# Adam Klukowski

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Research interests: low-dimensional topology, Mapping Class Groups and Teichmüller theory, laplacian spectra, group rings, probabilistic and geometric group theory

#### EDUCATION

<ul> <li>Doctor of Philosophy, University of Oxford, Christ Church college</li> <li>▶ Working with prof. Vladimir Marković and prof. Dawid Kielak.</li> </ul>	Oct 2022 – present
Master of Mathematics, University of Cambridge, Trinity college ▶ Part III essay on "Rigidity Theorems for Hyperbolic Groups".	Oct 2016 – Jun 2020

## PUBLICATIONS

Congruence Subgroup Property for nilpotent groups and subsurface subgroups of Mapping Class Groups ▶ arxiv:2411.06867

Tangle free permutations and the Putman-Wieland property of random covers

- $\blacktriangleright$ joint with V. Marković, IMRN, doi:10.1093/imrn/rnae206
- Simple closed curves, non-kernel homology and Magnus embedding ▶ arxiv:2304.13196, under review

## ACADEMIC TEACHING

Lecturer at Somerville College Oxford	2024-2025
Algebraic Topology (tutor)	Michaelmas 2024
Topology and Groups (tutor)	Michaelmas 2024
Topology and Groups (consultation sessions)	Trinity 2024
Elliptic Curves (marker)	Hilary 2024
Lie Groups (marker)	Michaelmas 2023
Topology and Groups (TA)	Michaelmas 2022
Analytic Topology (TA)	Michaelmas 2022
Tutor, XIV Liceum in Warsaw	Sep $2015 - Apr 2016$
$\blacktriangleright$ Led extra curricular classes for younger secondary school students.	
$\blacktriangleright$ 5 out of 10 participants became finalists of the Polish Mathematical Olympiad.	
Volunteering	
Team guide, International Mathematical Olympiad	Jul 2019
Volunteer, STIMULUS Project	Nov 2017 – Mar 2018
▶ Helping GCSE and A-level students with mathematics at a local school in Camb	bridge.
Lecturer, Maths Beyond Limits	Sep 2016
▶ Led a workshop about Hilbert's Tenth Problem at an international mathematica camp for gifted secondary school students.	al
Talks	
Lost in Topology workshop (flash talk), Pisa	Sep 2024
Geometric Group Theory seminar, Cambridge	Jun 2024
Young Coometrie Croup Theory (flach talk) Bristol	Apr 2024

Young Geometric Group Theory (flash talk), Bristol	Apr 2024
Junior Topology and Group Theory seminar, Oxford	Jan 2024
Autumn School on Large Scale Geometry (flash talk), Göttingen	Oct 2023
Junior Topology and Group Theory seminar, Oxford	Apr 2023

#### AWARDS AND PRIZES

First prize, European Union Contest For Young Scientists

▶ Proof that all complex roots of  $\sum_{k=0}^{pq-1} X^{\lfloor \frac{k}{p} \rfloor + \lfloor \frac{k}{q} \rfloor}$  lie on the unit circle.