

Freda Li

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Education **Wesleyan University**, Middletown, CT
Ph.D., Mathematics May 2020
Advisor: Wai Kiu Chan
Thesis: Finiteness of strictly n -regular and almost n -regular Hermitian lattices

Bryn Mawr College, Bryn Mawr, PA
B.A./M.A., Mathematics May 2014

Research **Interests**
Quadratic Forms, Hermitian Forms, Number Theory

Teaching **Instructor, Wesleyan University**

Graduate Pedagogy Fall 2019
Sole instructor, discussion based course with topics and materials chosen by myself.

Elements of Calculus Part I Fall 2018
Sole instructor during meeting hours, course materials created in conjunction with a senior faculty member.

Introductory Calculus II, Spring 2016
Sole instructor during meeting hours, course materials created in conjunction with fellow instructors and senior faculty mentor.

Graduate Teaching Assistant, Wesleyan University

Graph Theory Spring 2020
Hold weekly TA sessions, and write solutions to and grade problem sets.

Multivariable Calculus Spring 2019
Held weekly TA sessions and lectured one week of the course.

Automata Theory and Formal Languages Spring 2018
Held weekly office hours and graded problem sets.

Introduction to Programming Fall 2017
Held weekly TA sessions for exams and graded problem sets.

Automata Theory and Formal Languages Spring 2017
Held weekly office hours and graded problem sets.

Calculus I Fall 2015
Held weekly TA sessions, and aided in grading exams.

Multivariable Calculus Spring 2015
Held weekly TA sessions, and wrote solutions to problem sets.

Vectors and Matrices Fall 2014
Held weekly TA sessions, and graded problem sets.

Math Workshop, Wesleyan University
Tutor Fall 2016, Fall 2019

Tutored students from a variety of mathematics courses.

Mentoring

Directed Reading Program, Wesleyan University
Quadratic Forms Spring 2019
Mentored a student one on one in reading through quadratic forms notes.

Conferences & Workshops

Joint Mathematics Meetings January 2020
Denver, CO.
Graduate Student Conference in Algebra, Geometry, and Topology June 2019, 2018, 2017
Temple University.
Beyond the Binary May 2019
University of Hartford.
Women in Mathematics in New England September 2019, 2018, 2017
Smith College.
Strength In Numbers May 2018
Queen's University.
Upstate Number Theory Conference April 2018
University at Buffalo.
Sage Days 87: p-adics in Sage and the LMFDB July 2017
University of Vermont.
Upstate New York Number Theory Conference May 2017
Binghamton University.
Mid-Atlantic Mathematical Logic Seminar October 2017
Wesleyan University.
Joint Mathematics Meetings January 2017
Atlanta, GA.
Southern New England Conference on Quadratic Forms and Modular Forms June 2016
Wesleyan University.

Talks

AWM Graduate Student Poster Session January 2020
Joint Math Meetings, Denver, CO. Strictly n -regular Hermitian lattices.
MAA General Contributed Paper Session on Number Theory, Part I January 2020
Joint Math Meetings, Denver, CO. Regularity conditions on Hermitian lattices.
Women in Mathematics in New England September 2019
Smith College. Quadratic and Hermitian Forms.
Graduate Student Conference in Algebra, Geometry, and Topology June 2019
Temple University. Similarity classes of certain Hermitian lattices.
Wesleyan University Algebra Seminar December 2018
Wesleyan University. On strictly regular Hermitian lattices over imaginary quadratic fields.
Graduate Student Seminar
Wesleyan University.
– Why inert primes are just the right amount of interesting. March 2019
– Watson transformations. October 2018
– Building Cacti and Trees: A reconstruction problem in March 2018

graph theory.

- Skewing Things: An introduction to Hermitian forms. November 2017
- An introduction to quadratic Forms. March 2017
- Classifying universal ternary \mathbb{Z}_p -lattices. December 2016

Service

- Co-founder and President** September 2018 - May 2020
AWM Grad Student Chapter, Wesleyan University.
- Committee Member** September 2018 - May 2020
Directed Reading Program, Wesleyan University.
- Co-organizer** January 2019 - December 2019
Graduate Student Seminar, Wesleyan University.
- Graduate Student Panel** September 2019
Women in Mathematics in New England conference, Smith College.
- Treasurer** September 2017 - July 2019
AMS Grad Student Chapter, Wesleyan University.
- Graduate Student Representative** April 2019
Beyond the Binary conference, University of Hartford.
- Housing Committee Member** August 2015 - June 2016
Graduate Student Association, Wesleyan University.