

Luke Kershaw

l.kershaw@bristol.ac.uk

Office 2.21, Fry Building, Bristol

SUMMARY Current 2nd year PhD student in Mathematics at the University of Bristol. Researching homological algebra and representation theory of finite-dimensional algebras.

EDUCATION **Ongoing**
Doctor of Philosophy, Mathematics 2019-2023 (*Expected*)
Focus: Representation Theory of Finite-Dimensional Algebras
University of Bristol, Bristol, UK *Supervisor: Prof. Jeremy Rickard*
Previous
Master of Mathematics, Mathematics October 2015 - July 2019
University of Warwick, Coventry, UK
First Class *Final mark: 83%*
Blue Coat School, Liverpool
*A Levels: 3A*s, 1 A* *GCSEs: 8 A*s, 5 As, 1 B*

RESEARCH EXPERIENCE **Previous**
4th Year Project, Tropical Geometry *Supervisor: Dr Diane Maclagan*
Warwick Mathematics Institute 2018-2019
An investigation into the properties of tropical geometry, with a focus on tropical orders of vanishing and comparison with their classical analogue.
2nd Year Essay, Tensors and Exterior Algebra
Warwick Mathematics Institute 2016-2017
An introduction to the ideas behind Exterior Algebras aimed at second year mathematics students. Used as an opportunity to learn independently about a topic that interested me.

TEACHING EXPERIENCE **Ongoing**
Teaching Support Assistant, Bristol School of Mathematics 2019-Present
Fortnightly tutorials and homework grading. Focused on helping students to be mathematically rigorous in their arguments.
Courses: Linear Algebra, Intro to Proof, Intro to Group Theory
Previous
Supervisor, Warwick Mathematics Institute 2018-19
Mentor and support two groups of five 1st year maths students with all core modules. Communicate new ideas to students and assist in their general mathematical development. Complete marking and provide feedback in an effective and organised manner.
Peer Tutor, Warwick Mathematics Institute 2016
Provided support for Teaching Assistant of 1st year analysis class. Focused on helping students to understand how to think and communicate ideas rigorously.

CONFERENCES ATTENDED	<i>University of Bristol (Online), UK</i>	June 2021
	Young Researchers in Mathematics 2021	
	<i>University of Valencia (Online), Spain</i>	December 2020
	3 rd Bringing Young Mathematicians Together Conference	
	<i>ICRA 2020 (Online)</i>	November 2020
	Workshop and International Conference on Representations of Algebras	
	<i>Hausdorff Center for Mathematics (Online), Germany</i>	October 2020
	Winter School - "Connections between representation theory and geometry"	
	<i>London Mathematical Society (Online), UK</i>	September 2020
	Autumn Algebra School	
MISC. EXPERIENCE	<i>Leicester (Online), UK</i>	September 2020
	Categorifications in Representation Theory	
	<i>PGR Representative:</i>	2019-Present
	Member of the Student Staff Liason Committee.	
	<i>Conference Co-organiser:</i>	
WORK EXPERIENCE	MINGLE 2020 (annual Bristol postgraduate conference).	
	<i>Programming Languages:</i> Python, Lua, Matlab, Java, C.	
	<i>Software:</i> Microsoft Office, TeXworks.	
	<i>Data Engineer (prev. Data Science Intern)</i>	Jul-Aug 2018, Jul-Aug 2019
	AIMES Ltd, Liverpool, England	
	<ul style="list-style-type: none"> Developed an automatic system for data collection and processing to aid in NHS funding applications. Effectively organised work to complete the project within strict deadlines. 	
	<i>Accounts Assistant</i>	Dec 2016, Mar-Apr 2017, Jul-Sep 2017
	Velocity Composites Plc, Burnley, England	
	<ul style="list-style-type: none"> Developed a demand analysis project to forecast changes in customer needs. Communicated within the business to decide which information was relevant to calculations and decision making. 	
	<i>Accounts Assistant</i>	Aug 2014
	Ultrasys Plc, London, England	
	<ul style="list-style-type: none"> Managed current and historical invoices, processed purchases and expenses. 	