

Hannah Dell

School of Mathematics, University of Edinburgh, United Kingdom

hdell@math.uni-bonn.de | hannahdell.com

Research interests

Algebraic geometry, derived categories of coherent sheaves, Bridgeland stability conditions, group actions on varieties and triangulated categories, Kuznetsov components, Fano 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 and preprints

1. Stability conditions on free abelian quotients, arxiv.org/abs/2307.00815

2. Cyclic covers: Hodge theory and categorical Torelli theorems (joint with Augustinas Jacovskis and Franco Rota), arxiv.org/abs/2310.13651

3. Fusion-equivariant stability conditions and Morita duality (joint with Edmund Heng and Anthony Licata), arxiv.org/abs/2311.06857

Talks

Invited talks

Tale of Geometries Workshop, *Brussels*

October 2024

Workshop on DT Theory and Derived Categories, *Paris*

September 2024

Equivariant Derived Categories Seminar, *SLMath, Berkeley*

March 2024

Wayne State Algebra Seminar, *Detroit*

March 2024

Geometry and Physics Seminar, *Sheffield*

February 2024

AG Seminar, *Luxembourg*

February 2024

Artin Groups meet Triangulated Categories Workshop, *Oberwolfach*

January 2024

Algebra, Geometry, and Number Theory Seminar, *Bath*

November 2023

QM Research Seminar, *University of Southern Denmark*

October 2023

GLEN Workshop on Stability Conditions, *Liverpool*

September 2023

Algebraic Geometry Seminar, *Lille*

June 2023

Junior Geometry Seminar, *Cambridge*

June 2023

Algebra Seminar, *Leeds*

March 2023

CALF (UK Junior Algebraic Geometry Seminar), *Nottingham*

March 2023

Selected contributed talks

Fano and Hyperkähler Varieties in Genova

January 2024

	Queer In Number Theory and Geometry Workshop, <i>Norfolk</i>	August 2023
	Workshop on Singularities and Mirror Symmetry, <i>Glasgow</i>	December 2022
Funding awarded	Laura Wisewell Travel Scholarship (University of Edinburgh)	November 2022
	Awarded £900 to support my attendance at the workshop on Hyperkähler quotients, singularities, and quivers at SCGP, Stony Brook.	
	EMS Research Support Fund	April 2021
	Awarded £1389.33 by the Edinburgh Mathematical Society on behalf of GAeL XXIX to support 7 early-career researchers from or based in Scotland to attend.	
Visiting positions	SLMath: Noncommutative Algebraic Geometry	March – April 2024
	Program Associate.	
Teaching	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	
	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.	
	Mathematics Undergraduate Supervisor (University of Warwick)	2019 – 2020
	Running weekly tutorials and marking assignments for small groups of first years.	
Languages	\LaTeX , LEAN (familiar), English (native), German (B2 equiv.), French (A2 equiv.)	
Service and outreach	Maths Outreach Team Member (University of Edinburgh)	April 2023 – August 2024
	Running monthly maths engagement activities for school children and teachers.	
	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.	
	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.	
References	Available upon request	