

Contact Details

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Employment

Jan 2010-Sep 2014	Zeeman Lecturer, Mathematics Institute, University of Warwick.
Oct 2008-Dec 2009	Junior Research Fellow in Mathematics, Churchill College, Cambridge.

Research Grants

Oct 2008-Sep 2011	EPSRC Postdoctoral Fellowship EP/F04304X/1, <i>Eigenvarieties for compact reductive groups</i> (sole investigator). Value: £128,335.
March-July 2011	Monash-Warwick Strategic Funding Initiative grant <i>Computations on supersingular elliptic curves</i> (co-investigator). Value: £7750.

Education

2005-2008	PhD student, Department of Mathematics, Imperial College, UK. Supervisor: Kevin Buzzard. Thesis title: <i>Overconvergent algebraic automorphic forms</i> .
Jan-May 2006	Visitor at Department of Mathematics, Harvard University, USA. Attended "Eigenvarieties" special semester programme.
2004-2005	Mathematical Tripos Part III (one-year taught postgraduate course), University of Cambridge, UK. (Graduated with distinction.) Dissertation title: <i>Congruences between modular forms</i> .
2001-2004	BA (Hons) Mathematics, University of Cambridge (Trinity College), UK. (First Class, highest mark in year).
1994-2001	Cotham School, Bristol. 4 A-levels at grade A (Pure Mathematics, Mechanics, Physics, Chemistry). 1 AS-level at grade A (Statistics).

Prizes and Scholarships

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| 2003 | Yeats Mathematical Essay Prize awarded by Trinity College.
Essay title: <i>Spectral Measures</i> . |
| 2002-5 | Trinity College Senior Scholarship. |
| 2002-4 | Percy Pemberton (2002), G.F.A. Osborn (2003) and Ver Heyden de Lancey (2004) prizes (awarded by Trinity College for highest mark in end of year exams). |
| 2001 | Silver Medal in the 42nd International Mathematical Olympiad (highest score in UK team). |

Academic Visits

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| November 2008 | “ <i>P</i> -adic Semester”, Tata Institute of Fundamental Research, Mumbai, India. |
| Feb-March 2011 | Northwestern University, Chicago, USA (as guest of Matthew Emerton). |

Invitations to Conferences

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| August 2011 | Summer school on Computational Methods for Modular Forms, Heidelberg, Germany. (Invited to give a course of 5 lectures.) |
| July 2011 | LMS Research Symposium “Automorphic forms and Galois representations”, Durham. |
| July 2011 | Workshop on Explicit Methods in Number Theory, Mathematisches Forschungsinstitut Oberwolfach, Germany. |
| March 2010 | Workshop on Computer Methods for <i>L</i> -Functions and Automorphic Forms, CRM, Montréal. |
| November 2009 | Workshop on Arithmetic Geometry, Kanazawa, Japan. |
| June 2009 | Sage Days 16 (Barcelona). |
| June 2009 | London-Paris Number Theory Seminar. |
| August 2008 | Workshop on Computation with Modular Forms, Heilbronn Institute (Bristol). |
| November 2007 | Sage Days 6 (Bristol). |

I have been invited to give seminar talks at many UK mathematics departments (Bristol, Cambridge, Exeter, London, Oxford, Nottingham and Warwick), and at Northwestern University (Chicago, USA), Boston University (USA) and the Tata Institute of Fundamental Research (Mumbai, India). I have also given a colloquium talk, “Modular forms from a p -adic viewpoint”, at UCL.

Teaching Experience

2010-11	Supervisor for two 4th year MMath students undertaking research projects on modular forms, University of Warwick.
Autumn 2010	Lecturer for 3rd/4th year undergraduate course “Modular Forms” (30 lectures), University of Warwick.
Autumn 2009	Supervisor (providing small-group teaching complementing lectures) for the Cambridge 2nd year “Linear Algebra” course.
Spring 2009	Lecturer for course “Modular Forms” (24 lectures), Mathematical Tripos Part III, University of Cambridge.
Spring 2007	Graduate teaching assistant for 3rd/4th year undergraduate course “Group Representation Theory”, Imperial College.
Autumn 2006	Supervisor for the Cambridge 2nd year “Metric and Topological Spaces” and “Analysis II” courses.
Autumn 2005	Graduate teaching assistant for various 1st and 2nd year undergraduate courses, Imperial College.

Other Professional Experience

- I have refereed papers for a variety of research journals, including *Proceedings* and *Bulletin of the London Mathematical Society*, *Mathematical Proceedings of the Cambridge Philosophical Society*, *Contemporary Mathematics*, *Mathematics of Computation* and *Journal of Number Theory*.
- I am an active contributor to the Sage open-source mathematical software project; I have contributed extensively to the widely-used Sage module for computing with modular forms, as well as using Sage as a means to disseminate my work on implementing more specialised algorithms relating to p -adic modular forms and automorphic forms.
- I am currently enrolled on the University of Warwick’s PCAPP (Postgraduate Certificate in Academic and Professional Practice) programme, and have attended several workshops on various aspects of university teaching and research; I hope to complete this programme in summer 2012.