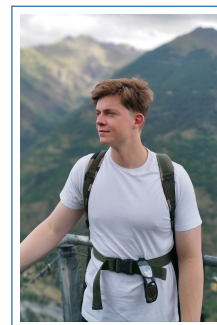


Guilhem Mureau

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Formation

- 2023–2026 **PhD in pure mathematics**, *Inria, IMB, Université de Bordeaux*, Under the supervision of Alice Pellet–Mary and Renaud Coulangeon, « On the Module Lattice Isomorphism Problem »
- 2022–2023 **Master of pure mathematics 2nd year - Algebra, Geometry and Number Theory**, *Université de Bordeaux*
Mention bien (15,37/20)
- 2021–2022 **Agrégation externe de mathématiques**, *Université de Bordeaux*
Competitive national examination. Rank 80.

Publications

- 2024 **Cryptanalysis of rank-2 module-LIP in totally real number fields**, *joint work with Alice Pellet–Mary, Heorhii Pliatsok and Alexandre Wallet*, accepted to Eurocrypt 2024

Preprints

- 2024 **A reduction from Hawk to the principal ideal problem in a quaternion algebra**, *joint work with Clémence Chevigard, Alice Pellet–Mary, Pierre-Alain Fouque and Alexandre Wallet*

Talks and seminars

- 2024 **Cryptanalysis of rank-2 module-LIP in totally real number fields**, *Eurocrypt 2024, Zurich, May 2024*
- 2024 **Cryptanalysis of rank-2 module-LIP in totally real number fields**, *TII CRC Seminar, Abu Dhabi (remotely), May 2024*
- 2024 **Cryptanalysis of rank-2 module-LIP in totally real number fields**, *CWI Seminar, Amsterdam (remotely), May 2024*
- 2023 **On the module-Lattice Isomorphism Problem**, *JC2, Najac, October 2023*

Teaching

- 2024–2025 **Tutorials**, *Université de Bordeaux*
1st year bachelor students, 64h.
- 2023–2024 **Tutorials**, *Université de Bordeaux*
1st year bachelor students, 64h.
- 2020–2022 **Student contract**, *Université de Bordeaux*
Math tutoring, individual, in groups, bachelor level.
Homeworks correction in algebra and integration theory.

Dissertations

- 2023 **Master thesis**, *Inria, IMB, Université de Bordeaux*, Under the supervision of Alice Pellet–Mary, « On the Module Lattice Isomorphism Problem »
- 2022 **Dissertation**, *Université de Bordeaux*
« Prime numbers theorem ». Effective version of De La Vallée Poussin's theorem for primes in arithmetic progressions.
- 2021 **Master 1 thesis**, *Université de Bordeaux*
« Quadratic forms with rational coefficients ». Classification, local-global principle.

Miscellaneous

Languages skills : French (native language), English level C1 (frequently spoken).
Personal interests : Music, electric guitar (for 10 years) in a band, gigs.