
Jianing Li

Born: Oct. 1989 in Shanxi, China. • **Citizenship:** Chinese.

Place: Shandong University (Qingdao)

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Professional History

- ▶ **Tenure-Track Research Fellow**, *Nov. 2021 – Present*
Research Center for Mathematics and Interdisciplinary Sciences, Shandong University (Qingdao)
- ▶ **Associate Research Fellow**, *Oct. 2020 – Oct. 2021*
School of Mathematical Sciences, University of Science and Technology of China
- ▶ **Postdoctoral Fellow**, *Nov. 2017 – Sep. 2020. Mentor: Yi Ouyang*
School of Mathematical Sciences, University of Science and Technology of China

Research Interests

- ▶ Number Theory

Education

- ▶ **Ph.D. Mathematics**, *Aut. 2017*
Academy of Mathematics and Systems Science, Chinese Academy of Sciences
Advisor: Yingpu Deng
- ▶ **M.S. Mathematics**, *Aut. 2014*
College of Mathematics, Sichuan University
Advisor: Qifan Zhang
- ▶ **B.S. Mathematics**, *Aut. 2011*
Department of Mathematics, Taiyuan Normal University

Publications and Preprints

Publications

- ◇ John Coates, **Jianing Li** and Yongxiong Li. Classical Iwasawa theory and infinite descent on a family of abelian varieties. *Selecta Math. (N.S.)*, (2021) online
<https://link.springer.com/article/10.1007/s00029-021-00644-3>.
- ◇ **Jianing Li** and Shenxing Zhang. The 3-class groups of $\mathbb{Q}(\sqrt[3]{p})$ and its normal closure. *Mathematische Zeitschrift*. <https://doi.org/10.1007/s00209-021-02797-5>.
- ◇ **Jianing Li**, Yi Ouyang, Yue Xu and Shenxing Zhang. ℓ -Class groups of fields in Kummer towers. *Publicacions Matemàtiques*, to appear. (arxiv:1905.04966)

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- ◇ **Jianing Li**. On 2-adic logarithm of certain units of pure imaginary quartic fields. *Asian Journal of Mathematics*, to appear (arXiv:2005.09926).
 - ◇ **Jianing Li** and Yue Xu. On class numbers of pure quartic fields. *Ramanujan Journal* (2020) online. <https://doi.org/10.1007/s11139-020-00253-2>
 - ◇ **Jianing Li** and Chia-Fu Yu. The Chevalley-Gras formula over global fields. *Journal de Théorie des Nombres de Bordeaux*, vol. 32, no. 2, pp. 525-543. (2020)
 - ◇ **Jianing Li** and Yingpu Deng. Nonexistence of two classes of generalized bent functions. *Designs, Codes and Cryptography*, vol. 85, no. 3, pp. 471-482. (2017)
 - ◇ Chang Lv and **Jianing Li**. On the Non-Existence of Certain Classes of Generalized Bent Functions. *IEEE Transactions on Information Theory*, vol. 63, no. 1, pp. 738-746. (2017)

Preprints _____

- ◇ **Jianing Li**. On the λ -invariant of Selmer groups arising from certain quadratic twists of Gross curves. (preprint) (arXiv:2107.03027).
- ◇ **Jianing Li**, Yi Ouyang and Yue Xu. On abelian 2-ramification torsion modules of quadratic fields. (submitted) (arXiv:2009.13262)

Teaching Experience _____

Teaching _____

► University of Science and Technology of China

- MATH5012P *Algebraic Number Theory*, Spring 2021
- MA05109 *Algebraic Number Theory*, Spring 2018

Teaching Assistant _____

► University of Chinese Academy of Sciences

- Summer School on Algebra and Number Theory, Summer 2019

Grants & Awards _____

Grants _____

- ◇ USTC Research Funds of the Double First-Class Initiative (WK0010000058)
- ◇ Fundamental Research Funds for the Central Universities (WK3470000020)

Awards _____

- ◇ The President Scholarship of CAS(Chinese Academy of Sciences), 2016

Invited Talks _____

Conference Talks _____

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- ◇ **May 2020** Conference on Computational Number Theory and Applications (Online). Academy of Mathematics and Systems Science, CAS. (*Title: Class groups and units of certain number fields.*)
 - ◇ **Oct 2019** International Conference on Class groups of Number fields and Related Topics (ICCGNFRT). Harish-Chandra Research Institute, Allahabad, India. (*Title: Class groups in Kummer towers.*)

Colloquium Talks _____

- ◇ **Feb 2021** Xi'an Jiaotong-Liverpool University (XJTLU). (Online) (*Title: Class groups and units of certain number fields.*)
- ◇ **Nov 2020** Institute of Information Engineering, CAS (*Title: Class groups of quadratic fields.*)
- ◇ **Jun 2019** Institute of Information Engineering, CAS. (*Title: 2-Class groups in dyadic Kummer towers.*)
- ◇ **Mar 2019** Academy of Mathematics and Systems Science, CAS. (*Title: Class groups in norm-compatible towers.*)
- ◇ **Jan 2017** Institute of Information Engineering, CAS. (*Title: How to construct Hilbert class fields.*)