Betti and de Rham stacks
- 2024 **Higher categories of cohomological correspondences**
Conference on (∞, n) -Categories, Utrecht University
- 2024 **Higher Traces**
Oberseminar Lie-Theorie, Ruhr University Bochum
- 2024 **Analytic Riemann-Hilbert**
ARGOS seminar: Real Local Langlands, University of Bonn and MPIM
- 2024 **Finitary arc sheaves and Berkovich motives**
ARGOS seminar: Berkovich Motives, University of Bonn and MPIM
- 2022 **The big lines of proof in [Coherent Springer theory and the categorical Deligne-Langlands correspondence](#)**
ARGOS seminar: Categorical Local Langlands, University of Bonn
- 2022 **Torus fixed points on bow varieties**
Seminar in Representation Theory: Bow varieties, University of Bonn
- 2021 **The Kawai-Yoshioka formula**
Seminar on Donaldson-Thomas theory, University of Bonn
- 2021 **Moduli of Curves**
ARGOS seminar: Arithmetic Bigness and Uniform Bogomolov, University of Bonn
- 2021 **The Torelli theorem**
Seminar in Algebraic Geometry: Jacobian of curves and abelian varieties, University of Bonn

Conferences and Workshops

- 2026 **Higher Category Theory in Geometry and Representation Theory**
Mini-workshop, Mathematisches Forschungsinstitut Oberwolfach · upcoming
- 2025 **Arakelov Geometry and Condensed Mathematics**
IRMA, University of Strasbourg · speaker
- 2025 **Non-Archimedean Geometry and Applications**
Mathematisches Forschungsinstitut Oberwolfach · participant and reporter
[MFO page](#) · [report](#)
- 2024 **Conference on (∞, n) -Categories**
Utrecht University · contributed speaker
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Teaching

- 2024–2025 **Assistant, Representation Theory I**
Lecture course on compact Lie groups taught by Tasho Kaletha
- 2024 **Tutor, Advanced Algebra I**
Lecture course on elliptic curves taught by Andreas Mihatsch
- 2023–2024 **Tutor, Algebraic Geometry I**
Lecture course taught by Johannes Anschütz
- 2022 **Tutor, Introduction to Geometry and Topology**
Lecture course taught by Koen van den Dungen
- 2019–2020 **Tutor, Analysis I**
Lecture course taught by Sergio Conti