Lauritz Streck

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Career

University of Edinburgh	**Edinburgh, UK**
Gordon Seggie Brown Fellow	*2024-2027*
Postdoctoral Position.	

Education

University of Cambridge	**Cambridge, UK**
PhD in Mathematics	*2020-2024*
Title: On the Fourier decay and the dimension of self-similar measures. Advisor: Péter Varjú.	
Hebrew University	**Jerusalem, Israel**
MSc Mathematics	*2018-2020*
Master's thesis: Non-concentration of primes along horocycle orbits in $\Gamma\backslash PSL_2(\mathbb{R})$. Advisor: Tamar Ziegler.	
Rheinische Friedrich-Wilhelms-Universität	**Bonn, Germany**
BSc Mathematics	*2014-2018*
Bachelor's Thesis (2017): On the Delta Calculus. Advisor: Christoph Thiele.	

Publications

1. The dimension of random subsets of self-similar sets generated by branching random walk (with P. Allaart). *Submitted.*
2. On absolute continuity and maximal Garsia entropy for self-similar measures with algebraic contraction ratio. *Mathematical Proceedings of the Cambridge Philosophical Society*, January 2026.
3. On equidistribution of polynomial sequences in quotients of $PSL_2(\mathbb{R})$. *Ergodic Theory and Dynamical Systems*, October 2025.
4. Non-Concentration of Primes in $\Gamma\backslash PSL_2(\mathbb{R})$. *Israel Journal of Mathematics*, March 2025.
5. Low-degree learning and the metric entropy of polynomials (with A. Eskenazis and P. Ivanisvili). *Discrete Analysis*, November 2023.

Invited Talks

Curves, combinatorics, and the exact overlaps conjecture (60min)	
University of St. Andrews, UK	*November 2025*
Analysis Seminar	
A geometric approach to counting rationals near curves (30min)	
University of Maryland, USA	*September 2025*
Workshop "Recent Developments in Sparse Equidistribution"	
Sparse Equidistribution of horocycle orbits on quotients of $PSL_2(\mathbb{R})$ (1h)	
Warwick, UK	*May 2025*
Analysis Seminar	
Sparse Equidistribution of horocycle orbits on quotients of $PSL_2(\mathbb{R})$ (1h)	
York, UK	*April 2025*
Number Theory Seminar	
The dimension of random subsets of Cantor sets defined by tree branching (1h)	
Edinburgh, UK	*October 2024*
Analysis Seminar	

On the Fourier decay of inhomogeneous self-similar measures (1h)

Manchester, UK   *September 2024*

Dynamical Systems, Number Theory, and Quantum Chaos: New connections and directions

Entropy Rates in Fractal Geometry (30 min)

Oberwolfach, Germany   *June 2023*

Oberwolfach workshop 2323: Incidence Problems in Harmonic Analysis, Geometric Measure Theory, and Ergodic Theory

Entropy Rates in Fractal Geometry (1h)

University of Warwick, UK   *February 2023*

Dynamics and Group Geometry Early Researchers Seminar