

Hannah Dell

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Research interests Algebraic geometry, derived categories of coherent sheaves, Bridgeland stability conditions, group actions on varieties and triangulated categories, Kuznetsov components, Fano and hyperkähler varieties, moduli spaces, categories associated to quivers.

Employment **Postdoctoral Researcher** September 2024 – August 2026
University of Bonn, Germany (Mentor: Prof. Daniel Huybrechts)

Education **PhD Mathematics** September 2020 – August 2024
University of Edinburgh, UK
Thesis: *Stability Conditions and Group Actions*, supervised by Prof. Arend Bayer

MMath (1st Class) September 2016 – August 2020
University of Warwick, UK
Thesis: *Schemes and Graded Rings*, supervised by Prof. Gavin Brown

Publications

1. Stability conditions on free abelian quotients, arxiv.org/abs/2307.00815, *Épjournal de Géométrie Algébrique* 9 (2025), Art. 16
2. Cyclic covers: Hodge theory and categorical Torelli theorems (joint with Augustinas Jacovskis and Franco Rota), arxiv.org/abs/2310.13651, *IMRN* 2025, Issue 10
3. Fusion-equivariant stability conditions and Morita duality (joint with Edmund Heng and Anthony Licata), arxiv.org/abs/2311.06857, *Math. Z.* 311, 48 (2025)

Talks

Selected invited talks

ÖMG-DMV Meeting, <i>Linz</i>	September 2025
Hyperkähler Workshop, <i>Milan</i>	March 2025
Oberseminar Algebraische und Komplexe Geometrie, <i>Bochum</i>	November 2024
Seminar Algebraic Geometry, <i>Bonn</i>	November 2024
Tale of Geometries Workshop, <i>Brussels</i>	October 2024
Workshop on DT Theory and Derived Categories, <i>Paris</i>	September 2024
Equivariant Derived Categories Seminar, <i>SLMath, Berkeley</i>	March 2024
Wayne State Algebra Seminar, <i>Detroit</i>	March 2024
Geometry and Physics Seminar, <i>Sheffield</i>	February 2024
Artin Groups meet Triangulated Categories Workshop, <i>Oberwolfach</i>	January 2024
QM Research Seminar, <i>University of Southern Denmark</i>	October 2023
GLEN Workshop on Stability Conditions, <i>Liverpool</i>	September 2023

Selected contributed talks

Queer In Number Theory and Geometry Workshop, <i>Norfolk</i>	August 2023
Women in Number Theory and Geometry Retreat, <i>Chesterfield</i>	April 2023

Funding awarded	Heilbronn Focused Research Grant March 2025 Awarded £3300 to run a collaborative visit in May 2025 at the University of Cambridge for the project “ <i>Logarithmic Geometry and Smoothing Bridgeland Stability Conditions</i> ” together with Uttaran Dutta, Samuel Johnston, and Patrick Kennedy–Hunt.
Visiting positions	SLMath: Noncommutative Algebraic Geometry March – April 2024 Program Associate.
Teaching	<p> Lecturer (CIMPA school: Bridgeland stability and applications, Brazil) August 2025 Designed and presented a 6-hour advanced course at Universidade Federal de Santa Catarina, Florianópolis for PhD and master’s students from across South America. </p> <p> Tutor (School of Mathematics, University of Edinburgh) January 2021 – August 2024 Running weekly problem sessions and marking assignments for first - third year undergraduate courses on topics including algebra, geometry, and analysis. Award: Associate Fellow of the Higher Education Academy </p> <p> Count Me In Tutor (University of Edinburgh) Summer 2023 Together with Dr. Yoav Len, I supervised a group of 3 undergraduates for a 6-week research project on tropical moduli spaces. This was part of a research program for underrepresented groups in mathematics. I also organised seminars and social events. </p> <p> Mathematics Undergraduate Supervisor (University of Warwick) 2019 – 2020 Running weekly tutorials and marking assignments for small groups of first years. </p>
Languages	\LaTeX , LEAN (familiar), English (native), German (B2 equiv.), French (A2 equiv.)
Service and outreach	<p> Maths Outreach Team Member (University of Edinburgh) April 2023 – August 2024 Running monthly maths engagement activities for school children and teachers. </p> <p> GAeL XXIX, XXX July 2021 – July 2023 GAeL is an annual workshop for early-career algebraic geometers from across the globe. As part of a team of global organisers, I helped with publicising the event, participant communication, and securing main speakers and funding. </p> <p> EDGE and Hodge Seminars (University of Edinburgh) 2022 – 2024 In 2023–2024 I co-organised the geometry seminar (EDGE). In 2022–2023, I organised the Hodge pre-seminar. This is an introductory talk to complement the Hodge Seminar - the colloquium for algebra, geometry, number theory and topology. </p>
References	Available upon request