Félicien Comtat

Postdoc researcher in mathematics.

Contact Information

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Research interests

Number theory, automorphic forms and representations, L-functions.

Employment

present **Mathematisches Institut der Universität Bonn**, *Bonn*, Germany, 2023–2026.
Postdoctoral researcher.

2022–2023 **QMUL**, *London*, United Kingdom.
Postdoctoral research associate.

Education

2018–2022 **QMUL**, *London*, United Kingdom.
PhD under the direction of Abhishek Saha. Thesis title : *Whittaker coefficients of automorphic forms and applications to analytic number theory*.

2016–2017 **Université de Bordeaux**, *Bordeaux*, France.
Master's degree in Mathematics, speciality in Algebra, Geometry and Number Theory.

2014–2015 **École Normale Supérieure de Cachan**, *Cachan*, France.
Master 1 in Mathematics, mention **Very Good**.
Master 1 in theoretical Computer Science, mention **Very Good**.

2013–2014 **École Normale Supérieure de Cachan**, *Cachan*, France.
Bachelor's degree in Mathematics, mention **Good**.
Bachelor's degree in theoretical Computer Science, mention **Good**.

Preprints and Publications

2023 **Bounds on Fourier coefficients and global sup-norms for Siegel cusp forms of degree 2**, *preprint*, arxiv.org/abs/2307.07376.

2021 **A relative trace formula approach to the Kuznetsov formula on GSp4**, *preprint*, arxiv.org/abs/2107.08755.

2020 **Optimal sup norm bounds for newforms on GL2 with maximally ramified central character**, *Forum Mathematicum*, 33 (2021), no.1, 1–16.

2019 **A uniform estimate for the density of rational points on quadrics**, *J. Théor. Nombres Bordeaux*, 31 (2019), no. 1, 243–253.

Research work and unpublished scientific writings

2018 **Bristol University**, *Bristol*, United Kingdom.
Five months research project with Tim Browning : counting rational points, leading to my *J. Théor. Nombres Bordeaux* paper.

2017 **ETH Zürich**, *Zürich*, Switzerland.
Five months research project with EMMANUEL KOWALSKI : sieving methods for automorphic forms on GL_3, unpublished internship report.

2017 **Université de Bordeaux**, *Bordeaux*, France.
Master's thesis under the direction of FLORENT JOUVE in Number Theory : asymptotic distribution of Galois groups of integral polynomials.

2015 **Helsinki University**, *Helsinki*, Finland.
Research internship with JOUKO VÄÄNÄNEN in second order Logic and Set Theory : undecidability in ZFC of second order logic's categoricity, unpublished research article.

2014 **École Normale Supérieure de Cachan**, *Cachan*, France.
Bachelor's thesis under the direction of JEAN-MICHEL MOREL and CARLO DE FRANCHIS in image processing : stereo matching algorithm in C, unpublished research article.

Conference Talks

June 2023 **Arithmetic Statistics in Automorphic Forms and Analytic Number Theory**, *Lausanne*, Switzerland, (contributed talk).

September 2022 **Automorphic Forms Conference**, *Budapest*, Hungary (contributed talk).

March 2022 **Young Scholars in the Analytic Theory of Numbers and Automorphic Forms**, *Bonn*, Germany.

May 2019 **Colloque Inter'Actions en Mathématiques 2019**, *Talence*, France.

April 2019 **Analytic Aspects of Automorphic Forms**, *Lille*, France.

Invited talks at research seminars

April 2023 **Séminaire Arithmétique**, *Lille*, France.

March 2023 **London Number Theory Seminar** , *London*, United Kingdom.

December 2022 **Methusalem Junior Seminar** , *Leuven*, Belgium.

August 2022 **Number theory seminar**, *Copenhagen*, Denmark.

May 2022 **Egham-Reading-London Arithmetic Statistics Seminar VI**, *London*, United Kingdom.

May 2021 **Linfoot seminar**, *Bristol*, United Kingdom.

Teaching Experience

2020–2021 **QMUL**.
Semester 1 Teaching Assistant for *Introduction to Probabilities*
King's College London.
Semester 1 Tutor for *Introduction to Number Theory*

2019–2020 **QMUL**.
Semester 2 Teaching Assistant for *Introduction to Differential Geometry*.
Teaching Assistant for *Introduction to Algebra*.
Semester 1 Teaching Assistant for *Calculus 1*.

2018–2019 **QMUL**.
Semester 2 Demonstrator for *Complex Variable*.

Administration and Service

Royal Institution Speaker

AMS Reviewer