

Willie Rush Lim

Education

2019 – Present	PhD Candidate in Mathematics, Stony Brook University, NY <ul style="list-style-type: none">○ Research Interest: Holomorphic dynamics, renormalization theory○ Advisor: Dzmitry Dudko
2015 – 2019	MSci. Mathematics, Imperial College London, UK <ul style="list-style-type: none">○ First class honors○ Dissertation: <i>“Quadratic-Like Renormalisation in Holomorphic Dynamics”</i>○ Advisor: Davoud Cheraghi

Papers

2022	A Priori Bounds for Bounded Type Herman Rings (in preparation)
2022	Combinatorial Rigidity of Bounded Type Herman Quasicircles (in preparation)

Teaching Experience

2021	Fall	Grader, MAT211 Introduction to Linear Algebra
2021	Summer	Course Instructor, MAT203 Calculus III
2021	Spring	Teaching Assistant, MAT132 Calculus II
2020	Fall	Teaching Assistant, MAT131 Calculus I
2020	Summer	Course Instructor, MAT342 Applied Complex Analysis
2020	Spring	Grader, MAT351 Differential Equations: Dynamics and Chaos
2019	Fall	Grader, MAT341 Applied Real Analysis
2017 – 2019		Teaching Assistant, 1 st and 2 nd year undergraduate courses

Honors and Awards

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

Conferences and Workshops Attended

2022	May	Adventurous Berkeley Complex Dynamics – MSRI
2021	September	On Geometric Complexity of Julia Sets, Part III (online) – Banach Center, IMPAN
2021	September	Advancing Bridges in Complex Dynamics (online) – CIRM
2021	March	Many Faces of Renormalisation (online) – Simons Center

2020	August	On Geometric Complexity of Julia Sets, Part II (online) – Banach Center, IMPAN
2020	March	Analysis, Dynamics, Geometry and Probability – Simons Center

Talks

2022	Mar	<i>“Intro. to Kahler Geometry”</i> – Student Differential Geometry Seminar (SDGS)
2021	Dec	<i>“Dynamics of Quadratic Polynomials”</i> – Graduate Student Seminar (GSS)
2021	May	<i>“Information Inequalities”</i> – Analysis Student Seminar (ASS)
2021	March	<i>“What Is... an Orbifold?”</i> – GSS
2021	March	<i>“Brunn-Minkowski and Concentration of Measures”</i> – ASS
2020	October	<i>“Subharmonic Functions and Convexity”</i> – ASS
2020	February	<i>“Subharmonic and Plurisubharmonic Functions”</i> – SDGS
2019	December	<i>“Renormalization of Unimodal Maps and Feigenbaum Universality”</i> – Renormalization Student Seminar
2019	October	<i>“Brushing the Hairs of Transcendental Entire Functions”</i> – GSS
2019	February	<i>“Quasiconformal Deformations and Sullivan's No Wandering Domains”</i> – IMA's Tomorrow's Mathematicians Today, University of Greenwich
2018	March	<i>“A Conjecture on Quasiconformal Maps”</i> – Undergraduate Colloquium, Imperial College London

Outreach and Service

2022	Spring	Directed Reading Program (Fractal Geometry) – Stony Brook University
2021	Spring	Directed Reading Program (The Symmetries of Things) – Stony Brook University
2020 – 2021		Co-organiser of the Graduate Student Seminar – Stony Brook University