

# Finn Wiersig

## Personal Details

Address Mathematical Institute,  
University of Oxford  
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Date of birth October 14th, 1999

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## Education

10/2020 - 04/2025 Doctor of Philosophy in Mathematics, University of Oxford, St Peter's College

01/2020 - 02/2020 University of California at Berkeley  
Six informal visiting weeks via an invitation by Prof. Bernd Sturmfels

10/2017 - 09/2020 Bachelor of Science B.Sc.  
Course of studies: Mathematics with Specialisation Mathematics,  
Otto-von-Guericke-University Magdeburg,  
Bachelor's Thesis: *Sparse Polynomials in Polynomial Ideals*, supervised by  
Prof. Thomas Kahle  
Grade of Bachelor's Thesis: very good (1,0); Final Grade: with distinction (1,1)

10/2009 - 06/2017 Grammar school, Ökumenisches Domgymnasium Magdeburg,  
Graduated with A-levels (Abitur) with mark 1,3  
Advanced courses mathematics and physics  
Awarded for a written assignment (Besondere Lernleistung) on  
determinantal ideals by the German Mathematical Society

## Professional experience

06/2023 - 09/2024 *Stipendiary Lecturer in Pure Mathematics*, St Peter's College, Oxford

12/2022 *Undergraduate Admissions Interviewer*, Brasenose College, Oxford

02/2019 *Student research assistant*, research group of Prof. Thomas Kahle, Magdeburg

06/2018 - 01/2019 *Undergraduate assistant*, Otto-von-Guericke-University Magdeburg

## Publications and Preprints

09/2023 *On a solution functor for  $D$ -cap-modules via  $p$ -adic Hodge theory*, arXiv:2309.13769

02/2023 *No short polynomials vanish on bounded rank matrices*, with Jan Draisma and  
Thomas Kahle, Bulletin LMS 55 (4) (2023), pp. 1791-1807

## Talks

03/2023 *Continuous linear endomorphisms of holomorphic functions*, Junior Algebra and  
Number Theory Seminar, University of Cambridge

12/2022 *Continuous linear endomorphisms of holomorphic functions*, Junior Algebra and  
Representation Theory Seminar, University of Oxford

11/2021 *Towards a Riemann-Hilbert correspondence for  $D$ -cap modules*, Junior Algebra and

## Workshop organisation

- 01/2023 - 3/2023 *Rapoport-Zink spaces*, reading group co-organised with Arun Soor and James Taylor at the University of Oxford
- 10/2022 - 12/2022 *The (schematic) Fargues-Fontaine curve*, reading group co-organised with Arun Soor and James Taylor at the University of Oxford
- 1/2022 - 03/2022 *Derived analytic geometry*, reading group co-organised with Rhiannon Savage and Jaw Swar at the University of Oxford
- 1/2022 - 04/2022 *p-adic Hodge theory*, reading group co-organised with James Taylor at the University of Oxford

## Attended Conferences and Workshops

- 10/2023 *Arithmetic Algebraic Geometry*, Münster
- 09/2023 *Conference for Young Number Theorists in Bonn*, Max-Planck Institute for Mathematics, Bonn
- 02/2023 *Number Theory meets p-adic Representations*, Münster
- 11/2022 *London-Paris Number Theory Seminar*, focused on Higher Coleman Theory, Université Paris Cité, Paris
- 07/2022 *Smooth representations of  $GL(n, \mathbb{Q}_p)$  in natural characteristic*, University of Oxford
- 06/2022 *Topology and Arithmetic around the Langlands Program*, Stockholm University
- 05/2022 *London-Paris Number Theory Seminar*, focused on the representation theory of reductive groups, King's College, London
- 03 - 04/2022 *Cohomology of Varieties*, Institute of Mathematics of the Polish Academy of Sciences, Warsaw
- 09/2021 *The unity of mathematics: A conference in honour of Sir Michael Atiyah*; Isaac Newton Institute for Mathematical Sciences, Cambridge
- 09/2021 *Locally analytic representations of p-adic groups*; University of Cambridge
- 06/2021 *Conference on arithmetic geometry in honour of Luc Illusie*; Institut des Hautes Études Scientifiques, Paris
- 04/2021 *Spring school towards a mod p Langlands correspondence*; Universität Duisburg- Essen
- 12/2020 *Tropical geometry, Berkovich spaces, Arithmetic D-modules and p-adic local systems*; Imperial College London
- 11/2019 *Workshop Buildings, Varieties and Applications*; Max Planck Institute for Mathematics in the Sciences, Leipzig
- 09/2019 *Real Applied Algebraic Geometry*; Technical University of Berlin
- 09/2019 *Convexity Day*; Max Planck Institute for Mathematics in the Sciences, Leipzig
- 11/2018 Presentation of an exercise on the compactness of basic semialgebraic sets  
*Chow Lectures: by Peter Scholze*; Max Planck Institute for Mathematics in the Sciences, Leipzig

## Teaching

St Peter's College	<i>Stipendiary Lecturer in Pure Mathematics</i> , teaching <i>A0 Linear Algebra</i> , <i>A2 Metric Spaces and Complex Analysis</i> , <i>A3 Rings and Modules</i> , <i>A5 Topology</i> , <i>ASO Number Theory</i> and <i>ASO Projective Geometry</i> ; since Trinity 2023
Wadham College	Tutor for the <i>Sarah Lawrence Program</i> , teaching <i>Multivariable Calculus</i> ; Trinity 2022
Oxford Maths Institute	Tutor for <i>B3.4 Algebraic Number Theory</i> , Revision classes; Trinity 2023 Tutor for <i>B3.4 Algebraic Number Theory</i> ; Hilary 2022 Tutor for <i>C2.1 Lie algebras</i> ; Michaelmas 2022 Tutor for <i>C2.6 Introduction to Schemes</i> ; Hilary 2022 Tutor for <i>C2.7 Category Theory</i> ; Michaelmas 2021 Teaching assistant for <i>C2.5 Non-commutative rings</i> ; Hilary 2021 Teaching assistant for <i>B2.1 Introduction to Representation Theory</i> ; Michaelmas 2020

## Recognition

10/2020 - 9/2024	<i>Mathematical Institute Award</i> of the Mathematical Institute of the University of Oxford
03/2019 - 09/2020	Scholarship of the <i>Studienstiftung des Deutschen Volkes</i>
10/2018 - 03/2019	Scholarship <i>Deutschland-Stipendium</i>
2017	Award for graduation A-level ( <i>Abiturpreis</i> ) of the German Mathematical Society