

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> To appear Selecta Mathematica.4. <i>Potential diagonalisability of pseudo-Barsotti–Tate representations</i> Journal de Théorie des Nombres de Bordeaux, Volume 35 (2023) no. 2., pp. 335-371.5. <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.

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.
CONFERENCE TALKS	<ul style="list-style-type: none"> • Journées Arithmétiques 2023, Nancy (July 2023) • Banff International Research Station, Modularity and Moduli Spaces, CMO Oaxaca (Oct. 2019)
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

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).