

# David Loeffler – Curriculum Vitae

## Contact Details

Name: LOEFFLER, David Alexander  
ORCID identifier: [0000-0001-9069-1877](https://orcid.org/0000-0001-9069-1877)  
Date of birth: 25th April 1983  
Nationality: British  
Place of residence: Rugby, United Kingdom  
Web page: [https://warwick.ac.uk/fac/sci/math/people/staff/david\\_loeffler/](https://warwick.ac.uk/fac/sci/math/people/staff/david_loeffler/)

## Current Position

2018– Professor, Mathematics Institute, University of Warwick, UK  
2021–26 Visiting Professor, Department of Mathematics, ETH Zürich, Switzerland  
(25% part-time position)

## Previous Positions

2016–18	Reader	} Mathematics Institute, University of Warwick, UK
2014–16	Associate Professor	
2013–14	Assistant Professor	
2010–13	Zeeman Lecturer	
2008–10	Junior Research Fellow,	Churchill College, University of Cambridge, UK

## Education

2005-08 PhD Mathematics, University of London (Imperial College), UK.  
Supervisor: Kevin Buzzard. Thesis title: *Overconvergent algebraic automorphic forms*.  
2004-05 Mathematical Tripos Part III, University of Cambridge, UK.  
2001-04 BA (Hons) Mathematics, University of Cambridge, UK.  
1994-01 Cotham School, Bristol.

## Research Prizes

2015 London Mathematical Society Whitehead Prize (shared with Sarah Livia Zerbes).  
2014 Philip Leverhulme Prize (shared with Sarah Livia Zerbes).

## Research Grants

- 2021–26 ERC Consolidator Grant *Shimura varieties and the BSD conjecture*. Value: €1.7m.
- 2021–23 EPSRC New Horizons grant *The Birch–Swinnerton-Dyer conjecture: beyond dimension 1* (joint with Sarah Zerbes). Total value: £200,000.
- 2019–22 EPSRC Standard Grant *P-adic L-functions and reciprocity laws*. Value: £322,484.
- 2017–20 Royal Society URF Enhancement Award. Value: £98,442.
- 2017–20 Renewal of Royal Society University Research Fellowship. Value: £271,200.
- 2015–17 50% share of 2014 Philip Leverhulme Prize. Value: £50,000.
- 2012–17 Royal Society University Research Fellowship *L-functions and Iwasawa theory*. Value: £505,029.
- 2011 Monash-Warwick Strategic Funding Initiative grant *Computations on supersingular elliptic curves* (co-investigator). Value: £7,750.
- 2008-11 EPSRC Postdoctoral Fellowship *Eigenvarieties for compact reductive groups*. Value: £347,369.

## Teaching Experience

I have been responsible for numerous mathematics lecture courses, at levels ranging from introductory algebra courses for audiences of 300+ undergraduates, to advanced graduate courses on contemporary research topics for starting PhD students.

I have also acted as personal tutor for groups of Warwick undergraduates, supervised numerous final-year MMath / MAST dissertation projects, and led several “study groups” (learning seminars) for PhD students in number theory. Since 2019 I have served on the admissions committee for Warwick’s mathematics PhD programme.

## Research Supervision

- |                      |                                  |                               |
|----------------------|----------------------------------|-------------------------------|
| <i>PhD students:</i> | Chris Williams (2012–16)         | Xenia Dimitrakopoulou (2020–) |
|                      | Alessandro Arlandini (2016–20)   | Muhammad Manji (2020–)        |
|                      | Rob Rockwood (2018–)             | Arshay Sheth (2021–)          |
|                      | Zeping Hao (2019–)               |                               |
| <i>Postdocs:</i>     | Guhan Venkat Harikumar (2016–17) | Óscar Rivero Salgado (2021–3) |
|                      | Pak-Hin Lee (2019–22)            |                               |

## Invited talks and lecture series (selection)

- 2022 Invited speaker, *International Congress of Mathematicians*, St Petersburg, Russia (joint with S.L. Zerbes).
- 2018 Lecture course *Euler Systems* (joint with S.L. Zerbes), part of *Arizona Winter School on Iwasawa Theory*, Southwest Centre for Arithmetic Geometry, U. of Arizona, US.
- 2017 Speaker at *Workshop on Motives, Galois Representations and Cohomology Around the Langlands Program*, Insitute of Advanced Study, Princeton, US.

- 2017 Preparatory lecture series *Euler systems*, conference *Iwasawa 2017* (in honour of centenary of birth of K. Iwasawa), University of Toyko, Japan.
- 2015 Plenary speaker at *Journées Arithmétiques*, University of Debrecen, Hungary.

## Organisation of Scientific Meetings

- 2023 Member of scientific committee for semester programme *Algebraic cycles, L-values and Euler systems*, Mathematical Sciences Research Institute, Berkeley, US.
- 2019 Member of organising committee for workshop *p-adic L-functions for symplectic groups*, Laboratoire Paul Painlevé, University of Lille, France (approx. 50 participants).
- 2015 Member of organising committee for conference *Elliptic curves, modular forms and Iwasawa theory* in Cambridge, UK, in honour of J.H. Coates' 70th birthday (approx. 170 participants). I was also one of the two editors of the proceedings volume for this conference, published by Springer.
- 2013 Co-organiser of two conferences *Higher rank automorphic forms and L-functions* and *Explicit methods for modular forms*, University of Warwick, UK (each approx. 40 participants)

## Reviewing Activities

- Member of editorial boards of journals *Mathematika*, *Research in Number Theory*, and *Revista Math. Iberoamericana*.
- Member of External Advisory Board of the Heilbronn Institute for Mathematical Research, Bristol, UK.
- External reviewer of grant applications for funding bodies including European Research Council, EPSRC (UK), NSERC (Canada), NSA (US).
- Peer-reviewer for research journals including *Annals of Mathematics*, *Inventiones Math.*, *Duke Math. J.* and *J. Amer. Math. Soc.*

## Languages

- English: native language
- German: intermediate
- French, Spanish: basic

*Last updated Sun, 26 Sep 2021*