Filippo Baroni

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filippobaroni.github.io

Education

2021 – **DPhil**, *University of Oxford*
Advisor: Marc Lackenby

2016 – 2021 Student of mathematics at *Scuola Normale Superiore di Pisa*

2019 – 2021 **Master's degree**, *University of Pisa*
Advisor: Carlo Petronio
Degree thesis: *Realisability of branching data with a short partition*

2016 – 2019 **Bachelor's degree**, *University of Pisa*
Advisor: Riccardo Benedetti
Degree thesis: *Singular homology of fibred spaces*

Publications and preprints

2023 *Classification of genus-two surfaces in* S^3, preprint (`arXiv:2309.05387`)

2023 *Solution of the Hurwitz problem with a length-2 partition* (with Carlo Petronio), preprint (`arXiv:2305.06634`)

2022 *The Proportionality Principle via Bounded Cohomology*, in *Bounded Cohomology and Simplicial Volume* (pp. 118–131), Cambridge University Press

Invited speaker

May 2023 "Junior topology and group theory seminar", *University of Oxford*
Talk: *A brief history of virtual Haken*

Jun 2022 "Junior topology and group theory seminar", *University of Oxford*
Talk: *Existence of branched coverings of surfaces*

Mar 2022 "Seminario BabyGeometri", *University of Pisa*
Talk: *An algorithm for unknot recognition*

Feb 2021 "International young seminar on bounded cohomology and simplicial volume", *online*
Talk: *The proportionality principle via bounded cohomology*

Teaching

Oct–Dec 2023 Tutor for *Pure maths*, *St Catherine's College, Oxford*

Apr–Jun 2023 Tutor for *Graph theory*, *St Catherine's College, Oxford*

Jan–Mar 2023	Tutor for *Low-dimensional topology and knot theory*, *University of Oxford*
Oct–Dec 2022	Tutor for *Set theory*, *University of Oxford*
Oct–Dec 2022	Tutor for *Graph theory*, *St Catherine's College, Oxford*
Apr–Jun 2022	Tutor for *Graph theory*, *St Catherine's College, Oxford*
Jan–Mar 2022	Teaching assistant for *Low-dimensional topology and knot theory*, *University of Oxford*
Oct–Dec 2021	Teaching assistant for *Geometry of surfaces*, *University of Oxford*