

MATTEO BUTTARAZZI

Curriculum Vitae

GENERAL INFORMATION

Nationality:

Email:

ACCADEMIC EXPERIENCES

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| Jul 2025 – Ongoing | POSTDOCTORAL RESEARCHER
UNIVERSITY OF TURIN
Supervisor: Tiziano De Angelis |
| Jul 2024 – Jun 2025 | POSTDOCTORAL RESEARCHER
LA SAPIENZA UNIVERSITY OF ROME
Supervisor: Claudia Ceci
Funded by PRIN 2022 - Stochastic control and games and the role of information |

EDUCATION

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| 2021 – 2025 | PHD (DOCTOR EUROPAEUS) IN MODELS FOR ECONOMICS AND FINANCE
LA SAPIENZA UNIVERSITY OF ROME
Curriculum: Mathematics for Economic-Financial Applications
Grade: Cum Laude
Thesis: <i>Optimal Annuitization under Piecewise Deterministic Mortality Force</i>
Supervisors: Tiziano De Angelis and Gabriele Stabile |
| 2017 – 2020 | MSc IN FINANCE
LUISS GUIDO CARLI UNIVERSITY
Grade: 110 cum Laude
Thesis: <i>Transizione energetica ottimale</i>
Supervisor: Fausto Gozzi |
| 2014 – 2017 | BSc IN FINANCE
TOR VERGATA UNIVERSITY OF ROME
Thesis: <i>Fate il vostro gioco, perdere è matematico</i>
Supervisor: Maura Mezzetti |

ACCADEMIC VISITS

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| Jun 2024 – Jul 2024 | VISITING SCHOLAR - UNIVERSITY OF TURIN AND COLLEGIO CARLOALBERTO
Local supervisors: Tiziano De Angelis
Funded by "de Castro" Statistics Initiative |
| Sept 2023 – Feb 2024 | VISITING SCHOLAR - UNIVERSITÄT BIELEFELD
Local supervisors: Giorgio Ferrari
Funded by 50% increase in PhD Scholarship and International Mobility Grant for PhD Students (D.R. n. 2592/2023) |

RESEARCH INTERESTS

Optimal Stopping and Stochastic Optimal Control; Insurance and Mathematical Finance; Partial Information and Filtering.

PUBLICATIONS

CONFERENCE PROCEEDINGS

- [BS24] M. Buttarazzi and G. Stabile, “The market value of optimal annuitization and bequest motives,” in *Mathematical and Statistical Methods for Actuarial Sciences and Finance*, Springer, 2024, pp. 67–73. DOI: [10.1007/978-3-031-64273-9_12](https://doi.org/10.1007/978-3-031-64273-9_12)

JOURNAL ARTICLES

- [BC25] M. Buttarazzi and C. Ceci, *Filtering in a hazard rate change-point model and financial applications*. Arxiv Preprint: <https://arxiv.org/abs/2505.13185>

PHD THESIS

- [But25] M. Buttarazzi, *Optimal annuitization time under piecewise deterministic mortality force*. PhD Thesis, Sapienza University of Rome, March 2025.
Available at: <https://iris.uniroma1.it/handle/11573/1737175>

WORK IN PROGRESS

- [BDSX] M. Buttarazzi, T. De Angelis and G. Stabile, *Optimal annuitization time under piecewise deterministic mortality force*.
[ButX] M. Buttarazzi, *The Impact of a Health Shock on the Optimal Annuitization Time*.
[BCFX] M. Buttarazzi, C. Ceci and G. Ferrari, *Control of a reflected Brownian motion with drift with Knightian uncertainty on the drift*.

CONFERENCES

- Jun 2025 Contributed talk –Presentation of [BDSX]
12th General AMaMeF Conference, Verona (Italy).
- Jun 2025 **Invited Talk** –Presentation of [BC25]
sTOchastic control PRIN Workshop on Stochastic Control, Turin (Italy).
- May 2025 Contributed talk –Presentation of [But25]
Perspectives on Actuarial Risks in Talks of Young Researchers (PARTY), Liverpool (UK).
- May 2025 Contributed talk –Presentation of [But25]
Second International Conference on Control and Optimization (CONTROPT), Bari (Italy).
- Apr 2025 Contributed talk –Presentation of [But25]
XXVI Workshop on Quantitative Finance, Palermo (Italy).
- Sept 2024 **Invited Talk** –Presentation of [BDSX]
XLVIII annual conference of the Italian Association for Mathematics Applied to Social and Economic Sciences (AMASES), Ischia (Italy).
- Jun 2024 **Invited talk** –Presentation of [BDSX]
4th Italian Meeting on Probability and Mathematical Statistics, Rome (Italy).
- Mar 2024 Contributed talk –Presentation of [BS24]
XIV MEMOTEF Research Days, Rome (Italy).
- Feb 2024 Contributed talk –Presentation of [BS24]
Actuarial and Financial Mathematics Conference (AFMATH), Brussels (Belgium).
- Jun 2023 Contributed talk –Presentation of [BS24]
XIII MEMOTEF Research Days, Rome (Italy).

