Zachary **Feng**

Updated December 2023

Education

2022–2026	**Doctor of Philosophy**, *University of Oxford*
	Advisor: James Newton
2021–2022	**Master of Science**, *McGill University*
	Advisor: Patrick Allen
2016–2021	**Bachelor of Science**, *McGill University*
	First Class Honours, Dean's Honour List
Jan–Apr 2020	**Exchange Semester**, *National University of Singapore*

Publications

1. A lower bound on the proportion of modular elliptic curves over Galois CM fields. To appear in *International Journal of Number Theory*.

Teaching Experience

@ Oxford (2023-2024)

Hilary 2024	**Tutor**, *Representation Theory (Williams-Exeter Program @ Exeter)*
Hilary 2024	**Tutor**, *M1 Linear Algebra I & Groups and Group Actions (@ Balliol)*
Michaelmas 2023	**Tutor**, *M1 Linear Algebra I (@ Balliol)*
Michaelmas 2023	**Tutor**, *Galois Theory (Williams-Exeter Program @ Exeter)*

@ Oxford (2022-2023)

Trinity 2023	**Tutor**, *ASO Number Theory (@ Balliol)*
Trinity 2023	**Tutor**, *Galois Theory (Williams-Exeter Program @ Exeter)*
Trinity 2023	**Teaching Assistant**, *M1 Groups and Group Actions (@ Merton)*
Hilary 2023	**Teaching Assistant**, *A5 Topology (@ Merton)*
Michaelmas 2022	**Teaching Assistant**, *B3.1 Galois Theory*

@ McGill (2021-2022)

Jan–Apr 2022	**Mentor**, *Directed Reading Program*
Jan–Apr 2022	**Teaching Assistant**, *MATH 236 Algebra 2*
Sep–Dec 2021	**Teaching Assistant**, *MATH 133 Linear Algebra and Geometry*

Workshops Attended

Aug 2023	**Summer school on the automorphic side of the p-adic Langlands program**
	Universität Wuppertal

May 2023	**Summer school on the arithmetic of the Langlands program** Universität Bonn
Mar 2023	**Spring school on non-archimedean geometry and eigenvarieties** Universität Heidelberg
Jul 2022	**Special program on p-adic L-functions and eigenvarieties** University of Notre Dame
Jan–Apr 2021	**Arizona Winter Semester 2021: Virtual School in Number Theory** online

Conferences Attended

Sep 2023	**Young Researchers in Algebraic Number Theory (Y-RANT V)** University of Cambridge
Sep 2023	**Great Western Number Theory Seminar** University of Reading
Jan 2023	**Great Western Number Theory Seminar** Oxford
Nov 2022	**London-Paris Number Theory Seminar** Université Paris Cité
Jun 2021	**CMS Summer Meeting 2021** online

Seminars Attended

2023–present	**Oxford Algebra Seminar**
2023–present	**Oxford Junior Algebra and Representation Theory Seminar**
2022–present	**Oxford Number Theory Seminar**
2022–present	**Oxford Junior Number Theory Seminar**
2021–2022	**Quebec-Vermont Number Theory Seminar**

Activities

2023–present	**Co-organizer**, Young Researchers in Algebraic Number Theory (Y-RANT VI) Together with Arun Soor & Håvard Damm-Johnsen
2023–present	**Co-organizer**, Oxford Junior Number Theory Seminar Together with Arun Soor & James Taylor
Hilary 2024	**Co-organizer**, Oxford Global Reciprocity Study Group Together with Håvard Damm-Johnsen
Hilary 2024	**Co-organizer**, Oxford Montréal Functor Study Group Together with Finn Wiersig & James Taylor
Trinity 2023	**Co-organizer**, Oxford Tate's Thesis Study Group Together with Håvard Damm-Johnsen
Hilary 2023	**Co-organizer**, Oxford Automorphic Representations Study Group Together with Håvard Damm-Johnsen

2022–2023 **Graduate Student Representative**, Oxford Maths Teaching Committee

Talks

Sep 2023 **Young Researchers in Algebraic Number Theory (Y-RANT V)**
Title: p-adic L-functions and eigenvarieties

Jun 2023 **Oxford Algebraic Groups Study Group**
Title: Quotients, subgroups generated by a map, and solvable groups

May 2023 **Oxford Tate's Thesis Study Group**
Title: Local zeta functions and the functional equation

Feb 2023 **Oxford Automorphic Representations Study Group**
Title: Supercuspidal representations and the local Langlands correspondence

Jan 2023 **Oxford Automorphic Representations Study Group**
Title: Representations of locally profinite groups and Hecke algebras

Nov 2022 **Oxford Fargues-Fontaine Curve Study Group**
Title: Zeros of elements of the ring B: factorization and divisors

Oct 2022 **Oxford Modularity Lifting Study Group**
Deformations of representations of profinite groups

Industry Experience

May–Aug 2019 **Software Engineering Intern**, Microsoft Redmond HQ