Elisa Tacconi

PERSONAL INFORMATION

Born the 12th of September 1977 in Ascoli Piceno, Italy
Italian Citizenship

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20135 Milan, Italy

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FIELDS OF INTERESTS

Term Structure Dynamics / Asset pricing / Malliavin Calculus and Applications to Finance / Optimal Control in Finite and Infinite Dimension

APPOINTMENTS

Since 2024 — **Bocconi University, Department of Finance**
Tenured Lecturer in ”Metodi matematici dell’Economia e delle Scienze Attuariali e Finanziarie”.

2018-2023 — **Bocconi University, Department of Finance**
Lecturer in ”Metodi matematici dell’Economia e delle Scienze Attuariali e Finanziarie”. Maternity leave 2019.

2021 — **Bocconi University, Department of Finance**
Faculty advisor in the project with Citygroup bank.

2012-2018 — **Bocconi University, Department of Finance**
Researcher with grant. Maternity leave 2016-2017.

2012 — **Said Business School, Oxford**
Lecturer in Continuous Time Finance.

EDUCATION

2007-2011 — **LUISS Guido Carli**
Ph.D. in Mathematical Methods for Economics, Business, Finance and Insurance.
Title: “Two problems in Control Theory and Applications to Economics”
Supervision: Federico Salvatore (University of Siena (Italy)), Gozzi Fausto (LUISS, Rome), Papi Marco (University Bio-Medical Campus, Rome).

2007-2008 **University Paris XIII, Galileo Institute**
Master in Mathematics and Computer Sciences.
Specialization "Optimization, Modelization and Calculus"

Fall 2006 **Italian National Research Council, Institute for Applied Calculus**
Visiting Fellow.
Research unit: "Quantitative and qualitative methods in finance and economics"

2006 **University of Modena and Reggio Emilia**
Master of Advanced Studies in Computational Finance and Risk Management.
Thesis title: A Parametric Study of Term Structure Dynamics
Supervision: M. BERNASCHI and D. VERGNI.

2005 **University of Bologna**
Master's Degree in Mathematics.
Thesis title: Differential Games with Special Structures.
Supervision: I. GALLIGANI and D. RITELLI.

TEACHING EXPERIENCE

2020-2024 **Bocconi University: *General Mathematics, Matematica Generale, Preparatory Class for Mathematics, Applied Mathematics.***
Undergraduate course.

Mathematical Models for finance.
Master of Quantitative Finance and Risk Management.

2020-2021 **Bocconi University: *Faculty Advisor*: supervision of Bocconi finance students selected for the Citi/Bocconi project.**
Graduate School.

2015-2019 **Bocconi University: *General Mathematics*, *Preparatory Class for Mathematics.***
Undergraduate course.

2013-2014 **Bocconi University: *Quantitative Finance and Derivatives.***
Graduate course, Master of Finance.

2012-2015 **Bocconi University: *Matematica generale*.**
Undergraduate course.

2012 **Oxford University: *Continuous Time Finance*.**
Graduate course. Master in Financial Economics at Said Business School.

REFEREED PAPERS AND WORK IN PROGRESS

- "Irreversible investment with fixed adjustment costs: a stochastic impulse control approach", with S. Federico and M. Rosestolato, ***Mathematics and Financial Economics***, Vol.13, pp. 579-616, 2019.

- "Dynamic Programming for the Optimal Control Problems with delays in the Control Variable", with S. Federico, ***SIAM Journal on Control and Optimization***, Vol. 52, Issue 2, pp. 1203-1236, 2014.

- "A Parametric Study of the Term Structure Dynamics", with M. Bernaschi and D. Vergni, ***Physica A: Statistical Mechanics and its Applications***, Vol. 387, Issue 5-6, pp. 1264-1272, 2008.

- "Altruism and asset pricing", with Abraham Lioui and Andrea Tarelli, mimeo.

- "HJB equations for the optimal control of stochastic differential equations with delay in the control variable," mimeo.

- "On the Existence of a Density for Controlled Stochastic Processes and Application to Portfolio Optimization by Dynamic Programming," mimeo.

AFFILIATION AND GRANTS

2011 - 2012 **GNAMPA - Gruppo Nazionale per l'Analisi Matematica e la Probabilitá**
Member of the research project *"On the analysis of distributional properties of controlled stochastic processes and application to the Portfolio Optimization."*

2010 - 20011 **Italian National Research Council, Institute for Applied Calculus**
Modulo di attivitá di Commessa: DG.RSTL.004.
Title: Modelli e Simulazioni.

2007 - 2008 **Italian National Research Council, Institute for Applied Calculus**
Modulo di attivitá di Commessa: SP.P08.001.
Title: Metodi quantitativi per il manufacturing.

PRESENTATIONS AT CONFERENCES

- *XIX Workshop on Quantitative Finance*, January 24/26 2018, Rome, Italy.
- 13^{th} *Viennese Workshop on Optimal Control and Dynamic Games*, May 13/16, 2015, Vienna (Austria).

- *XXXV Conference A.M.A.S.E.S.*, “HJB equations for the optimal control of differential equations with delay in the control variable”, September 15/17, 2011, Pisa, Italy.

SUMMER SCHOOLS

- 2^{nd} *European Summer School in Financial Mathematics*, Applied and Industrial Mathematics Society, Paris - August 2009.
- 6^{th} *Seminar on Stochastic Analysis, Random Fields and Applications*, Stefano Franscini center, Ascona, Switzerland - May 2008.
- *International Summer School in Risk Measurement and Control*, Swiss Institute, Rome - June 2007.
- *Finance Spring School*, University of Bologna, Bologna - May 2007.

LANGUAGES AND COMPUTER SKILLS

LANGUAGES: Italian (native), English (fluent), French (fluent).
SOFTWARE: LINUX, MATLAB, LaTeX, MS OFFICE.

Milan, the 25th of May, 2024