Zhichen Wu

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EDUCATION

Oct 2023 — Jun 2024
MSc Mathematical Sciences, University of Oxford
Oxford

The rigorous training at Oxford provides me with a solid foundation for future research.

Sep 2021 — Jul 2023
BSc Mathematics, University of Sheffield
Sheffield

I transferred from Xi'an Jiaotong-Liverpool University (XJTLU) to the University of Sheffield in 2021.

First Class Honours

Sep 2019 — Jul 2021
Applied Mathematics, Xi'an Jiaotong-Liverpool University
Suzhou

This program is hosted conjointly by the University of Liverpool (UK) and the Xi'an Jiaotong-Liverpool University (China).

RESEARCH EXPERIENCE

Jun 2022 — Jul 2023
Classification of arithmetic hyperbolic manifolds
Online

The purpose of this project is to classify certain kinds of arithmetic hyperbolic manifolds. During this process, I studied related topics such as quadratic forms, algebraic number theory, and hyperbolic geometry.

Jun 2022
Summer Undergraduate Research Experience
Sheffield

Funded 6-week long Summer Undergraduate Research Internship in Algebraic Topology under the supervision of Prof Sarah Whitehouse

This project (the title was 'Loops and Covers') looked at covers of spaces and developed an approach to the Van Kampen's theorem via the theory of covers. I also learned some basic category theory in order to have the language in which to formulate this precisely.

CONFERENCES AND WORKSHOPS

Sep 2023
British Topology Meeting
Sheffield

The 36th British Topology Meeting

Jul 2023
2023 International Summer School of Algebraic Geometry
Shanghai

This summer school invited Chenyang Xu and many other international experts in algebraic geometry to give a short course on moduli space theory. The topics included algebraic K-stability, moduli spaces over derived categories, and the P = W conjecture.

Aug 2022
LMS Undergraduate Summer School 2022
Edinburgh

Annual two-week courses held by LMS every Summer at a UK university

The aim is to introduce modern mathematics to the best UK undergraduates who will enter their final year the following Autumn, and encourage them to think about an academic career in maths. The LMS Undergraduate Summer School consists of a combination of short lecture courses with problem-solving sessions and colloquium-style talks from leading mathematicians. 50 places are available to students per year.

Jul 2022
AMS-EMS-SMF 2022
Grenoble

The 2nd Joint Congress of Mathematics co-organized by the American Mathematical Society, the European Mathematical Society and the Société Mathématique de France

Aug 2021
International Conference and Summer School on Applied Topology
Shijiazhuang

Summer courses on Simplicial Homology and Homotopy, and Computational Topology

COMPETITIONS

Aug 2022	**Simon Marais Mathematics Competition** Member of the University of Sheffield team	Sheffield
Aug 2022	**International Mathematics Competition for University Students** Certificate	Online
May 2022	**Mathematical Contest in Modeling** Honourable Mention (approximately 21% of teams)	Sheffield

GRADUATE-LEVEL COURSES

Algebraic Topology	Differential Manifolds
Algebraic Geometry	Lie Groups
Homological Algebra	Galois Theory
Category Theory	

READING SEMINARS

Nov 2021 — Jun 2023	**Algebra and Category Theory** • Algebra: Chapter 0 by Paolo Aluffi • Galois Theory by Tom Leinster • Basic Category Theory by Tom Leinster	Sheffield
Jul 2020 — Oct 2021	**Topology** • Basic topology by M. A. Armstrong • Algebraic topology by Allen Hatcher	Suzhou

SKILLS

Latex

Programming in R, Python, and Matlab

Mathematical Modelling

Machine Learning

LANGUAGES

Chinese

English
• With good command
• IELTS 7.0 GRE 321