

Federico Lazzeri f.lazzeri6@studenti.unipi.it +39 3474118119 My personal website

# Federico Lazzeri

### Student

### **Research interests**

Algebraic and enumerative combinatorics, Representation theory, Symmetric functions, Graph theory, Optimization.

### **Education**

Pisa, 2020 - 2023

Master degree in Mathematics, University of Pisa

Mark 110/110 cum laude

Thesis title: "Representation theory of the 0-Hecke algebra"

Supervisor: Prof. Michele D'Adderio

Pisa, 2021

Training course for teaching, University of Pisa

Pisa, 2017 - 2020

Bachelor degree in Mathematics, University of Pisa

Mark 107/110

Thesis title: "Algorithms for manifold learning and analysis of their sta-

bility"

Supervisor: Prof. Dario Trevisan

### **Selected courses**

- Algebraic combinatorics
- Groups and representations
- Combinatorial methods in topology
- Chromatic symmetric functions: recent advances
- Algebraic topology
- Elements of algebraic topology
- Algebra institutions
- Operations research
- Theory and methods of optimization
- Mathematical logic
- Post-quantum cryptography

### **Achievements**

#### Pisa, May 2023

Eligible for the PhD course in Mathematics at the **Scuola Normale Superiore** for the academic year 2023/2024.

#### Cesenatico, 2017

Finalist in the **Italian Mathematical Olympiad** team competition.

### Attended conferences

Pisa, November 2024

Research-Oriented Seminar In COmbinatorics (ROSICO)

Pisa, November 2024

**COmbinatorics Seminar for Everyone (COSE)** 

Bologna, November 2024

INcontro TRIangolare di Combinatoria Algebrica e TOpologica (INTRICATO)

Dobbiaco (Toblach), February 2023

Winter School "Geometry, Algebra and Combinatorics of Moduli Spaces and Configurations V"

Pisa, May 2022

**COmbinatorics Seminar for Everyone (COSE)** 

Talk: Reciprocity for simplicial cones.

## Work experience

Montepulciano, September 2023 - August 2024

**Substitute teacher** in Mathematics, Licei Poliziani Scientifico e Scienze Umane

Pisa, March - May 2023

**Tutor** of Algorithms and Data Structures, University of Pisa, Mathematics Department

Pisa, September 2021

Mathematics Precourse **tutor**, University of Pisa, School of Engineering

Pisa, March - May 2021

**Tutor** of Algorithms and Data Structures, University of Pisa, Mathematics Department

Montepulciano, February 2021

**Substitute teacher** in Mathematics and Physics, Licei Poliziani Linguistico e Scienze Umane

# Languages and computer skills

- Italian (native), English (B2/C1 level), French (B1/B2 level)
- C, Matlab, MFX

### References

#### Prof. Michele D'Adderio

Professor, Department of mathematics, University of Pisa, Italy Contacts: michele.dadderio@unipi.it - Personal page

#### Prof. Filippo Gianluca Callegaro

Professor, Department of mathematics, University of Pisa, Italy Contacts: filippo.callegaro@unipi.it - Personal page