OTHER ATTENDED CONFERENCES

- Dec 2023 Workshop Young Researchers in Stochastic Control and Games, Bielefeld (Germany).
18th BiGSEM Doctoral Workshop on Economics and Management, Bielefeld (Germany).
- Apr 2023 XXIV Workshop on Quantitative Finance, Gaeta (Italy).
New professional and scientific perspectives in pensions and actuarial sciences, Rome (Italy).

TEACHING

TEACHING ASSISTANCE

- AY 2024/2025 **Mathematics** (Prof. C. Ceci and M. G. Bruno)
40H and 200+ Students. Bando: BT-B2 1/2024.
BSc in Economics and Finance, **La Sapienza University of Rome**
- AY 2024/2025 **Mathematics** (Prof. M. Scarpitti, B. Vantaggi and G. Stabile)
40H and 200+ Students. Bando: BT-B2 1/2024.
BSc in Economics, **La Sapienza University of Rome**
- AY 2023/2024 **Mathematics** (Remedial course)
40H and 100+ Students. Bando: 1592/2022.
BSc in Economics, **La Sapienza University of Rome**
- AY 2022/2023 **Mathematics** (Prof. A. Palestini)
40H and 200+ Students. Bando: 1296/2021.
BSc in Economics, **La Sapienza University of Rome**

FUNDINGS

RESEARCH GRANTS AND SCHOLARSHIPS

- 2024 **La Sapienza University of Rome – Academic Research Grant**
Financed amount: 3000 euro (Co-I)
Title: On the role of bequest motives in the annuitization decision
Grant number: RP124190EA4DDA9F
- 2024 **La Sapienza University of Rome – Academic Starting Research Grant**
Financed amount: 2500 euro (PI)
Title: Optimal annuitization under piecewise deterministic mortality force
Grant number: AR2241906EB2D3B9
- 2023 **La Sapienza University of Rome – Academic Research Grant**
Financed amount: 9050 euro (Co-I)
Title: Ambiguity: its role in asset pricing and insurance
Grant number: RM123188F744909D
- 2023 **La Sapienza University of Rome – International Mobility Grant for PhD Students**
Financed amount: 2100 euro
Bando: D.R. n. 1505/2023
- 2022 **La Sapienza University of Rome – Academic Research Grant**
Financed amount: 3000 euro (Co-I)
Title: L'opzione di riscatto nelle polizze rivalutabili: l'impatto delle penalità sulle scelte dei sottoscrittori
Grant number: RP12218167E24F87
- 2021 – 2024 **La Sapienza University of Rome – PhD Scholarship**

CONFERENCE GRANTS AND SUPPORT

- 2024 FWO–WOG Grant of 400 euro and 100% registration fee waiver
@ **Actuarial and Financial Mathematics Conference (AFMATH)**
- 2024 Approx. 70% registration fee waiver
@ **4th Italian Meeting on Probability and Mathematical Statistics**

INTERNATIONAL AND NATIONAL RESEARCH GROUPS

- 2024 European Union - Next Generation EU - **Project PRIN 2022** (Grant code BEMMLZ)
Stochastic control and games and the role of information.

SUMMER SCHOOLS

- 2023 **32nd Jyväskylä Summer School**, Jyväskylän Yliopisto.
Lecture by Goran Peskir.
- 2023 **Risk and uncertainty in economics, insurance and finance**, Bielefeld.
Lectures by Fernando Alvarez, Daniel Bauer and Tommaso Denti.
- 2022 **Summer School SMI**, Perugia.
Lectures by Loredana Lanzani, and Nicola Arcozzi.

MEMBERSHIPS

Association for Mathematics Applied to Social and Economic Sciences (**AMASES**).