

# Harry SPENCER

## CONTACT

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URL: [hspen99.github.io](https://hspen99.github.io)

## EDUCATION

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- 2022— **PhD**, University College, London School of Geometry and Number Theory  
*Expected to finish by autumn 2026.*  
EPSRC-funded joint PhD programme between Imperial, King's, and University Colleges.  
Supervisor: Vladimir DOKCHITSER
- 2018–2022 **BA, MA; MMath**, Churchill College, University of Cambridge  
Part III Essay: “*Deforming Galois Representations*” | Advisor: Jack THORNE

## PRE-PRINTS & PUBLICATIONS

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MOTIVIC PIECES OF CURVES: L-FUNCTIONS AND PERIODS  
*Pre-print*, November 2025 ([pdf](#))

WILD CONDUCTOR EXPONENTS OF CURVES  
*Submitted*, February 2025 ([pdf](#))

CONSTRUCTING FAMILIES OF 3-SELMER COMPANIONS  
*Res. Number Theory* **11**, art. 67 (2025)

EVIDENCE FOR AND AGAINST ZAUNER'S MUB CONJECTURE IN  $\mathbb{C}^6$   
With Gary McConnell and Afaq Tahir, *Quantum Inf. Comput.* **21** (2021): 721–736

## TEACHING

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- 2023— Teaching Assistant, UCL Department of Mathematics  
Responsibilities: Tutorials, marking coursework and exams, supervising undergraduate projects.  
Courses: Algebra 1 (tutorials, marking); Algebra 3: Further Linear Algebra, Galois Theory (marking)

## ORGANISATION

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- 2025 Organiser, UCL study group  
Organising weekly talks on ‘The arithmetic of hyperelliptic curves’
- 2023–2024 Co-organiser, London Junior Number Theory Seminar  
Organising weekly talks aimed at PhD students in number theory.
- 2022–2023 Chair, LSGNT Student-Staff Liaison Committee  
Organising and chairing meetings with senior staff at the LSGNT; representing student views.

## INVITED TALKS

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Feb. 2025 CURVES, REPRESENTATION THEORY AND CONDUCTORS  
Junior Number Theory Seminar, University of Warwick

Oct. 2024 WILD CONDUCTOR EXPONENTS OF CURVES  
Heilbronn Number Theory Seminar, University of Bristol