

# Edoardo Berton

✉ edoardo.berton@unicatt.it

## Education

---

### Università Cattolica del Sacro Cuore

PhD in Economics and Finance

Milan, Italy

2021 - present

### Università degli Studi di Milano

M.Sc. in Finance and Economics (*curriculum*: Quantitative Finance)

Milan, Italy

2018 - 2020

### Ludwigs-Maximilians Universität - LMU

Erasmus+ semester

Munich, Germany

2019 - 2020

### Università degli Studi di Milano - Bicocca

B.Sc. in Economics and Business (*curriculum*: Financial Economics)

Milan, Italy

2014 - 2018

## Academic Positions

---

### Teaching Assistant

Politecnico di Milano

Milan, Italy

- Mathematical Finance II (M.Sc. *Mathematical Engineering*), Academic Year: 2024/25.

### Teaching Assistant

Università degli Studi di Milano

Milan, Italy

- Optimization (M.Sc. *Economics and Political Sciences*), Academic Years: 2023/24, 2022/23, 2021/22.
- Mathematics Crash Course (*incoming M.Sc. students*), Academic Years: 2023/24, 2022/23.

### Teaching Assistant

Università Cattolica del Sacro Cuore

Milan, Italy

- Mathematics (B.Sc. *Banking and Finance*), Academic Year: 2023/24.

### Research Assistant

Esade Business School

Barcelona, Spain

May 2021 - Sept. 2023

- Support Prof. Carlo Sala with paper replication, data analysis, algorithm development (main focus on Asset Pricing, Risk Management and Mathematical Finance).

## Associations

---

Member of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES)

Member of the National Institute for Advanced Mathematics: Group of Mathematical Analysis, Probability and Applications (INdAM - GNAMPA)

## Publications

---

E. Berton, L. Mercuri, (2023) **An Efficient Unified Approach for Spread Option Pricing in a Copula Market Model**, Annals of Operations Research

## Preprints

---

E. Berton, A. Doldi, M. Maggis, (2024) **On Conditioning and Consistency for Nonlinear Functionals**, ArXiv

## Conference Talks

---

- Poster**, 4th Italian Meeting on Probability and Mathematical Statistics Rome, 2024  
*On conditioning and consistency for nonlinear maps*
- Talk**, XXV Quantitative Finance Workshop Bologna, 2024  
*On continuity of state-dependent utility*
- Talk**, PhD<sup>2</sup>ays, Department of Mathematics “Federigo Enriques” Milan, 2024  
*On continuity of state-dependent utility*
- Talk**, European Conference on Operations Research Athens, 2021  
*Spread Option Pricing in a Copula Affine GARCH( $p,q$ ) Model*

## Experience

---

### Analyst, Quantitative Risk and Stress Testing

Citibank

Warsaw, Poland  
Sept. 2020 - Oct. 2021

- Calibration and maintenance of Commodity-PCA curves simulation model.
- Development of Python library for data-cleaning and data-enhancement process.
- Minor involvement in portfolio VaR computations.

### Intern, Credit Analysis

HypoVereinsbank

Munich, Germany  
Mar. 2020 - Aug. 2020

- Support in the preparation of Credit Risk Assessments.
- Cash-flow modelling and Credit Rating Issuance.
- Industry Analysis, Peer Group Analysis and Financial Reports Analysis.

## Summer Schools

---

### Computational Methods in Finance and Economics

Centro di Ricerca Matematica (CRM), Scuola Normale Superiore

Pisa, 2024

### Winter School in Stochastic Processes, Analysis and Semigroups

University of Trento

Trento, 2022

## Projects

---

### Heston-Nandi GARCH Python Library, GitHub

2021

- Development of a Python library related to “A Closed-Form GARCH Option Valuation Model” by Heston and Nandi (2000),
- Library includes GARCH fit to data, Montecarlo Simulation Pricing and Pricing through Analytical Formula.

## Additional Information

---

**Languages** Native in Italian, fluent in English, intermediate in German