Rebecca Bellovin

Curriculum vitae

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Employment

- 2023-2024 Member, Institute for Advanced Study
 - 2022- Rankin-Sneddon Fellow, University of Glasgow
- 2019–2021 Distributed systems engineer, Ably Realtime
- 2018–2019 EPSRC postdoc, Imperial College London
- 2015–2018 Junior Research Fellow, Imperial College London
- 2014–2015 NSF postdoctoral fellow, University of California, Berkeley
- 2013–2014 ERC postdoc, Imperial College London

Education

- 2013 Ph. D., Stanford University
 - Advisor: Brian Conrad
 - Thesis: p-adic Hodge theory in rigid analytic families
- 2008 **B.A.**, Columbia University
 Summa cum laude, with honors in mathematics

Preprints and Publications

- [1] R. Bellovin. "Modularity of trianguline representations". Submitted. 2021. URL: https://arxiv.org/abs/2108.02823.
- [2] R. Bellovin. "Cohomology of (φ, Γ) -modules over pseudorigid spaces". To appear in Int. Math. Res. Not. URL: https://arxiv.org/abs/2102.04820.
- [3] R. Bellovin. "Galois representations over pseudorigid spaces". To appear in *J. de Théor. Nombres Bordeaux.* URL: https://arxiv.org/abs/2002.06687.
- [4] R. Bellovin and O. Venjakob. "Wach modules, regulator maps, and ε -isomorphisms in families". In: *Int. Math. Res. Not.* 16 (2019), pp. 5127–5204.
- [5] R. Bellovin and T. Gee. "G-valued local deformation rings and global lifts". In: Algebra Number Theory 13.2 (2019), pp. 333–378.
- [6] R. Bellovin. "Generic smoothness for G-valued potentially semi-stable deformation rings". In: Ann. Inst. Fourier (Grenoble) 66.6 (2016), pp. 2565–2620.
- [7] R. Bellovin. "p-adic Hodge theory in rigid analytic families". In: Algebra Number Theory 9.2 (2015), pp. 371–433.

[8] R. Bellovin et al. "Newton polygons for a variant of the Kloosterman family". In: Women in Numbers 2: Research Directions in Number Theory. Vol. 606. Contemp. Math. Amer. Math. Soc., Providence, RI, 2013, pp. 47–63.

Fellowships

- 2014–2015 NSF Mathematical Sciences Postdoctoral Research Fellowship, University of California, Berkeley
- 2010–2012 NSF Graduate Research Fellowship, Stanford University
- 2008–2010 RTG Fellowship, Stanford University

Professional Service

Conferences

August 2021	Project co-leader	A Pair of A	Automorphic Workshops

October 2019 Co-organizer Modularity and Moduli Spaces, Casa Matematica Oaxaca (CMO), Mexico

July 2017 Teaching assistant Automorphic Forms and the Langlands Program, MSRI

March 2017 Project assistant Perfectoid Spaces, Arizona Winter School

October 2016 Co-organizer Oberwolfach seminar on perfectoid spaces

Departmental service

Fall 2016 Co-organizer

London Number Theory Seminar

2015–2016 London School of Geometry and Number Theory (Ph.D. program) admissions committee

Refereeing

- Algebra & Number Theory
- Mathematische Zeitschrift
- o Commentarii Mathematici Helvetici
- Journal of Number Theory

Invited Talks

- 2023 Universität Heidelberg Non-archimedean geometry and eigenvarieties
- 2022 Simons Symposium on p-adic Hodge Theory
- 2021 Canadian Mathematical Society Winter Meeting
- 2021 Zoom Recent Advances in Modern p-Adic Geometry
- 2019 Durham University Algebra and Number Theory Seminar
- 2018 University of Exeter Workshop on Stark's conjectures, Iwasawa theory and related topics
- 2017 Cambridge University Number Theory Seminar
- 2017 University of Amsterdam Arithmetic and Algebraic Geometry seminar

2017	Oxford University	Number	$Theory\ Seminar$
2017	Warwick University	Number	Theory Seminar
2016	Indiana University C	Conference on the p-adic Langlands	s programme and related topics
2016	Universität Duisburg-Ess	sen Essener Seminar für Algebra	aische Geometrie und Arithmetik
2016	Universität Heidelberg	Seminar der Forschergruppe 'Symn	netrie, Geometrie und Arithmetik'
2015	University of Bristol	$Heilbronn\ Number$	Theory Seminar
2015	AMS Summer Institute in	n Algebraic Geometry	
2015	Northwestern University	Number	Theory Seminar
2015	University of Chicago	Number	Theory Seminar
2015	University of California, I	Los Angeles Number	Theory Seminar
2014	Universität Heidelberg S	Seminar der Forschergruppe 'Symn	netrie, Geometrie und Arithmetik'
2014	British Mathematical Co.	lloquium	
2014	Cambridge University	Number	Theory Seminar
2013	London Number Theory	Seminar	
2013	University of California, I	Berkeley Number	Theory Seminar
2013	Boston University	Number	Theory Seminar
2013	University of California,	San Diego Number	Theory Seminar

Teaching

Spring 2023 Instructor

Teaching 'Maths 1' (Introduction to pure mathematics) to first-year undergraduates at the University of Glasgow

Fall 2022 Instructor

Teaching 'Introduction to Real Analysis' to second-year undergraduates at the University of Glasgow.

Spring 2022 Instructor

Taught 'Galois Theory' to fourth-year undergraduates at the University of Glasgow.

July 2017 Teaching assistant

Teaching assistant for graduate course given by Kevin Buzzard at MSRI.

Spring 2017 Instructor

Taught 'Group Representation Theory' to third- and fourth-year undergraduates at Imperial College.

March 2017 Project assistant

Project assistant for graduate course given by Jared Weinstein at Arizona Winter School.

Spring 2013 **Teaching assistant**

Administrative teaching assistant for Math 51 at Stanford. Organized other TAs and students' extensions, absences, and accommodations.

Fall 2010 Teaching assistant

Teaching assistant for Math 51 at Stanford. Taught section, held office hours, and graded exams.

Summer Counselor

2005, 2008 Counselor at PROMYS. Supervised students, helped with problem sets, and gave lectures to high school students and college students.

2006–2008 Course assistant

Undergraduate course assistant at Columbia University. Responsible for grading problem sets, holding office hours, and sometimes leading discussion section for the following courses:

- Math W4045: Algebraic Curves
- o Math W4042: Introduction to Modern Algebra II (Galois theory)
- Math V3025: Making and Breaking Codes
- o Math V1207: Honors Mathematics A (calculus and linear algebra)

Supervision

2017 David Nielsen-Scott, 'Weil Conjectures for Algebraic Curves'

M4R essay, Imperial College

References

- Prof. Tara Brendle
 School of Mathematics and Statistics
 University of Glasgow
 tara.brendle@glasgow.ac.uk
 (teaching)
- Prof. Brian Conrad
 Department of Mathematics
 Stanford University
 conrad@math.stanford.edu
- Prof. Toby Gee
 Department of Mathematics
 Imperial College London
 toby.gee@imperial.ac.uk
- Prof. David Savitt
 Department of Mathematics
 Johns Hopkins University
 savitt@math.jhu.edu