Curriculum vitae – Christian Johansson

Personal details

Full name	Hans Christian Johansson
Date of birth	4 August 1985
Nationality	Swedish
Address	Department of Pure Mathematics and Mathematical Statistics Centre for Mathematical Sciences Wilberforce Road Cambridge CB3 0WB United Kingdom
Email	hcj24@cam.ac.uk
Homepage	https://www.dpmms.cam.ac.uk/~hcj24/

Employment

09/2016 – present	Herchel Smith Postdoctoral Research Fellow, DPMMS, University of Cambridge, UK
01/2015 – 07/2016	Member, School of Mathematics, Institute for Advanced Study, Princeton, USA
08/2014 – 12/2014	Postdoctoral Research Fellow, Mathematical Sciences Research Institute, Berkeley, USA
04/2013 – 07/2014	Senior Research Fellow, Mathematical Institute, University of Oxford, UK

Fellowships and visiting positions

10/2016 – present	College Research Associate, Clare College, University of Cambridge, UK
10/2013 – 07/2014	Nicholas Kurti Junior Research Fellow, Brasenose College, University of Oxford, UK
01/2012 – 03/2012	Scientific researcher, Thematic program on Galois representations Fields Institute, Toronto, Canada

Education

09/2009 – 03/2013	PhD in Mathematics, Imperial College London, UK Advisors: Prof. Kevin Buzzard and Dr. Toby Gee Viva date: 6 June 2013.
10/2008 – 06/2009	Certificate of Advanced Study in Mathematics (Part III) Clare College, University of Cambridge, UK Distinction
10/2005 – 06/2008	BA Mathematics Clare College, University of Cambridge, UK First Class Honours all three years
08/2004 – 06/2005	Göteborg University, Sweden Mathematics 63 hp Mathematical Logic 37.5 hp All courses passed with VG ("pass with distinction")

Teaching experience

10/2017 – 12/2017	Lecturer, "Algebraic Number Theory", 4th year master's level course, University of Cambridge
10/2017 – 12/2017	Supervisor, "Linear Algebra", 2nd year undergraduate course, Clare College, University of Cambridge
03/2017	Project assistant, Arizona Winter School, Southwest Centre for Arithmetic Geometry, University of Arizona
01/2017 – 03/2017	Supervisor, "Analysis I", 1st year undergraduate course, Clare College, University of Cambridge
10/2016 – 12/2016	Lecturer, "Local Fields", 4th year master's level course, University of Cambridge
10/2016 – 12/2016	Supervisor, "Analysis II", 2nd year undergraduate course, Clare College, University of Cambridge
01/2014 – 03/2014	Lecturer, "Adic spaces", graduate course, University of Oxford
10/2013 – 12/2013	Class Tutor, "Introduction to Representation Theory", 3rd year undergraduate course, University of Oxford
10/2013 – 12/2013	Class Tutor, "Commutative Algebra", 4th year master's level course, University of Oxford

01/2010 – 03/2010	Marker of graded homework for 3rd/4th year undergraduate course "Algebraic Number Theory", Imperial College London
06/2008 – 08/2008	Teaching assistant for a foundational course for students about to enter university, Göteborg University

Publications and Preprints (may be found on https://www.dpmms.cam.ac.uk/~hcj24/)

1. Classicality for small slope overconvergent automorphic forms on some compact PEL Shimura varieties of type C. **Math. Annalen., vol. 357(1), pp 51-88 (2013).**

2. A remark on a conjecture of Buzzard-Gee and the cohomology of Shimura varieties. **Math. Research Letters, vol. 20(2), pp 279-288 (2013).**

3. A trace formula approach to control theorems for overconvergent automorphic forms. **Manuscripta Mathematica, vol. 151(1), pp 19-48 (2016).**

4. A canonical dimension estimate for non-split semisimple p-adic Lie groups. With Konstantin Ardakov. **Representation Theory, vol. 20, pp 128-138 (2016).**

5. On the Sato-Tate conjecture for non-generic abelian surfaces. With an appendix by Francesc Fite. **Transactions of the A.M.S., vol. 369(9), pp 6303-6325 (2017).**

6. Overconvergent modular forms and perfectoid Shimura curves. With Przemyslaw Chojecki and David Hansen. **Documenta Mathematica, vol. 22, pp 191-262 (2017).**

7. Extended eigenvarieties for overconvergent cohomology. With James Newton. Submitted.

8. Irreducible components of extended eigenvarieties and interpolating Langlands functoriality. With James Newton. Submitted.

9. Local Langlands correspondence in rigid families. With James Newton and Claus Sorensen. Submitted.

10. Parallel weight two points on Hilbert modular eigenvarieties and the parity conjecture. With James Newton.

Organization and service

09/2015 – 06/2016	Organizer, IAS/Princeton University Number Theory Seminar
01/2014 – 07/2014	Organizer, Oxford Number Theory Seminar
10/2013	Organizer, "Number Theory Day", one-day internal conference, University of Oxford
Journal referee:	Algebra and Number Theory, Forum of Mathematics Sigma, International Mathematical Research Notices, Women in Numbers

Awards and scholarships

Yael Dowker Centenary Prize, Imperial College London 2013

Owst Prize in Mathematics, Clare College 2008

Scholarship from Felix Neubergh resestipendiefond, 2006-2009
Total value 91,000 SEK

Invited talks

09/2017	Stockholm University, Algebra and Geometry Seminar
09/2017	Summer School on Modular Forms, University of Padova
06/2017	Meeting of the Catalan, Spanish and Swedish Mathematical Societies, Number Theory Workshop, University of Umeå
05/2017	University of Amsterdam, Arithmetic and Algebraic Geometry Seminar
02/2017	"p-adic methods for Galois representations and modular forms" University of Barcelona
02/2107	University of Cambridge, Number Theory Seminar
02/2017	University College London, London Number Theory Seminar
10/2016	University of Cambridge, Algebra and Representation Theory Seminar
01/2016	Boston University, Number Theory Seminar
10/2015	Johns Hopkins University, Number Theory Seminar
10/2015	University of Chicago, Number Theory Seminar
10/2015	Northwestern University, Number Theory Seminar
05/2015	Chalmers University of Technology, Number Theory Seminar
10/2014	MSRI, Postdoctoral Seminar
10/2014	Stanford University, Number Theory Seminar
06/2014	Adam Mickiewicz University, Poznan, Number Theory Seminar
02/2014	"Frobenius distributions on curves", CIRM Luminy
11/2013	London-Paris Number Theory seminar, Institut de Mathématiques de Jussieu

09/2013	University of Bristol, Heilbronn Seminar
06/2013	"Géométrie Arithmétique p-adique", ENS Lyon
04/2013	Ecole Normale Superieure de Lyon, Number Theory Seminar
03/2013	British Mathematical Colloquium, University of Sheffield Number Theory Workshop
01/2013	University of Oxford, Number Theory Seminar
10/2012	University of Warwick, Number Theory Seminar
10/2012	University of Cambridge, Number Theory Seminar
06/2012	King's College London, London Number Theory Seminar

Language skills

English (fluent)
Swedish (native)
French (basic)