

Wanlin Li

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Education

PhD Mathematics, [University of Wisconsin–Madison](#), Madison, WI, In progress under Advisor: [Jordan Ellenberg](#).

BA Mathematics, Nanjing University, Nanjing, Jiangsu, China, June 2013.

Publications

- “Vanishing of Hyperelliptic L-functions at the Central Point”, J. Number Theory 191 (2018), 85-103, [arXiv](#).
- “Effective Bounds on the Dimensions of Jacobians Covering Abelian Varieties”, with J. Bruce, submitted, [arXiv](#).
- “Newton polygons of cyclic covers of the projective line branched at three points”, with E. Mantovan, R. Pries and Y. Tang, to appear in Research Directions in Number Theory: Women in Numbers IV, [arXiv](#).
- “Newton Polygons Arising for Special Families of Cyclic Covers of the Projective Line”, with E. Mantovan, R. Pries and Y. Tang, Res. Number Theory 5 (2019), no. 1, 5:12, [arXiv](#).
- “Ranks, 2-Selmer groups, and Tamagawa numbers of elliptic curves with $\mathbb{Z}/2\mathbb{Z} \times \mathbb{Z}/8\mathbb{Z}$ -torsion”, with S. Chan and J. Hanselman, ATNS-XIII, [arXiv](#).
- “Newton polygon stratification of the Torelli locus in PEL-type Shimura varieties”, with E. Mantovan, R. Pries and Y. Tang, submitted., [arXiv](#).
- “Nonvanishing of hyperelliptic zeta functions over finite fields”, with J. Ellenberg and M. Shusterman, [arXiv](#)..

Organization

I was a primary organizer for the following conferences.

- Conference: [Arithmetic of Algebraic Curves](#), Apr 2018
- Conference: [Geometry and Arithmetic of Surfaces](#), Feb 2019

Grant and Award

- Elizabeth Hirschfelder Prize, 2018-2019
- Postdoctoral Ambassadorship from the Women and Mathematics Program at the Institute for Advanced Study, 2017-2018

Upcoming and Recent Presentations

- Automorphic Forms and Arithmetic seminar, Columbia University, Apr 2019
- AMS Special Session on Arithmetic Geometry and its connections, Hawaii, Mar 2019
- AMS Special Session on Arithmetic Statistics, Baltimore, Maryland, Jan 2019
- Quebec-Vermont Number Theory Seminar (QVNTS), Montreal, Quebec, Dec 2018.
- Algebraic Geometry and Number Theory seminar, Rice University, Nov 2018.
- Front Range Algebraic Geometry and Number Theory Seminar, Colorado State University, Jul 2018.
- Canadian Number Theory Association Conference (CNTA XIV), Quebec, Aug 2018.
- Connecticut Summer School in Number Theory (CTNT), Jun, 2018
- Maine-Quebec Number Theory Conference, Oct 2017.
- Present "Elliptic curves with rational $\mathbb{Z}/2\mathbb{Z} \times \mathbb{Z}/8\mathbb{Z}$ -torsion" in ICTP, Aug 2017
- Present "Newton polygons of cyclic covers of the projective line" at Women in Numbers 4, BIRS, Aug 2017.

Upcoming and Recent Conferences Attended

- The Joint Mathematics Meetings, Jan 2019
- Conference on open questions in cryptography and number theory, Sep 2018
- Arithmetic Geometry, Number Theory, and Computation at MIT, Aug 2018
- 15th Meeting of the Canadian Number Theory Association (CNTA XV), July 2018
- Connecticut Summer School in Number Theory, University of Connecticut, June 2018
- Maine-Quebec Number Theory Conference 2017, October 2017
- PhD Summer school and workshop "Curves and L-functions", ICTP, August 2017
- WIN4: Women in Numbers 4, BIRS, August 2017
- A View Towards Algebraic Geometry, in honor of David Eisenbuds birthday, May 2017

- Arizona Winter School 2017: Perfectoid Spaces, The Southwest Center for Arithmetic Geometry, March 2017
- Introductory Workshop: Analytic Number Theory, MSRI, February 2017
- 14th Meeting of the Canadian Number Theory Association (CNTA XIV), June 2016
- Summer School in Explicit Methods for Abelian Varieties, PIMS, June 2016
- Arizona Winter School 2016: Analytic Methods in Arithmetic Geometry, The Southwest Center for Arithmetic Geometry, March 2016
- Program for Women and Mathematics: Aspects of Algebraic Geometry, IAS, May 2015
- Arizona Winter School 2015: Arithmetic and Higher-Dimensional Varieties, The Southwest Center for Arithmetic Geometry, March 2015

Teaching

Teaching assistant

Algebra and Trigonometry, Fall 2018.

Calculus and Analytic Geometry II, Spring 2018.

Calculus and Analytic Geometry I, Fall 2017.

Calculus and Analytic Geometry II, Spring 2017.

Calculus and Analytic Geometry II, Fall 2016.

Introduction to Discrete Mathematics, Spring 2016.

Techniques in Ordinary Differential Equations, Fall 2015.

Calculus—Functions of Several Variables, Spring 2015.

Calculus and Analytic Geometry II, Fall 2014.

Service

Orientation for incoming mathematics graduate students, August 2017.

Graduate Program Committee, 2015-

Math Girls Night Out, Fall 2015

Directed Reading Program, Fall 2016, Spring 2017