

Procedura di selezione per la copertura di n. 1 posto di Ricercatore a tempo determinato - Tipologia B, SC 13/D4 – SSD SECS-S/06, presso il Dipartimento di Metodi e Modelli per il Territorio, l'Economia e la Finanza, Facoltà di Economia, Sapienza Università di Roma, Codice Concorso: 2022RTDB012

Decreto Rettrice Sapienza Università di Roma n. 1616/2022 del 11.05.2022

Antonio Luciano Martire

Curriculum vitae

(ai fini della pubblicazione)

Riccia, July 6, 2022

General Information

Full name: Antonio Luciano Martire

Citizenship: Italian

Education

- 06/11/2014 **II level Master Degree in Applied Econometrics**, Scuola Nazionale dell'Amministrazione.
- 17/02/2012 **Ph.D. in Mathematics for Economic-Financial Applications**, University of Rome "La Sapienza".
- 15/07/2008 **Laura in Matematica** (Laurea quadriennale), University of Rome "La Sapienza". 101/110.

Academic Appointments

- 01/02/2022 - Current (end 31/01/2023) Post-doctoral fellow - Dipartimento di Economia dell'Università degli Studi di Genova (art. 22 L. 240/2010, Settore concorsuale 13/D4).
- 01/12/2020 - 30/11/2021 Post-doctoral fellow - Dipartimento di Metodi e Modelli per l'Economia, il Territorio e la Finanza della Sapienza Università di Roma (art. 22 L. 240/2010, Settore concorsuale 13/D4).
- 01/10/2019 - 30/09/2020 Post-doctoral fellow - Dipartimento di Metodi e Modelli per l'Economia, il Territorio e la Finanza della Sapienza Università di Roma (art. 22 L. 240/2010, Settore concorsuale 13/D4).
- 01/10/2018 - 30/09/2019 Post-doctoral fellow - Dipartimento di Metodi e Modelli per il Territorio e la Finanza della Sapienza Università di Roma (art. 22 L. 240/2010, Settore concorsuale 13/D4).

Teaching experience

- February 2013 - September 2013 - supporto alla didattica per lo svolgimento di attività connesse alla materia di Matematica Finanziaria - I Canale per l'a.a 2012/2013, Facoltà di Economia, Università degli Studi di Roma Tre
- February 2018 - January 2019 - Finanza Quantitativa (9 CFU) presso la Facoltà di Economia - Sapienza, Università di Roma.
- February 2019 - January 2020 - Finanza Quantitativa (9 CFU) - la Facoltà di Economia - Sapienza, Università di Roma.
- January 2022 - Neural Network for Economists (16 hours) - European Ph.D. in Socio-Economics and Statistical Studies - Sapienza, Università di Roma.
- June 2022 - Matlab application in Finance (10 hours) - Master of Science in Financial Engineering and Risk Management - Metropolitan Tirana University, Tirana (Albania).

Society Memberships

AMASES (Associazione per la Matematica Applicata alle Scienze Economiche e Sociali) - Membership.

Funding Information

- Progetto di Ateneo 2020 - Participation to the research project **Actuarial and financial risk management solutions in a pandemic mortality framework**, Sapienza Università di Roma. . Principal Investigator: Immacolata Oliva.
- Progetto di Ateneo 2019 - Participation to the research project **Life market: a renewal boost for quantitative management of longevity and lapse risks**, Sapienza Università di Roma. Principal Investigator: Gabriele Stabile.

Research Activities

Computational methods in finance and actuarial sciences. In particular:

- pricing of life insurance products embedding different financial guarantees and options;
- pricing of path-dependent derivatives.

Summary of Scientific Achievements

- **Bibliographic Indexes**

Scopus: h-index 2; 10 citations by 10 documents.

- **Number of Papers in Journals of Class A for “Settore Concorsuale 13/D4”**

4 published papers.

