JOE W. WEBSTER

CONTACT INFORMATION

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EMPLOYMENT

- Grinnell College, Grinnell, IA, August 2023-Present
  Assistant Professor of Mathematics

- University of Virginia, Charlottesville, VA, August 2021-May 2023
  Whyburn Research Associate and Lecturer

EDUCATION

- University of Oregon, Eugene, Oregon, 2014-2021
  Thesis: *The combinatorics of log-Coulomb gases in p-fields*
  Thesis Advisor: Christopher D. Sinclair

- University of California Davis, 2011-2013
  B.S. Mathematics, minored in Physics

RESEARCH INTERESTS

- Non-archimedean and adelic analysis, combinatorics, mathematical physics

RESEARCH PAPERS

- *log-Coulomb gases in the projective line of a p-field*, P-Adic Num Ultrametr Anal Appl, (2023).
  https://doi.org/10.1134/S2070046623010041

- *log-Coulomb gas with norm-density in p-fields*, P-Adic Num Ultrametr Anal Appl, (2021).
  https://doi.org/10.1134/S2070046621010015

HONORS AND AWARDS

- Frank W. Anderson Graduate Teaching Award, Spring 2019
- E.M. Johnson Memorial Award, Summer 2018

Teaching Experience

- At University of Virginia, I was the Instructor of Record for the following courses:

Term	Course Number	Course Name
Spring 2023	Math 3250	Ordinary Differential Equations
Fall 2022	Math 8510	Introduction to p-adic Numbers
Spring 2022	Math 3310	Basic Real Analysis
Fall 2021	Math 3351	Elementary Linear Algebra

- At University of Oregon, I was the Instructor of Record for the following courses:

Term	Course Number	Course Name
Spring 2020	Math 253	Calculus III
Winter 2020	Math 316	Fundamentals of Analysis
Summer 2019	Math 316	Fundamentals of Analysis
Fall 2018	Math 111	College Algebra
Spring 2018	Math 253	Calculus III
Winter 2018	Math 252	Calculus II
Fall 2017	Math 252	Calculus II
Summer 2017	Math 251	Calculus I
Spring 2017	Math 251	Calculus I
Fall 2016	Math 112	Elementary Functions
Summer 2016	Math 106	University Math II
Spring 2016	Math 112	Elementary Functions
Winter 2016	Math 112	Elementary Functions
Summer 2015	Math 243	Intro to Probability and Statistics
Spring 2015	Math 111	College Algebra
Winter 2015	Math 111	College Algebra
Fall 2014	Math 111	College Algebra

Selected Talks and Presentations

- UVA Harmonic Analysis and PDE Seminar, September 21, 2021
- 8th International Conference on p-Adic Mathematical Physics and Applications, May 25, 2021
- FSU Number Theory Seminar, April 1, 2021
- UO Number Theory Seminar, October 21, 2020
- PSU Combinatorics Seminar, February 10, 2020
- UO Number Theory Seminar, June 4, 2019
- OSU Number Theory Seminar, April 4, 2019
- Oregon Number Theory Days, poster session, February 16, 2019

Service and Memberships

- Member, Red '22 Cohort in the MAA's Project NExT, June 2022 - August 2023

- Mentor, UVA Mathematics Directed Reading Program, September 2021 - February 2023

- Committee member, Junior Mathematician Research Archive, July 2020 - present

- Cofounder and mentor, UO Undergraduate Directed Reading Program, June 2018 - June 2021

- Organizer, UO Graduate Student Number Theory Seminar, January 2018 - March 2019

- Instructor, UO Math Department incoming graduate student "Boot Camp", August 2018

- Mentor, UO AWM Undergraduate Reading Program, January 2017 - March 2018

- Teacher, UC Davis COSMOS program, Summers of 2012 and 2013

- Intern, UC Davis MAST program, Fall 2012

Expository Talks

- *A crash course in p-adic numbers*, UVA Harmonic Analysis Seminar, September 14, 2021

- *Basics of p-adic Lebesgue integration*, UO Graduate Student Seminar, January 10, 2019

- *Fun facts about $\mathbb{Z}_p$*, UO Graduate Student Seminar, November 8, 2018

- *p-adic integration by combinatorics*, UO Graduate Student Seminar, October 16, 2018

- *Fourier analysis on $\mathbb{Q}_p$*, UO Graduate Student Seminar, April 10, 2018

- *Characters on $\mathbb{Q}_p$*, UO Graduate Student Seminar, April 3, 2018

- *The analytic continuation of $\zeta(s)$*, UO Graduate Student Seminar, February 15, 2018

- *Places, adèles, and idèles: Part IV*, UO Graduate Student Seminar, October 31, 2017

- *Places, adèles, and idèles: Part III*, UO Graduate Student Seminar, October 24, 2017

- *Places, adèles, and idèles: Part II*, UO Graduate Student Seminar, October 17, 2017

- *Places, adèles, and idèles: Part I*, UO Graduate Student Seminar, October 10, 2017

- *Finiteness of class number: Minkowski style*, UO Graduate Student Seminar, October 2017

- *The Robinson-Schensted algorithm*, UO Symmetric Function Seminar, April 2017

- *The p-adic absolute value*, UO Graduate Student Seminar, January 2017

Conferences and Workshops Attended

- 8th International Conference on p-Adic Mathematical Physics and Applications (Web Conference), May 17-28, 2021

- Lluís Santaló Summer School: p-adic Analysis, Arithmetic, and Singularities, Santander, Spain, June 24-28, 2019

- Oregon Number Theory Days, Eugene/Portland/Corvallis, OR, 2017-2019

- 2018 Arizona Winter School on Arithmetic Geometry, Tucson, AZ, March 3-7, 2018

- 2018 Joint Mathematics Meetings, San Diego, CA, January 10-13, 2018

- 18th Northwest Probability Seminar, Redmond, WA, November 5, 2016

Proficiencies

- *Software:* TeXShop, Matlab, Microsoft Office

- *Programming/Typesetting:* C/C++, LaTeX