

Rebecca Bellovin

Curriculum vitae

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📄 <https://rmbellovin.github.io>

Employment

- 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”. Submitted. 2021. URL: <https://arxiv.org/abs/2102.04820>.
- [3] R. Bellovin. “Galois representations over pseudorigid spaces”. Submitted. 2020. 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

- 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*
- *Commentarii Mathematici Helvetici*
- *Journal of Number Theory*

Invited Talks

- 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	<i>Conference on the p-adic Langlands programme and related topics</i>
2016	Universität Duisburg-Essen	<i>Essener Seminar für Algebraische Geometrie und Arithmetik</i>
2016	Universität Heidelberg	<i>Seminar der Forschergruppe ‘Symmetrie, Geometrie und Arithmetik’</i>
2015	University of Bristol	<i>Heilbronn Number Theory Seminar</i>
2015	AMS Summer Institute in Algebraic Geometry	
2015	Northwestern University	<i>Number Theory Seminar</i>
2015	University of Chicago	<i>Number Theory Seminar</i>
2015	University of California, Los Angeles	<i>Number Theory Seminar</i>
2014	Universität Heidelberg	<i>Seminar der Forschergruppe ‘Symmetrie, Geometrie und Arithmetik’</i>
2014	British Mathematical Colloquium	
2014	Cambridge University	<i>Number Theory Seminar</i>
2013	London Number Theory Seminar	
2013	University of California, Berkeley	<i>Number Theory Seminar</i>
2013	Boston University	<i>Number Theory Seminar</i>
2013	University of California, San Diego	<i>Number Theory Seminar</i>

Teaching

Spring 2022	Instructor. Teaching ‘Galois Theory’ to 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 2005, 2008	Counselor. 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
- Math W4042: Introduction to Modern Algebra II (Galois theory)
- Math V3025: Making and Breaking Codes
- 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. Kevin Buzzard
Department of Mathematics
Imperial College London
`kevin.m.buzzard@gmail.com`
(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`