

Quentin Gazda

Postdoc at Centre de Mathématiques Laurent Schwartz

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Since December 1st 2022, I am postdoc at the [Centre de Mathématiques Laurent Schwartz \(CMLS\)](#) in the team [Algèbre et arithmétique](#) under the supervision of [Javier Fresán](#). I am interested in analogies between number fields and function fields and especially in Anderson t -motives.

University curriculum

- December 2022 **Postdoc**, *Centre de Mathématiques Laurent Schwartz (CMLS)*, École Polytechnique - Palaiseau, Laureate 2022 of the program Sophie Germain
- 2021 – 2022 **Postdoc**, *Max Planck Institut für Mathematik*, Bonn
- October 2021 **Invited researcher**, *Centre de Mathématiques Laurent Schwartz (Polytechnique)*, Palaiseau, Invited by Javier Fresán
- 2018 – 2021 **PhD (3rd year)**, *Institut Camille Jordan*, Lyon and Saint-Étienne, under the supervision of Federico Pellarin on Motivic cohomology in function fields arithmetic. Member of the Laboratory council
- 2017 – 2018 **Pre-doct Internship**, *IWR*, Heidelberg Universität, nine months internship under the supervision of Prof. Gebhard Böckle, on Anderson's A -motives
- 2016 – 2017 **M2 Geometry-Arithmetic**, *École Normale Supérieure de Lyon*, Mention Très bien
- 2015 – 2016 **M1 Hadamard**, *Université Paris-Saclay*, (École Polytechnique, École Normale Supérieure de Paris-Saclay, Université Paris-Sud XI), Mention Très bien
- 2014 – 2015 **L3**, *École Normale Supérieure Paris-Saclay*, Cachan, Mathematics department admitted as a Normalien élève.

Invited speaker

- July 2023 **Seminar**, *HIM*, Bonn, [Trimester on the Langlands program](#)
 - **Trimester Program**, Invited to the trimester on the Arithmetic of the Langlands Program
- May 2023 **Conference**, *Sapienza–Department Guido Castelnuovo*, Rome, [An Arithmetic Day](#)
- April 2023 **Seminar**, *IRMAR*, Rennes, [Séminaire Géométrie Arithmétique](#)
 - **Seminar**, *IMJ-PRG*, Paris, [Arithmetic Geometry Preprint Seminar](#)
- March 2023 **Seminar**, *IMB*, Bordeaux, [Séminaire théorie des nombres](#)
 - **Conference**, *MPIM*, Bonn, “[Motives and Automorphic Forms](#)” in Honour of Günter Harder’s 85th Birthday
- February 2023 **Seminar**, *CMLS*, Palaiseau, [Séminaire Arithmétique](#)
- December 2022 **Seminar**, *LMBP*, Clermont-Ferrand, [Séminaire Théorie des Nombres](#)
- November 2022 **Workshop**, *Kyoto-Nanjing*, Zoom, [4th Kyoto-Nanjing Workshop on Arithmetic and Geometry](#)
 - **Seminar**, *IMJ-PRG*, Paris, [Séminaire de théorie des nombres de l’IMJ-PRG](#)
- October 2022 **Seminar**, *ENS Lyon*, Lyon, [Séminaire d’arithmétique à Lyon](#)
- June 2022 **Workshop**, *Isaac Newton Institute*, Cambridge, [Arithmetic geometry, cycles, Hodge theory, regulators, periods and heights](#)
 - **Summer School**, *Institut de Recherche Mathématique Avancée*, Strasbourg, [Motives and Arithmetic Groups](#)
 - **Oberwolfach Research Fellow**, with Dr. Damien Junger, Analogies between the Carlitz module and Tate twists in the categorical framework, a picture
- February 2022 **Seminar**, *Institut Mathématique de Toulouse*, [Séminaire de théorie des nombres](#)
- November 2021 **Seminar**, *Japan/Europe*, Zoom, [Japan Europe Number Theory Exchange Seminar](#)
 - July 2021 **Conference**, *Pisa*, Zoom, [Quarta giornata dei dottorandi in Teoria dei Numeri](#)
 - May 2021 **Conference**, *ENS Lyon*, Zoom, [Rendez-Vous on Special Values and Periods](#)
- February 2021 **Seminar**, *ENS Lyon*, PhD student seminar
- January 2021 **Seminar**, *Münster Universität*, Zoom, [Mittagsseminar](#)
- July 2020 **Seminar**, *IHES*, Paris, [Seminar on Beilinson’s conjecture](#), summer semester 2020

