

Yanshuai Qin

yanshuai.qin@ur.de • arXiv • Website • GitHub • LinkedIn • Languages: Chinese, English

Experience

Postdoctoral Researcher (Mathematics)

Nov 2023 – Dec 2025 Supervisor: Moritz Kerz

University of Regensburg, Germany

Visiting Scholar

Oct 2023 – Nov 2023

BICMR, Beijing, China

Education

PhD in Mathematics, University of California, Berkeley

2018–2023

Advisor: Xinyi Yuan

MSc in Mathematics, Nanjing University

2016–2018

BSc in Mathematics, Nanjing University

2011–2015

Research interests

Number theory and arithmetic geometry; Brauer groups; p-adic methods; Arakelov theory.

Publications

- **On the Brauer groups of fibrations.** *Mathematische Zeitschrift* 307, Article 18 (2024). DOI:10.1007/s00209-024-03487-8.

Preprints

- **F-isocrystals of Higher Direct Images of p-divisible Groups** (with Zhenghui Li). arXiv:2506.11736.
- **On p-torsion of geometric Brauer groups** (with Zhenghui Li). Submitted. arXiv:2406.19518.
- **On the Brauer groups of fibrations II.** Submitted. arXiv:2103.06910.
- **On geometric Brauer groups and Tate–Shafarevich groups.** arXiv:2012.01681.
- **Comparison of different Tate conjectures** (with Veronika Ertl and Timo Keller). Submitted. arXiv:2012.01337.

Invited talks

- University of Arizona, Algebra and Number Theory Seminar — Mar 2, 2021.
- Academy of Mathematics and Systems Science (CAS), Colloquia & Seminars — Jun 11, 2021.
- Berkeley–Tokyo Workshop on Number Theory and Arithmetic Geometry — Mar 11, 2022.
- PRIMA Congress 2022 (Special Session in Arithmetic Geometry) — Dec 9, 2022.
- Institute of Mathematical Sciences, ShanghaiTech University (Seminar) — Apr 3, 2023.
- IRMA, University of Strasbourg, Arithmetic and Algebraic Geometry Seminar — Dec 19, 2024.
- Institut für Mathematik, Universität Würzburg — Jan 7, 2025.
- Bernoulli Center, EPFL (Workshop: Arithmetic geometry of K3 surfaces) — May 8, 2025.
- Summer Research Institute in Algebraic Geometry (Fort Collins, CO) — Jul 28, 2025.

Teaching

- UC Berkeley: Instructor (Math 115 Introduction to Number Theory), Summer 2019.
- UC Berkeley: GSI (Math 1A; Math 16B; Math 53; Math 128A; Math 214; Math 250B), 2019–2023.
- Nanjing University: Teaching Assistant (Galois theory), Fall 2017.

Awards and fellowships

- Department Fellowship, UC Berkeley Mathematics Department (Summer 2020, Summer 2021, Spring 2022, Summer 2022, Summer 2023).