

# Pax Kivimae

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## CONTACT INFORMATION

Department of Mathematics  
Northwestern University  
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## RESEARCH INTERESTS

Probability Theory, Statistical Physics, Random Matrix Theory, Spin Glasses

## EDUCATION

Northwestern University  
Ph.D., Mathematics  
Advisor: Antonio Auffinger

*Evanston, IL, USA*  
September 2016 - June 2022 (expected)

University of California, Los Angeles  
B.S. and M.A., Mathematics

*Los Angeles, CA, USA*  
August 2012 - June 2016

## PAPERS

*Critical Fluctuations for The Spherical Sherrington-Kirkpatrick Model in an External Field* arxiv:1908.07512

*Gaussian Multiplicative Chaos for Gaussian Orthogonal and Symplectic Ensembles* arxiv:2012.09969

*The Ground-State Energy and Concentration of Complexity in Spherical Bipartite Models* arxiv:2107.13138

## TALKS

*Gaussian Multiplicative Chaos Limits for Random Symmetric Matrices* April 2022  
University of Sussex Probability Seminar

*The Ground-State Energy and Concentration of Complexity in Spherical Bipartite Models* February 2022  
University of Wisconsin: Madison Probability Seminar

*Gaussian Multiplicative Chaos Limits for Gaussian Orthogonal and Symplectic Ensembles* January 2022  
University of Oxford Random Matrix Theory Seminar

*The Ground-State Energy and Concentration of Complexity in Spherical Bipartite Models* September 2021  
University of Basel Probability Seminar

*Continuum Limits for Random Quadratic Optimization* November 2019  
Northeast Probability Seminar

*Applications of Gamma Cohomology to Obstruction Theory* April 2017  
Talbot Workshop

## AWARDS & HONORS

Sherwood Scholarship (2016)

UCLA Undergraduate Math Scholar Award (2014)

<b>SERVICE</b>	Northwestern Directed Reading Program Mentor	Fall 2018 - Spring 2020
<b>TEACHING</b>	<p>(Fall 2017) Math 240: Linear Algebra (Teaching Assistant) (two sections)</p> <p>(Winter 2018) Math 321-2: Real Analysis II (Teaching Assistant)</p> <p>(Winter 2018) Math 382: Complex Analysis and Group Theory (Teaching Assistant)</p> <p>(Spring 2018) Math 281-3: Accelerated Mathematics for ISP (Teaching Assistant)</p> <p>(Spring 2018) Math 334: Linear Algebra: Second Course (Teaching Assistant)</p> <p>(Fall 2018) Math 410-1: Analysis (Teaching Assistant)</p> <p>(Fall 2018) Math 311-1: Probability and Stochastic Processes (Teaching Assistant)</p> <p>(Fall 2019) Math 410-1: Analysis (Teaching Assistant)</p> <p>(Fall 2019) Math 321-1: Real Analysis I (Teaching Assistant)</p> <p>(Fall 2021) Math 290-1: Linear Algebra and Vector Calculus (Teaching Assistant) (two sections)</p> <p>(Winter 2021) Math 290-2: Linear Algebra and Vector Calculus (Teaching Assistant)</p> <p>(Winter 2021) Math 334: Linear Algebra: Second Course (Teaching Assistant)</p>	
<b>CONFERENCES ATTENDED</b>	19th Northeast Probability Seminar	November 2019
	41st Midwest Probability Colloquium	October 2019
	CMI Integrable Probability Summer School	June 2019
	18th Northeast Probability Seminar	November 2018
	40th Midwest Probability Colloquium	October 2018
	The Rough High-Dimensional Landscape Problem	February 2018
	39th Midwest Probability Colloquium	October 2017