

SERGIO SERRANO DE HARO IVÁÑEZ

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EDUCATION

DPhil in Cancer Science <i>University of Oxford</i>	2023 – Present
MSc in Mathematical Sciences <i>University of Oxford</i> Dissertation: Homological approaches to graph evasiveness	2021 – 2022
BSc in Mathematics <i>Universitat Autònoma de Barcelona</i> Dissertation: On the original proof of the Chern theorem	2016 – 2021
BSc in Physics <i>Universitat Autònoma de Barcelona</i> Dissertation: How can we interpret probability in the quantum framework?	2016 – 2021

WORK EXPERIENCE

College Lecturer <i>Keble College, University of Oxford</i> Tasks involve tutoring undergraduate courses and participating in the admissions process.	2024 – Present
Project Administrator <i>Numerical Factory, Universitat Politècnica de Catalunya</i> Co-organised a coding video contest funded by MathWorks and Catalan universities.	2022 – 2023

AWARDS

Cancer Sciences Doctoral Training Centre Scholarship DPhil scholarship including tuition fees and stipend.	2023-2027
Academic Merit State Scholarship (Matrícula de Honor) Undergraduate performance awards, funded 50% of my BScs fees.	2016 – 2021

ACADEMIC TEACHING

University of Oxford

Keble College, Tutor:

- ASO Projective Geometry – TT 2025
- ASO Number Theory – TT 2025 & TT 2024
- M1 Linear Algebra II – HT 2025
- M1 Linear Algebra I – MT 2024
- ASO Special Relativity – TT 2024

- Introduction to Mathematical Modelling in Biology – HT 2024

PUBLICATIONS

1. **S. Serrano de Haro Iváñez***, L. Fesser*, K. Devriendt, M. Weber, R. Lambiotte (2024). Augmentations of Forman's Ricci Curvature and their Applications in Community Detection. *Journal of Physics: Complexity* 5 (3), 035010 (2024).

*Joint first authors

TALKS AND PRESENTATIONS

SPATIAL ANALYSIS OF COLORECTAL CANCER MULTIPLEX IMAGING

Poster at the Annual Meeting of the Society for Mathematical Biology, Seoul, 1-5 Jul 2024.

OUTREACH AND VOLUNTEERING

DEMONSTRATOR 2024
University of Oxford
Activity demonstrator at Oxford Maths Festival.

SUPPORT TEACHER 2023
Save the Children Spain
Co-supervised two groups of 12 secondary school students. Offered weekly after-school mathematics support throughout the academic year.

STAFF MEMBER 2019
Universitat Autònoma de Barcelona
Co-tutored 6 mathematics workshop sessions aimed at high school students.

WORKSHOP ORGANISER 2016
Catalunya-La Pedrera Foundation
Co-designed and presented a workshop in mathematics and magic devoted to 30 primary school students.

OTHER SKILLS

PROGRAMMING: Python, C, and LaTeX.
Experience with topological data analysis, network science, and mathematical animation libraries.

LANGUAGES: English (Proficiency); Spanish (Mother tongue); Catalan (Mother tongue).