

Jinwoo Sung (성진우, 成鎮宇)

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Employment	University of Washington	Seattle, WA
	Acting Assistant Professor in Mathematics	September 2025 – June 2028

Education	University of Chicago	Chicago, IL
	Ph.D. in Mathematics	August 2025
	– Advisors: Gregory F. Lawler and Ewain Gwynne	
	M.S. in Mathematics	December 2020
	B.A. in Mathematics	June 2019

Research interests	Probability theory and its connections to complex analysis and mathematical physics.
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Papers	<i>The Minkowski content measure for the Liouville quantum gravity metric</i> with Ewain Gwynne. Annals of Probability , 2024.
	<i>Quasiconformal deformation of the chordal Loewner driving function and first variation of the Loewner energy</i> with Yilin Wang. Mathematische Annalen , 2024.
	<i>A deterministic proof of Loewner energy reversibility via local reversals</i> Annales Fennici Mathematici , 2025.
	<i>Area measures and branched polymers in supercritical Liouville quantum gravity</i> with Manan Bhatia and Ewain Gwynne. Submitted .
	<i>Quasi-invariance for SLE welding measures</i> with Shuo Fan. Preprint .
	<i>Random walk reflected off of infinity, with applications to uniform spanning forests and supercritical Liouville quantum gravity</i> with Ewain Gwynne. Preprint .

Awards	Wirszup Fellowship (University of Chicago)	2025
	Harper Dissertation Fellowship (University of Chicago)	2024
	Kwanjeong Educational Foundation Scholarship	2019 – 2026
	Amick Fellowship (University of Chicago)	2019 – 2023

Paul R. Cohen Memorial Prize (University of Chicago)	2019
South Korean Presidential Science Scholarship	2013 – 2019

Teaching

Instructor (University of Washington)	
– Introduction to Differential Equations	Autumn 2025
Instructor (University of Chicago)	
– Calculus III	Autumn 2023 and Autumn 2024
– Mathematical Method for Economic Analysis	Winter 2023
– Calculus II	Autumn 2021
College Fellow (University of Chicago)	
– Markov Chains, Martingales, and Brownian Motion	Autumn 2020 and Spring 2021
– Analysis in \mathbf{R}^n II (accelerated)	Winter 2021

Invited talks

Advances and Connections of Modern Geometric Function Theory Hosted at the University of Michigan .	October 2025
Hausdorff Research Institute for Mathematics , Trimester Program “Probabilistic methods in quantum field theory”	July 2025
Aalto University , Seminar on Mathematical Physics	March 2025
University of Washington , Rainwater Seminar	February 2025
University of Michigan , Probability and Analysis Seminar	January 2025
KIAS , Analysis, PDE & Probability Seminar	December 2024
Seoul National University , Probability Research Seminar	December 2024
CRM-ISM (Montreal) , Probability Seminar	November 2024
Aalto University , Seminar on Mathematical Physics	September 2024
IMSI , Two-Dimensional Random Geometry Workshop	July 2024
MIT , Probability Seminar	April 2024
Pacific Quasiworld Online Seminar	December 2023
Lehigh University , Probability and Statistics Seminar	December 2023
UIUC , Probability Seminar	October 2023
Peking University , Summer School on Probability	June 2023
Random Conformal Geometry and Related Fields in Jeju Hosted by Korea Institute for Advanced Study (KIAS).	June 2023
University of Bonn , Oberseminar Mathematical Physics	May 2023
IHES , Probability and Analysis Informal Seminar	April 2023

Indiana University , Probability Seminar	April 2023
Random Geometry and Statistical Physics Workshop	October 2022
Hosted at the University of Pennsylvania .	
KIAS , Analysis, PDE & Probability Seminar	August 2022
At Korea Institute for Advanced Study, Seoul.	

Outreach

<i>Mentor</i> , University of Chicago Math REU (research experience for undergrads)	2020, 2021, 2023, 2024
<i>Mentor</i> , University of Chicago Math DRP (directed reading program)	2023, 2024
<i>Instructor</i> , Math Circles of Chicago	2022