# **Danielle Wang**

Curriculum Vitae

## **PERSONAL DETAILS**

diwang@mit.edu e-mail https://danielleywang.github.io Website

### EDUCATION

PhD Candidate

Expected in 2024

Massachusetts Institute of Technology Candidate for PhD in Mathematics from the Massachussetts Institute of Technology. Advisor: Wei Zhang.

#### **Bachelor of Science**

Massachusetts Institute of Technology

B.S. in Mathematics from the Massachusetts Institute of Technology.

### PUBLICATIONS AND PREPRINTS

Wang, D. (2023). Twisted Gan-Gross-Prasad conjecture for unramified quadratic extensions. https://arxiv.org/abs/2307.15234 Submitted.

Vemulapalli, S. and Wang, D. (2021). Uniform bounds for the number of rational points on symmetric squares of curves with low Mordell-Weil rank. https://arxiv.org/abs/ 1708.07057 Acta Arithmetica, **199**(4) 331-359.

Wang, D. (2019). The Eulerian distribution on involutions is indeed  $\gamma$ -positive. https: //arxiv.org/abs/1808.08481 Journal of Combinatorial Theory Series A, 165 139-151.

Berger, A. and Wang, D. (2019). Modified Erdös-Ginzburg-Ziv Constants for  $\mathbb{Z}/n\mathbb{Z}$ and  $(\mathbb{Z}/n\mathbb{Z})^2$ . https://arxiv.org/abs/1808.08486 Discrete Mathematics, 342(4) 1113-1116.

Wang, D. (2019). On roots of Wiener polynomials of trees. https://arxiv.org/abs/ 1807.10967 Discrete Mathematics, 343(1) 111643.

2019

# INVITED TALKS

| AIM Workshop "Arithmetic intersection theory on Shimura varieties" | Jan 8-12, 2024 |
|--|----------------|
| Duke Number Theory Seminar   | Oct 4, 2023    |
| BC NT/RT seminar   | Oct 28, 2023   |
| Johns Hopkins Number Theory Seminar                                | Sep 9, 2023    |
| Arizona Algebra and Number Theory Seminar                          | Mar 28, 2023   |

# **FUTURE INVITATIONS**

| Banff Workshop "Branching Problems for Representations of Real, P-Adic and Adelic Groups" | July 2024     |
|---|---------------|
| Texas Oklahoma Representations and Automorphic forms XIII                                 | April 2024    |
| UT Austin Number Theory seminar   | March 2024    |
| Johns Hopkins Junior Number Theory Days   | February 2024 |

# FELLOWSHIPS AND AWARDS

| MSRI Lauter Graduate Fellow              | 2023       |
|--|------------|
| Alice T. Schafer Prize Runner-Up         | 2019       |
| NSF Graduate Fellowship                  | 2019       |
| MIT Presidential Fellow                  | 2019       |
| William Lowell Putnam Competition N1     | 2018       |
| Elizabeth Lowell Putnam Award            | 2015, 2018 |
| USA Mathematical Olympiad (USAMO) Winner | 2015       |

# TEACHING AND WORK EXPERIENCE

#### Teaching Assistant

18.510

Graded for the class 18.510 Intro to Mathematical Logic and Set Theory at MIT during Fall 2023

**Teaching Assistant** 18.02

#### Fall 2022

Fall 2023

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January 2022

June 2016, 2018, 2019

Math Olympiad Summer Program

Graded for the Math Olympiad Summer Program, the training camp for the USA International Math Olympiad (IMO) team.

Instructor

A-Star Summer Math Camp Taught the Pre-MathCounts class at the A-Star Summer Math Camp in 2017.

research program offered by the MIT math department.

Instructor

A-Star Winter Math Camp Taught the USAMO/USAJMO class at the A-Star Winter Math Camp in 2015.

## Study Group Leader (Virtual)

Arizona Winter School

Led a virtual study group during the 2022 Arizona Winter School on automorphic forms beyond  $\mathrm{GL}_2$ .

Taught recitation for the introductory class 18.02 Multivariable Calculus at MIT during Fall

#### Mentor

Mentor UROP+

2022.

Directed Reading Program

**Teaching Assistant** 

Mentored a pair of undergraduate students for the Directed Reading Program offered by the MIT math department.

Mentored a student in a combinatorics research project for UROP+, an undergraduate

June – August 2020

July – August 2017

December 2015