Rebecca Bellovin

Curriculum vitae

✉ r.m.bellovin@gmail.com
https://rmbellovin.github.io

Employment

2019–present **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". In preparation.

[2] R. Bellovin. "Cohomology of (φ, Γ)-modules over pseudorigid spaces". Preprint. 2020. URL: https://rmbellovin.github.io/triangulation.pdf.

[3] R. Bellovin. "Galois representations over pseudorigid spaces". Submitted. 2020. URL: https://arxiv.org/abs/2002.06687.

[4] R. Bellovin and T. Gee. "G-valued local deformation rings and global lifts". In: *Algebra Number Theory* 13.2 (2019), pp. 333–378.

[5] R. Bellovin and O. Venjakob. "Wach modules, regulator maps, and ε-isomorphisms in families". In: *Int. Math. Res. Not.* 16 (2019), pp. 5127–5204.

[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

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 *Conference on the p-adic Langlands programme and related topics*

2016 Universität Duisburg-Essen *Essener Seminar für Algebraische Geometrie und Arithmetik*

2016 Universität Heidelberg *Seminar der Forschergruppe 'Symmetrie, Geometrie und Arithmetik'*

2015 University of Bristol *Heilbronn Number Theory Seminar*

2015 AMS Summer Institute in Algebraic Geometry

2015 Northwestern University *Number Theory Seminar*

2015 University of Chicago *Number Theory Seminar*

2015 University of California, Los Angeles *Number Theory Seminar*

2014 Universität Heidelberg *Seminar der Forschergruppe 'Symmetrie, Geometrie und Arithmetik'*

2014	British Mathematical Colloquium	
2014	Cambridge University	*Number Theory Seminar*
2013	London Number Theory Seminar	
2013	University of California, Berkeley	*Number Theory Seminar*
2013	Boston University	*Number Theory Seminar*
2013	University of California, San Diego	*Number Theory Seminar*

Teaching

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

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 **Teaching assistant**.
Teaching 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
  `tobygee@fastmail.com`

- Prof. Kiran Kedlaya
  Department of Mathematics
  University of California, San Diego
  kedlaya@ucsd.edu