Mateusz Kujawski

Interests

Topology of smooth 4-manifolds and low dimensional topology in general, knot theory, exotic structures on manifolds.

EDUCATION

University of the National Education Comission

Cracow

PhD in Mathematics. Advisors: Maciej Borodzik & Piotr Pokora

2025-current

University of Warsaw

Warsaw

M.S. in Mathematics.

Thesis: Exotic diffeomorphisms of 4-manifolds. Advisor: Maciej Borodzik

2023-2025

University of Warsaw

Warsaw

B.S. in Mathematics. Thesis: Kirby diagrams of gropes.

2020-2023

Conferences & events attended

• (future) Workshop Scottish Talbot On Algebra and Topology II

Crianlarich, Scotland, 5-9.1.2026

• (future) Workshop Branched covers

University of Seville, 17-21.11.2025

• Algebraic Topology research seminar I gave a talk about my Masters's thesis University of Warsaw, 15.10.2025

Workshop Mapping class groups of non-simply connected 4-manifolds

University of Glasgow, 1-5.09.2025

I gave a short talk Watanabe's propagators for $(S^1)^4$.

• Research visit

MPIM Bonn, 9-18.12.2024

Invited by Aru Ray. I gave talk on my work (Kontsevich integrals) at the students Seminar.

• Summer School in Low Dimensional Topology

Institut Fourier, Grenoble, Summer 2024

 $Three-weeks-long\ summer\ school\ for\ PhD\ students.\ I\ attended\ a\ couple\ of\ mini-courses.\ Topics\ included\ classical\ knot\ theory, categorification,\ Heegaard-Floer\ homology\ and\ mapping\ class\ groups.$

• Knots, Homologies and Physics Simons Semester

Warsaw, Spring 2024

In three separated weeks I attended numerous lectures centered around low dimensional manifolds and knot theory.

SCHOLARSHIPS AND AWARDS

• Advanced Master Degree Programme

07.2024 - 10.2025

A programme organized and funded by the University of Warsaw for Master students who want to work in research early. I got qualified with my Master thesis as my project.

Rector Scholarship

10.2023-06.202

For students with top 7% GPA in a year. Practically top 4 in around 60 students with GPA 4.75 (on a 2.0/5.0 scale).

TEACHING

• Additional exercise session before mid-term exam in Topology II (intro to Algebraic Topology) around April 2023 A year after completing Topology II course, I organized an event traditionally called 'douczki' for students taking Topology II at that time, as a volunteer. It involved solving exercises mostly from previous-year mid-term exam focused on Brouwer's Fixed Point Theorem and Seifet-van Kampen Theorem.

• Introductory lecture in homotopy

around May 2022

When differential forms and their integration appeared on the Analysis II course, most students were unfamiliar with loop homotopy. As I was taking the Topology II course at that time, I volunteered to give a 90 minutes unofficial lecture about the topic.