Willie Rush Lim

Employment

2024 – current	**Tamarkin Assistant Professor, Brown University, RI**

Education

2019 – 2024	**PhD in Mathematics, Stony Brook University, NY**
	○ Dissertation: "*From Herman Rings to Herman Curves*"
	○ Advisor: Dzmitry Dudko
2015 – 2019	**MSci. in Mathematics, Imperial College London, UK**

Research Interests

Dynamical systems, in particular complex dynamics and renormalization theory

Papers

[3] Hyperbolicity of renormalization of critical quasicircle maps. Submitted. arXiv:2405.09008

[2] Rigidity of J-rotational rational maps and critical quasicircle maps. arXiv:2308.07217
To appear in Transactions of the AMS.

[1] A priori bounds and degeneration of Herman rings with bounded type rotation number. Submitted. arXiv:2302.07794

Recent Talks

2025	**August**	Fields-CNAM Nonlinear Days 2025, Fields Institute
2025	**August**	Geometric Complexity of Julia Sets VI, Bedlewo
2025	**June**	Topics in Complex Dynamics, University of Barcelona
2025	**February**	Geometry & Topology Seminar, Brown University
2024	**November**	Dynamical Systems Seminar, Stony Brook University
2024	**November**	Dynamical Systems Seminar, Cornell University
2024	**October**	Dynamical Systems Seminar, Boston University
2024	**April**	AMS Sectional Meeting, UW-Milwaukee
2024	**April**	Workshop on Dynamical Systems and Related Topics, UMD
2024	**January**	Geometry & Topology Seminar, Brown University
2023	**November**	Quasiworld Seminar, Online
2023	**March**	Complex Analysis and Dynamics Seminar, CUNY
2022	**November**	Dynamical Systems Seminar, Stony Brook University

Teaching Experience

2025	**Fall**	Instructor, MATH1710 Topology
2025	**Fall**	Instructor, MATH1110 Ordinary Differential Equations
2025	**Spring**	Lecturer, MATH180 Multivariable Calculus
2024	**Fall**	Lecturer, MATH200 Multivariable Calculus
2023	**Summer**	Instructor, MAT127 Calculus C (part of Simons STEM Scholars Summer Bridge)
2022	**Fall**	Lecturer, MAT125 Calculus A
2022	**Summer**	Instructor, MAT203 Calculus III
2021	**Summer**	Instructor, MAT203 Calculus III
2020	**Summer**	Instructor, MAT342 Applied Complex Analysis
2019 − 2024		Teaching Assistant (as a grader and recitation leader) Calculus I, Calculus II, Calculus IV, Intro. to Linear Algebra, Applied Real Analysis, Applied Complex Analysis, Dynamics and Chaos, Graduate Complex Analysis

Honors and Awards

2024		Chairman's Award for Excellence in Teaching, Stony Brook University
2019		IBM Prize for Excellence in Pure Mathematics
2019		Prize for Excellence in Support of Teaching, Imperial College London
2017		G-Research Prize
2015 − 2019		Dean's List, Imperial College London
2015 − 2019		President's Undergraduate Scholarship, Imperial College London

Outreach and Service

2022	**Fall**	Co-organizer of ENYGMMa (Empowering New York Gender Minority Mathematicians)
2022	**Summer**	Instructor of the Mathematics Summer Program (MathCamp) for high school students
2021 − 2022		Directed Reading Program
2020 − 2021		Co-organizer of the Graduate Student Seminar