Quanli Shen

Curriculum Vitæ

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Research Interest

Analytic number theory; Moments of L-functions; Explicit results; Green-Tao method.

Education

2017-2021 **Doctor of Philosophy**, Department of Mathematics and Computer Science, University of Lethbridge, Alberta, Canada.

Advisors: Drs. Habiba Kadiri and Nathan Ng.

2013-2016 Master of Science, Department of Mathematics, Capital Normal University, Beijing, China.

Advisor: Dr. Yonghui Wang.

2008-2012 Bachelor of Science, Department of Mathematics, Linyi university, Shandong, China.

Employment

2016-2017 Teacher, Linyi Experimental Middle School, Shandong, China.

Papers

- * (with Nathan Ng and Peng-Jie Wong) The eighth moment of the Riemann zeta function, 56 pages, preprint available at arXiv:2204.13891.
- * The first moment of quadratic twists of modular L-functions, 17 pages, preprint available at arXiv:2103.12284.
- * (with Elchin Hasanalizade and Peng-Jie Wong) Counting zeros of the Riemann zeta functions, Journal of Number theory 235(2022), 219-241.
- * (with Elchin Hasanalizade and Peng-Jie Wong) Counting zeros of Dedekind zeta functions, Mathematics of Computation 91(2021), no. 333, 277-293.
- * The fourth moment of quadratic Dirichlet L-functions, Mathematische Zeitschrift 298 (2020), 713-745.
- * The ternary Goldbach problem with primes in positive density sets, Journal of Number Theory 168 (2016), 334-345.

Teaching Experience

- Fall 2019 Tutorial Instructor, Calculus I, Applied Calculus I, University of Lethbridge, Canada.
- Spring 2019 **Tutorial Instructor**, Accelerated Calculus II, Elementary Linear Algebra, University of Lethbridge, Canada.
 - Fall 2018 Tutorial Instructor, Calculus II, University of Lethbridge, Canada.

Awards and Honours

Dec. 2019 Graduate Student Travel Funding, Canadian Mathematical Society, Canada.

Talks in Seminars and Conferences

- Nov. 2021 The first moment of quadratic twists of modular L-functions, Number Theory Seminar (online), The University of Mississippi, US, Nov. 03, 2021.
- Feb. 2021 The first moment of quadratic twists of modular L-functions, FRG Graduate Student Seminar (online), American Institute of Mathematics, US, Feb. 15, 2020.
- Feb. 2021 The first moment of quadratic twists of modular L-functions, Number Theory and Combinatorics Seminar (online), University of Lethbridge, Canada, Feb. 01, 2021.
- Dec. 2020 The fourth moment of quadratic Dirichlet L-functions, Canadian Mathematical Society Winter Meeting (online), Canada, Dec. 04, 2020.
- Oct. 2020 The fourth moment of quadratic Dirichlet L-functions, FRG workshop (online), American Institute of Mathematics, US, Oct. 27, 2020.
- May 2020 The fourth moment of quadratic Dirichlet L-functions, Alberta Number Theory Days XII (online), BIRS, Banff, Alberta, Canada, May 02-03, 2020.
- Oct. 2019 The fourth moment of quadratic Dirichlet L-functions, Canadian Mathematical Society Winter Meeting, Student Session, Toronto, Canada, Dec. 06-09, 2019.
- Oct. 2019 The fourth moment of quadratic Dirichlet L-functions, Number Theory and Combinatorics Seminar, University of Lethbridge, Canada, Oct. 28, 2019.
- Apr. 2019 The ternary Goldbach problem with primes in positive density sets, Number Theory and Combinatorics Seminar, University of Lethbridge, Canada, Apri. 01, 2019.
- Nov. 2018 A brief introduction to Gowers' norm and generalized von Neumann theorem, Students Seminar, University of Lethbridge, Canada, Nov. 09, 2018.

Conferences and Workshops attended

- July 2020 FRG workshop (online), American Institute of Mathematics, US, July 27-31, 2020.
- Dec. 2019 Canadian Mathematical Society Winter Meeting, Toronto, Canada, Dec. 06-09, 2019.
- May 2019 NSF-CBMS Conference: L-functions and Multiplicative Number Theory, University of Mississippi, US, May 20-24, 2019.
- May 2019 Alberta Number Theory Days XI, BIRS, Banff, Alberta, Canada, May 10-12, 2019.
- May 2018 Alberta Number Theory Days X, BIRS, Banff, Alberta, Canada, May 11-13, 2018.

Others

Citizenship: China.

Languages: Chinese (native), English (advanced).