

Calliope Ryan-Smith

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School of Mathematics
University of Leeds
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Education

2021–Present	Ph.D (in progress). Supervisors: Dr Asaf Karagila, Dr Andrew Brooke-Taylor, Dr Vincenzo Mantova	<i>University of Leeds</i>
2020–2021	M.Math , Mathematics	<i>University of Cambridge</i>
2017–2020	B.A , Mathematics	<i>University of Cambridge</i>

Grants

2021 **Mathematical Sciences Doctoral Training Partnership**
EPSRC, grant number [EP/W523860/1].

Research interests

Mathematical logic; intersections of model theory and set theory. Set theory: cardinal characteristics; generalised Cantor space; theory of forcing; large cardinals; choiceless constructions; combinatorial objects. Model theory: classification theory; abstract elementary classes; independence property; generalised logic.

Preprints

2024	(w/ J. Schilhan and Y. Wei) Upwards homogeneity in iterated symmetric extensions	<i>Submitted.</i> arXiv:2405.08639
2024	String dimension: VC dimension for infinite shattering	<i>Submitted.</i> arXiv:2402.18250
2023	The Hartogs–Lindenbaum spectrum of symmetric extensions	<i>Accepted.</i> arXiv:2309.12100
2023	(w/ A. Karagila) Which pairs of cardinals can be Hartogs and Lindenbaum numbers of a set?	<i>Submitted.</i> arXiv:2309.11409
2023	Stratifiable formulae are not context-free	<i>Submitted.</i> arXiv:2304.10291

Teaching experience

Workshop leader:

2022	Coding theory (<i>2nd year</i>)
2022, 2023	Discrete Mathematics (<i>2nd year</i>)
2022	Elementary Differential Calculus (<i>1st year</i>)
2022, 2023	Logic (<i>2nd year</i>)
2024	Real Analysis (<i>2nd year</i>)
2024	Sets, Sequences and Series (<i>1st year</i>)