

Guillaume Pignon-Ywanne

25 years old

Personal webpage available at the following adress: https://perso.ens-lyon.fr/guillaume.pignon-ywanne/

Academic Cursus and degrees

- 2023-2026 **PhD thesis**, Supervised by Gabriel Dospinescu and Arthur-César Le Bras, Title: "On p-adic étale cohomology of p-adic period domains", Defense expected in summer of 2026.
- 2019-2023 **Scolarity at ENS Ulm**, Graduated with a major in mathematics and a minor in computer science.
- 2021-2022 **Master 2 "Mathématiques fondamentales"**, *ENS Ulm & Sorbonne Université*, With highest honors, Grade : 18.85/20.
- 2020-2021 **Master 1 Mathematics**, *ENS Ulm & Université de Paris*, With highest honors, Grade : 18.90/20.
- 2019-2020 Bachelor's Degree Double major Mathematics & Computer Science, ENS Ulm & Université Paris Diderot, With highest honors, Grade : 17.76/20 and 17.55/20.
- 2017-2019 CPGE, Lycée Louis Le Grand, MPSI-MP*.

Research

- 2025 **Mod p Poincaré duality for p-adic period domains**, *Incoming preprint*, Preliminary version (expected) accessible on my webpage.
 - 2023 **Introduction to étale cohomology**, *Introduction to the field of research*, Accessible on my webpage, In french.
 - 2022 **Extension groups of some period sheaves**, *Master's thesis*, IMJ-PRG, with Wiesława Nizioł. Accessible on my webpage; Graded: 19/20

Talks

- Nov. 2025 **Talk at Lyon's "Arithmetics" seminar**, *Mod-p Poincaré Duality for some non-proper spaces in p-adic analytic geometry*, UMPA.
- May. 2025 **Talk at a p-adic Hodge theory working group**, Vector bundles on the Fargues-Fontine curve and the "Weakly admissible implies admissible" conjecture.
- Dec. 2024 **Talk at a p-adic Hodge theory working group**, Definition of the Fargues-Fontaine curve.
- May. 2023 **Defended my "Introduction to the field of research"**, *An introduction to étale cohomology*, DMA, ENS Ulm.

Attended conferences and Workshops

- Feb. 2026 Around the Langlands program Thematic Month, CIRM, Lumigny, France.
- (upcoming) Accepted application
- October 2025 New Structures and Techniques in p-adic Geometry, IHES, Bures-Sur-Yvette, France.
 - Juillet 2025 Journées Arithmétiques, Université du Luxembourg, Belval, Luxembourg.

- Juin 2025 **Iwasawa Theory and Representations of p-Adic Groups**, *Laboratoire Paul Painlevé*, Lille, France.
- April 2025 Arithmetic and Geometry of locally symmetric spaces, UMPA, Lyon, France.
- March 2025 **Lyon-Tokyo conference in Number Theory and Arithmetic Geometry**, *UMPA*, Lyon, France.
 - Déc. 2024 The Analytic De Rham Stack, IMPAN, Varsovie, Allemagne.
- Octobre 2024 **Summer School "Methods in Mixed Characteristic Geometry"**, *JGU*, Mayence, Allemagne.
- August 2023 Summer School: "Discovering local Langlands correspondances: representations of p-adic groups, class field theory and Bruhat-Tits buildings", LAMFA, Amiens.
 - June 2023 Conference on Local Langlands and p-adic methods, HIM, Bonn.
 - May 2023 Summer School on the Arithmetic of the Langlands Program, HIM, Bonn.

Teaching experience

- 2025-202 **Exercise sessions**, *Riemann Surfaces*, First year of master's, Umpa, ENS de Lyon. (incoming)
 - 2025 **Jury**, Examiner of 6 first year master student's reports and defenses, ENS Lyon.
- 2024-2025 **Exercise sessions**, *Riemann Surfaces*, First year of master's, Umpa, ENS de Lyon.
- 2024-2025 **Exercise sessions**, *Complex Analysis*, L3, Umpa, ENS de Lyon.
- Spring 2024 Exercise sessions, Locally Compact Groups, L3, Umpa, ENS de Lyon.
 - Fall 2023 **Exercise sessions**, *Continued Fractions*, L3, Umpa, ENS de Lyon.
 - 2019-2021 Oral interrogator (khôlleur) in Mathematics, CPGE, MPSI3, Lycée Louis-Le-Grand.

Older internships and Thesis

- Spring 2021 **M1 Internship**, *Institut Camille Jordan Lyon 1*, with Jean-Yves Welschinger, On Rokhlin's congruence in real algebraic geometry.
- Summer 2020 **Computer Science Internship**, *LaBRi*, with Nathanaël Fijalkow and Guillaume Lagarde, On fair tournaments in Bradley-Terry's model et TrueSkill's algorithm.
 - Spring 2020 **Computer Science Bachelor's Thesis**, with Claire Mathieu, Fair organizing of single elimination tournaments.

Languages

French Native speaker

English Advanced - C1

German Basic - B1-B2

Personal interests

Technique Amateur light and sound technician

Danse Cheerleading, Modern Jazz, Pole

Musique Drumming