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Francesco Rotondi

Personal Webpage

Appointments

2021 - today Lecturer.

Department of Finance, Università Commericale L. Bocconi, Milan (IT).

Lecturer of "Mathematical Methods for Economics, Finance and Actuarial Sciences" (Italian Scientific Sector SECS/06)

Assistant to the Director of the MSc Finance

Coordinator of the Specialized Master in Quantitative Finance and Risk Management (MaFinRisk)

12/2020 - **Post-doc**.

11/2022 Department of Mathematics, Università degli Studi di Padova, Padova (IT).

Topic of the research grant: Stochastic methods for financial markets and the role of information

Research

Publications.

- 2023 Valuation of general GMWB annuities in a low interest rate environment (with C. Fontana), Insruance: Mathematics and Economics
- On horizon-consistent mean-variance portfolio allocation (with S. Cerreia-Vioglio, F. Ortu, F. Severino), Annals of Operations Research
- 2022 American options and stochastic interest rates (with A. Battauz), Computational Management Science
- 2019 American options on high dividend securities: a numerical investigation, Risks

Working Papers.

- 2023 Efficient valuation of barrier options under equity and interest rate risks
- 2023 Flexibility and uncertainty: the optimal management of a gas-fired turbine (with C. Bertolosi)
- 2023 A hidden Markov model for statistical arbitrage in international crude oil futures market (with V. Fanelli and C. Fontana)

Work in Progress.

20232 Effective binomial discretizations of bivariate diffusion processes

Teaching Experience

(details of teaching activities carried out are on my personal webpage)

2020 - today Instructor.

Università Commericale L. Bocconi, Milan (IT).

Master level: Stochastic Calculus, Computational Methods and Machine Learning, Data-driven investments

MSc level: Applied Numerical Finance, Financial Econometrics and Empirical Finance, Quantitative Finance and Derivatives

2016 - 2020 **Teaching Assistant**.

Università Commericale L. Bocconi, Milan (IT).

MSc level: Quantitative Finance and Derivatives, Risk Management in Banking and Insurance, Principles of Finance

BSc level: Mathematics, Corporate Finance, Quantitative Methods for Finance

Education

2015 - 2020 PhD in Economics and Finance.

Università Commericale L. Bocconi, Milan (IT).

Fields: mathematical finance, asset pricing.

PhD advisor: Prof. Anna Battauz, 🖂 anna.battauz@unibocconi.it

Dissertation: Essays on American Options

2014 - 2015 Master of Science in Business Mathematics (Wirtschaftsmathematik).

Ludwig Maximilians Universität, Munich (DE). Final grade 1.0 (A).

Dissertation: Systemic risk Measures via acceptance sets.

2013 - 2014 Master Degree Program in Quantitative Finance.

Università di Bologna, Bologna (IT). Final grade: 110/110 cum laude.

2010 - 2013 Bachelor Degree in Mathematics.

Università degli Studi di Padova, Padova (IT). Final grade: 97/110.

Dissertation: Application of quantization to optimal control problems in finance.

2005 - 2010 A levels, Scientific High School.

Liceo Scientifico G. Galilei, San Donà di Piave (IT). Final grade: 98/100.

Conferences

- 2023* AMASES 2023, Università degli Studi di Milano-Bicocca, Milano (IT), presenter
- 2023 MathRisk Conference on Numerical Methods in Finance, Università degli Studi di Udine, Udine(IT), presenter
- 2023 Quantitative Finance Workshop XXIV, Università di Cassino e del Lazio Meridionale, Gaeta(IT), presenter
- 2023 Energy Finance Italy 8, Politecnico di Milano, Milano(IT), presenter
- 2022 AMASES 2022, Università degli Studi di Palermo, Palermo (IT), presenter
- 2022 ECSO-CMS 2022, Università Ca' Foscari di Venezia, Venice (IT), presenter
- 2022 MAF 2022, Università degli Studi di Salerno, Salerno (IT), presenter
- 2021 Statistics 2021, online event, Concordia University, Montrèal (CA), presenter
- 2021 IME, online event, hosted by multiple Institutions, presenter
- 2021 EFMA 2021 Annual Meeting, online event, University of Leeds, Leeds (UK), presenter
- 2021 AMAMEF, online event, Università di Padova, Padova (IT), presenter
- 2021 AFFI 2021 Annual Meeting, online event, *University of Nantes*, Nantes (FR), chair of a parallel session and presenter
- 2019 EFMA 2019 Annual Meeting, University of Azores, Ponta Delgada (PT), chair of a parallel session and presenter
- 2019 AMASES 2019, *Università di Perugia*, Perugia (IT), presenter, winner of the Award for the best paper presented by a young researcher
- 2018 ARPM, Advanced Risk and Portfolio Management Bootcamp, New York University, New York City (USA)
- 2018 11th European Summer School in Financial Mathematics, Ecole Polytechnique, Paris (FR)
- 2017 XVIII Workshop on Quantitative Finance, Università Bicocca, Milan (IT)
- 2017 10th European Summer School in Financial Mathematics, Technische Universität Dresden, Dresden (DE)

IT skills

OS Windows, Mac

Quantitative Matlab, Mathematica, EViews, Microsoft Excel and VBA

Coding Python

Dataset Bloomberg, Datastream

Writing Microsoft Word, Microsoft Power Point, Scientific Workplace and LATEX

Languages

Italian Native

English Full professional proficiency (TOEFL ibt score 103/120)