- Februar 2020 **Conference**, *LMNO*, Caen, [Workshop: Arithmetic in Positive Characteristic](#)
- October 2019 **Seminar**, *UJM*, Saint-Étienne, Seminar of the number theory team
- May 2019 **Conference**, *NCTS*, Taipei, [Arithmetic of function fields and Diophantine geometry](#)
- April 2019 **Seminar**, *Institut Camille Jordan*, PhD student seminar
- December 2018 **Conference**, *UJM*, Saint-Étienne, [Day of the number theory team](#)
- April 2018 **Seminar**, *Special values of Goss L-series*, Heidelberg, co-organised with Prof. Gebhard Böckle and Dr. Andreas Maurischat, [talks](#)
- October 2017 **Seminar**, *Hida families and Galois representations*, Heidelberg, [talks](#)

Publications and Preprints

- September 2023 **Carlitz twists: their motivic cohomology, regulators, zeta values and polylogarithms**, *avec Andreas Maurischat*, submitted
- June 2023 **Pour une définition commune des courbes elliptiques et modules de Drinfeld**, *avec Damien Junger*, preprint
- November 2022 **Residue of special functions of Anderson A-modules at the characteristic graph**, *with Dr. Andreas Maurischat*, preprint
- July 2022 **Regulators in the Arithmetic of Function Fields**, submitted
- January 2022 **On the Integral Part of A-Motivic Cohomology**, submitted
- September 2020 **Special functions and Gauss-Thakur sums for higher rank and dimension**, *with Dr. Andreas Maurischat*, published in *Journal für die reine und angewandte Mathematik*
DOI: 10.1515/crelle-2020-0038
- May 2020 **Generalized modular forms with a Cuspidal Divisor**, published in *Acta Arithmetica*
DOI: 10.4064/aa190903-15-6
- July 2019 **An extension of Macdonald's identity for \mathfrak{sl}_n** , published in *Research in Number Theory*
DOI: 10.1007/s40993-019-0163-0

Notes (no vocation to be published)

- November 2021 **Motivic cohomology in the arithmetic of function fields**, *thesis manuscript*
- December 2016 **Sur l'annulation de la valeur centrale de la fonction L de Hecke**, preprint
A Theorem for Distinct Zeros of L -functions, preprint

Teaching and popularization action

- 1st sem. 2023 **Teaching**, *École Polytechnique*, Palaiseau, Algebra and Galois Theory
Ingénieur 1A–Bachelor 3
- 2nd sem. 2019 **Teaching**, *INSPE Croix-Rousse*, Lyon, Python's courses and logic to certifiés and agrégés
- March 2019 **Popularization**, *Université Claude Bernard*, Lyon, Rallye MathCityMap
Use the mobile app MathCityMap in L1.
Popularization, *Goethe Universität*, Francfort, MoMaTre Intensive Study Program
Two intensive weeks at Goethe Universität on the elaboration of a mobile app MathCityMap offering geolocalized math problems, in collaboration with several european universities.
- 1st sem. 2019 **Teaching**, *Université Claude Bernard*, Lyon, Courses and exercises of Basic mathematical techniques in L1-PCSI
- 1st sem. 2018 **Teaching**, *INSPE Croix-Rousse*, Lyon, Python courses to certifiés and agrégés
Teaching, *INSPE Croix-Rousse*, Lyon, Elementary mathematics for future teachers in small grades (Master MEEF)
- 2015 – 2016 **Teaching**, *Lycée Jacques Decour*, Paris 9
Khôlleur in preparatory classes PSI*.
- 2014 – 2015 **Popularization**, *GICS*, Suburbs of Paris, Popularization talks on mathematical history in high school