

# Curriculum Vitae

Siddharth Setlur

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## Personal Information

Name	Siddharth Setlur	E-Mail	S.Setlur@sms.ed.ac.uk
Address	28/3 Wardlaw Place, EH11 1UQ Edinburgh, Scotland, UK	Personal Website	siddharthsetlur.github.io
		Phone	+44 0735 609 38 90
Date of Birth	18. Dec 2000	Languages	English (first language) and German (fluent)

## Education

Sept 2024 -	PhD at CDT in Algebra, Geometry and Quantum Fields, University of Edinburgh supervised by Dr. Darrick Lee & Dr. Sjoerd Beentjes. Fully funded by the UKRI ESPRC.
Sept 2022 - August 2024	Master of Science ( <i>with distinction</i> ) at ETH Zürich in Mathematics.
MSc Thesis	Optimizing Functions Based on Signed Barcodes supervised by Dr. Sara Kališnik & Dr. Steve Oudot.
Sept 2019 - Aug 2022	Bachelor of Science at ETH Zürich in Mathematics.
BSc Thesis	Different Theoretical Perspectives on Persistent Homology supervised by Dr. Sara Kališnik.

## Work Experience

Sept 2023 - Dec 2023	Teaching Assistant, Department of Mathematics ETH Zürich Teaching a twice-weekly exercise class for first year Math and Physics students taking Dr. Alessio Figalli's Single Variable Analysis course.
Oct 2022 - Feb 2023	Research Intern, Inria Saclay (France) supervised by Dr. Steve Oudot. Research in theoretical foundations of topological data analysis, namely the differentiability of new invariants for multiparameter persistence.
June 2021 - Sep 2022	Library Assistant, Mathematics Library ETH Zürich Responsibilities included helping select new books to purchase for the collection, opening and closing the library once a week, processing book returns, answering customer queries and conducting inventory.

## Publications

†= first or joint first authorship.

- {Luis Scoccola, Siddharth Setlur}†, David Loiseaux, Mathieu Carrière, and Steve Oudot. **Differentiability and Convergence of Filtration Learning with Multiparameter Persistence.** *International Conference on Machine Learning (ICML) 2024.*

## Workshops and Conferences Attended

November 2024	Twentieth Meeting of the Applied Algebra and Geometry Research Network
August 2024	Spires 2024, Oxford University. Poster Session for <b>Differentiability and Convergence of Filtration Learning with Multiparameter Persistence</b> (based on joint work with Luis Scoccola, David Loiseaux, Mathieu Carrière, and Steve Oudot).
July 2024	The Forty-first International Conference on Machine Learning, Vienna. Poster Session for <b>Differentiability and Convergence of Filtration Learning with Multiparameter Persistence</b> (based on joint work with Luis Scoccola, David Loiseaux, Mathieu Carrière, and Steve Oudot).
August 2023	BIREP Summer School on persistence modules—The Interplay of Representation Theory and Topological Data Analysis Contributed Talk - Signed Barcodes for Multiparameter Persistence

# Service & Volunteering

- October 2024 -

Organizer - BioTop Reading Group  
Organize a hybrid seminar at the University of Edinburgh that focuses on applications of topology, geometry, and algebra to biology.
- Feb. 2022 - July 2022

Organizer - Zurich Undergraduate Colloquium in Math and Physics  
Organized a weekly colloquium, where undergraduates were given the opportunity to hold talks about their semester/bachelor/master theses.