Selected Publications

1. Phd Thesis: Embedded surrender option pricing for equity-linked policies: comparisons and solutions for bivariate models, Roma, February 2012
2. Paolo De Angelis, Antonio Luciano Martire, Emilio Russo. A bivariate model for evaluating equity-linked policies with surrender option. Scandinavian Actuarial Journal, 2016:3, 246-261, DOI : 10.1080/03461238.2014.924433.
3. Paolo De Angelis, Roberto De Marchis, Antonio Luciano Martire. A new numerical method for a class of Volterra and Fredholm integral equations. Journal of Computational and Applied Mathematics 379 (2020) 112944

4. Paolo De Angelis, Roberto De Marchis, Antonio Luciano Martire, Immacolata Oliva. A mean-value Approach to solve fractional differential and integral equations. *Chaos, Solitons and Fractals* 138 (2020) 109895
5. Paolo De Angelis, Roberto De Marchis, Antonio Luciano Martire, Stefano Patri. Non-Standard Volterra Integral Equations: A Mean-Value Theorem Numerical Approach. *Applied Mathematical Sciences*, Vol. 14, 2020, no. 9, 423 - 432.
6. Paolo De Angelis, Roberto De Marchis, Mario Marino, Antonio Luciano Martire, Immacolata Oliva. Betting on bitcoin: a profitable trading between directional and shielding strategies. *Decisions in Economics and Finance* 44, 883-903 (2021).
<https://doi.org/10.1007/s10203-021-00324-z>.
7. Paolo De Angelis, Roberto De Marchis, Mario Marino, Antonio Luciano Martire, Immacolata Oliva. Evaluating Ruin Probabilities: a Streamlined Approach. *Applied Mathematics E-Notes* 21 (2021), 634-642.
8. Antonio Martire, Emilio Russo, Alessandro Staino, (2022). Surrender and path-dependent guarantees in variable annuities: integral equation solutions and benchmark methods. In: Corazza, M., Perna, C., Pizzi, C., Sibillo, M. (eds.) *Mathematical and Statistical Methods for Actuarial Sciences and Finance. MAF 2022*, pp. 340-346, Springer, Cham. https://doi.org/10.1007/978-3-030-99638-3_55.
9. Paolo De Angelis, Roberto De Marchis, Antonio Luciano Martire, Emilio Russo (2022). A flexible lattice framework for valuing options on assets paying discrete dividends and variable annuities embedding GMWB riders. *Decisions in Economics and Finance* 45, 415-446.
<https://doi.org/10.1007/s10203-022-00371-0>.

Co-author of the books:

- P. De Angelis, R. De Marchis, M. Marino; A. L. Martire - *Lezioni di Matematica Finanziaria* - G. Giappichelli EDITORE, Torino, 2021 (seconda edizione) - ISBN-13: 978-8892138452

Attended Workshops/Conferences

- **XXXVI Annual Conference of the Italian Association for Mathematics Applied to Economic and Social Sciences (AMASES)**
Vieste (FG), September, 2012.
Contributed a talk.
- **XXXVII Annual Conference of the Italian Association for Mathematics Applied to Economic and Social Sciences (AMASES)**
Stresa (VB), September, 2013.
Contributed a talk.
- **DySES (Dynamics of Socio Economic Systems) 2014**
Seville (Spain), September, 2014.
Contributed a talk.
- **XIX Workshop on Quantitative Finance**
Roma, January, 2018.
Poster session.
- **XXI Workshop on Quantitative Finance**
Napoli, January, 2020.
Poster session.
- **Online International Conference in Actuarial science,**
Online, April, 2020.
Contributed a talk.

- **Virtual 24th International Congress on Insurance: Mathematics and Economics**
Online, July, 2021.
Contributed a talk.
- **Longevity 16**
Online, August, 2021.
Contributed a talk.
- **XLV Annual Conference of the Italian Association for Mathematics Applied to Economic and Social Sciences (AMASES)**
Online, September, 2021.
Contributed a talk.

Refereeing Activity

- **Scientific Journals**

I have served as a referee for: Open Mathematics; Iranian Journal of Science and Technology, Transactions A: Science; Symmetry, Risks, Mathematics.