# Rebecca Bellovin

*Curriculum vitae*

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🏠 *https://rmbellovin.github.io*

## Employment

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| 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

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| 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 $(\varphi, \Gamma)$-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 $\varepsilon$-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 Automorphic Workshops* |
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| 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* |
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| 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

| 2022 | Simons Symposium on $p$-adic Hodge Theory | |
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| 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* |

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| 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

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.

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| Summer 2005, 2008 | **Counselor**. <br> Counselor at PROMYS. Supervised students, helped with problem sets, and gave lectures to high school students and college students. |
| 2006–2008 | **Course assistant**. <br> 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

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| 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`