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| CONTACT INFORMATION | School of Mathematics and Statistics University of Glasgow University Place Glasgow G12 8QQ United Kingdom robin.bartlett.math@gmail.com https://http://robin-bartlett.github.io/ |
| RESEARCH INTERESTS | Algebraic number theory, with a particular emphasis on integral p -adic Hodge theory and geometric aspects of moduli spaces of p -adic Galois representations. |
| EMPLOYMENT | University of Glasgow Rankin-Sneddon fellow, from 2023 University of Münster Postdoctoral researcher, 2020-2023 Max Planck Institute for Mathematics (Bonn) Postdoctoral researcher, 2018-2020 |
| EDUCATION | Kings College London and the London School of Geometry and Number Theory Ph.D. in Mathematics, 2014-2018 Thesis: <i>On the reduction modulo p of crystalline representations</i> <ul style="list-style-type: none">• Supervised by Fred Diamond. University of Warwick MMath 2010-2014 <ul style="list-style-type: none">• Awarded first class degree. |
| PAPERS | <ol style="list-style-type: none">1. <i>Cycles relations in the affine grassmannian and applications to Breuil–Mézard for G-crystalline representations</i> Submitted 20232. <i>Explicit Serre weights for GL_2</i> (with Misja Steinmetz) Submitted 2022.3. <i>Degenerating products of flag varieties and applications to the Breuil–Mézard conjecture</i> Submitted 2021.4. <i>Potential diagonalisability of pseudo-Barsotti–Tate representations</i> To appear Journal de Théorie des Nombres de Bordeaux.5. <i>On the irreducible components of some crystalline deformation rings</i> Forum of Mathematics Sigma, Volume 8, 2020, e22.6. <i>Potentially diagonalisable crystalline lifts with controlled Hodge–Tate weights</i> Documenta Mathematica, 26, 795-827, 2021.7. <i>Inertial and Hodge–Tate weights of crystalline representation</i> Mathematische Annalen, 376(1), 645-681. |

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| SERVICES | <ul style="list-style-type: none"> • Organised the Summer semester 2022 Oberseminar (study group) on the topic of Modularity lifting theorems. • Co-organised (with Eugen Hellmann) Münster number theory seminar (Summer 2021). • Co-founded London junior number theory seminar (2016-2017) • Referee for journals including Algebra and Number theory, Forum of Math Pi, Ann. Sci. de l'ENS, J. de l'Ecole Poly. Math, J. Théor. Nombres Bordeaux, and Math. Res. Lett. |
| INVITED CONFERENCE TALKS | <ul style="list-style-type: none"> • Banff International Research Station, Modularity and Moduli Spaces, CMO Oaxaca (Oct. 2019) |
| INVITED SEMINAR TALKS | <ul style="list-style-type: none"> • Jussieu, Séminaire Groupes Réductifs et Formes Automorphes (Nov 2023) • University of Glasgow, Algebra and Number theory seminar (Nov 2023) • Queen Mary Number theory seminar (July 2023) • University of Münster (Sep 2022) • SUSTech, China (Mar. 2022) • Université Paris 13 (Feb. 2022) • University of Chicago Number theory seminar (Oct. 2021) • Queen Mary University London (Mar. 2021) • University of Arizona (Feb. 2021) • University of Münster (Nov. 2020) • University of Rennes (cancelled) (Jan. 2020) • University of Leiden (Dec. 2019) • Essen Arithmetic Geometry Research Seminar (Apr. 2019) • Max Planck Institute for Mathematics Number Theory Seminar (Apr. 2019) • Max Planck Institute for Mathematics Oberseminar (Nov. 2018) • University of Purdue Automorphic Forms and Representation Theory Seminar (May 2018) • University of Chicago Number Theory Seminar (May 2018) • Junior London Number Theory seminar (Jan. 2018) • Junior London Number Theory seminar (Oct. 2016) • London Number Theory Study groups (2015 - 2018, at least one talk a term) |
| AWARDS | <p>2016 Awarded funding by King's College London Global research grant to support a visit to Professor Frank Calegari and Professor Matthew Emerton at University of Chicago. Value: GBP 2000.</p> <p>2013 Awarded funding from the University of Warwick for a summer research project supervised by Dr. Damiano Testa. Project Title: Galois conjugate polynomials. Value: GBP 1000.</p> <p>2012 Awarded funding from the University of Warwick for a summer research project supervised by Dr. Daan Krammer. Project Title: The Braid group of \mathbb{Z}^n. Value: GBP 1000.</p> |
| TEACHING EXPERIENCE | <p>University of Münster Masters course: Deformation theory of Galois representations (Winter semester 2021/22)</p> <ul style="list-style-type: none"> • Course aimed at masters and Phd students. <p>King's College London Teaching Assistant (2016-2018)</p> |

- Ran tutorials for classes of 10-20 first and second year undergraduates (Elementary Number Theory, Linear Methods, Geometry, Curves and Surfaces, Introduction to abstract algebra).

University of Warwick

First year tutor (2013-2014)

- Tutored a group of 5 first year mathematics students over the course of a year. Graded their assignments for analysis, linear algebra, number theory and abstract algebra courses.

King's College London Mathematics School

Class tutor (2017-2018)

- Taught two groups of 16-17 year old students mathematical problem solving classes.

CONFERENCES ATTENDED

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| Fall | 2015 | Motives and Automorphic Forms (Clay research conference), Oxford |
| Spring | 2016 | Recent developments in integral p -adic cohomology theories, Bonn |
| Spring | 2016 | Recent trends in p -adic Cohomology, London |
| Summer | 2016 | Fundamental groups in arithmetic geometry, Paris |
| Summer | 2016 | London-Paris Number Theory Seminar on p -adic groups and arithmetic geometry, Paris |
| Fall | 2016 | Automorphic Forms: theory and computation, London |
| Fall | 2016 | London-Paris Number Theory Seminar on perfectoid spaces, Paris |
| Winter | 2017 | p -adic methods for modular forms and Galois representations, Barcelona |
| Spring | 2017 | Arizona Winter School on perfectoid spaces, Arizona |
| Summer | 2017 | London-Paris Number Theory Seminar on the trace formula, automorphic forms, and arithmetic manifolds, London |
| Summer | 2017 | Journées Arithmétiques 2017, Caen |
| Summer | 2017 | BICRM p -adic Hodge theory and automorphic forms, Beijing |
| Spring | 2018 | Arizona Winter School on Iwasawa theory, Arizona |
| Summer | 2018 | A celebration of Barry Mazur, Cambridge MA |
| Summer | 2018 | Geometerisation of the Langlands program, Lyon |
| Summer | 2018 | Workshop on Galois representations, Heidelberg |
| Fall | 2018 | Conference on Arithmetic Algebraic Geometry, Bonn |
| Spring | 2019 | p -adic Langlands correspondence and Iwasawa theory, Lille |
| Spring | 2019 | The p -adic Langlands programme and related topics, London |
| Summer | 2019 | The geometry and arithmetic of algebraic varieties, Bonn |
| Summer | 2019 | Arithmetic geometry in Carthage, Tunisia |
| Fall | 2019 | The Emerton–Gee stacks and related topics, Bonn |

LANGUAGES

English (native), French (reading), German (beginner).