



Federico Lazzeri  
federico.lazzeri@rub.de  
+39 3474118119  
My personal website

# Federico Lazzeri

## PhD student in Mathematics

### Research interests

Algebraic and enumerative combinatorics, Coxeter groups, Distributional properties of polynomials, Representation theory, Symmetric functions.

### Education

#### Bochum, 2025

**Fellowship** in Algebraic Combinatorics, Ruhr University Bochum.

Title: "Collaboration on Combinatorial Invariance Conjecture"

Supervisor: Prof. Christian Stump

#### 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 stability"

Supervisor: Prof. Dario Trevisan

### Attended conferences

#### Leipzig, June - July 2025

Summer School "New perspectives on discriminants and their applications"

#### Ancona, June 2025

"Algebraic Combinatorics in Ancona"

#### Bologna, April 2025

"6th Graduate Student Meeting in Applied Algebra and Combinatorics"

#### Bochum, March 2025

Spring School "The Dynkin Classification"

#### Dobbiaco (Toblach), February 2025

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

#### 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 (TOEFL 92/120), French (B1/B2 level), German (A2 level)
- C, Sage, Matlab,  $\text{\LaTeX}$

## 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