

## **CV Sergio Scarlatti 2023**

### **Education:**

-M.Sc. in Mathematics, University of Rome “La Sapienza” -Ph.D. in Mathematics, University of Rome “La Sapienza” -Educational studies in Mathematics, Probability and Statistics

### **Present Academic Appointments:**

-2007 to date , Full Professor (“professore ordinario”) of Mathematics for Economics and Finance, School of Economics, University of Rome-Tor Vergata

### **List of Research Topics and of Scientific Journals :**

#### **Topics:**

Derivative pricing, Montecarlo simulation, Investments and portfolio selection, Game theory, Fintech, Credit and Counterparty Risk.

Scientific (coauthored) papers have appeared in the following international journals:

- Games and Economic Behaviour
- Mathematical Social Sciences
- Finance & Stochastics
- Review of Derivatives Research
- Decisions in Economics & Finance
- Annals of Operation Research
- International Journal of Applied and Theoretical Finance

- Journal of Mathematical Finance

- European Journal of Operational Research

- Applied Mathematics and Computation

- Applied Stochastic models in Business and Industry

- Technology Analysis and Strategic Management

- Electronic Communication in Probability

- International Journal of Risk Assessment and Management

- Annals of Applied Probability

- SIAM Journal on Applied Mathematics

- Journal of Functional Analysis

- Journal of Operator Theory

- Advances in Applied Probability

-Acta Applicandae Mathematicae

-Journal of Statistical Physics

-Journal of Physics A

-Physics Letters B

### **Teaching activities for Bachelor and Master University Degrees**

From years 1991 to 2022:

Mathematics, Mathematical Statistics, Optimization, Mathematics of Financial Markets, Mathematical Finance.

### **Further Academic Activities (past & present)**

-Coordinator Master's degree in "Finance & Banking" (2008-2012) , School of Economics, University of Tor-Vergata

-Director Master course I level in "Project-Financing & General Contractor" (2007-2011), School of Economics, University of Tor-Vergata -Referee for international journals in the fields of Mathematical Finance, Probability, Stochastic Processes, Insurance

-Coordinator Bachelor's degree in "Economics and Finance" (c.d.l "Triennale") from 2021 to date, Rome Tor-Vergata University

-Co-organizer of workshops on Quantitative Finance and speaker in international conferences on Applied Probability , Game theory , Mathematical Finance, Stochastic Processes.

-Member of the Board "Dottorato in Economia e Finanza" , Economia Tor-Vergata (from May 2022 to date)

**ARTICOLI SU RIVISTE INTERNAZIONALI:**Visualizzati risultati **1-25** di **25**

N°	Anno	Articolo in rivista
1	2023	Scarlatti S, Alòs E, Antonelli F, Ramponi A (2023). CVA in fractional and rough volatility models. APPLIED MATHEMATICS AND COMPUTATION, vol. 442, ISSN: 1873-5649, doi: <a href="https://doi.org/10.1016/j.amc.2022.127715">https://doi.org/10.1016/j.amc.2022.127715</a>
2	2022	Antonelli, Fabio, Ramponi, Alessandro, Scarlatti, Sergio (2022). Approximate value adjustments for European claims. EUROPEAN JOURNAL OF OPERATIONAL RESEARCH, vol. 300, p. 1149-1161, ISSN: 0377-2217, doi: 10.1016/j.ejor.2021.10.029
3	2022	Ferraro G, Ramponi A, Scarlatti S (2022). Fintech meets Industry 4.0: a systematic literature review of recent developments and future trends. TECHNOLOGY ANALYSIS & STRATEGIC MANAGEMENT, ISSN: 1465-3990
4	2022	Fabio Antonelli, Alessandro Ramponi, Sergio Scarlatti (2022). On a convergent power series method to price defaultable bonds in a Vasicek-CIR model. ELECTRONIC COMMUNICATIONS IN PROBABILITY, ISSN: 1083-589X  <i>Proveniente dall'Archivio Istituzionale di UNIROMA2 con codice 2108/295091</i>
5	2021	Antonelli, Fabio, Ramponi, Alessandro, Scarlatti, Sergio (2021). A moment matching method for option pricing under stochastic interest rates. APPLIED STOCHASTIC MODELS IN BUSINESS AND INDUSTRY, vol. 37, p. 802-822, ISSN: 1524-1904, doi: 10.1002/asmb.26
6	2021	Alos E., Antonelli F., Ramponi A., Scarlatti S. (2021). CVA and Vulnerable Options in Stochastic Volatility Models. INTERNATIONAL JOURNAL OF THEORETICAL AND APPLIED FINANCE, ISSN: 0219-0249, doi: 10.1142/S0219024921500102
7	2019	Ramponi Alessandro, Antonelli Fabio, Scarlatti Sergio (2019). CVA and vulnerable options pricing by correlation expansions. ANNALS OF

		OPERATIONS RESEARCH, ISSN: 1572-9338, doi: 10.1007/s10479-019-03367-z	
8	2016	Scarlatti S, Antonelli F, Ramponi A (2016). Random Time Forward Starting Options. INTERNATIONAL JOURNAL OF THEORETICAL AND APPLIED FINANCE, vol. 19, p. 1-25, ISSN: 0219-0249	
9	2013	Scarlatti S, Antonelli F, Ramponi A (2013). Option-based risk management of a bond portfolio under regime switching interest rates. DECISIONS IN ECONOMICS AND FINANCE, vol. 3, p. 47-70, ISSN: 1593-8883	
10	2012	SCARLATTI, SERGIO, Blasi, F. (2012). From normal vs skew-normal portfolios: FSD and SSD rules. JOURNAL OF MATHEMATICAL FINANCE, vol. 2, ISSN: 2162-2434, doi: 10.4236/jmf.2012.21011	
		<i>Proveniente dall'Archivio Istituzionale di UNIROMA2 con codice 2108/103661</i>	
11	2010	SCARLATTI S, ANTONELLI F, RAMPONI A (2010). Exchange option pricing under stochastic volatility: a correlation expansion. REVIEW OF DERIVATIVES RESEARCH, vol. 13, p. 45-73, ISSN: 1380-6645	
12	2009	RAMPONI, ALESSANDRO, SCARLATTI, SERGIO (2009). Option pricing in a hidden Markov model of the short rate with application to risky debt evaluation. INTERNATIONAL JOURNAL OF RISK ASSESSMENT AND MANAGEMENT, vol. 11, p. 88-103, ISSN: 1466-8297, doi: 10.1504/IJRAM.2009.022199	
13	2009	SCARLATTI, SERGIO, Antonelli, F. (2009). Pricing options under stochastic volatility: a power series approach. FINANCE AND STOCHASTICS, vol. 13, p. 269-303, ISSN: 0949-2984, doi: 10.1007/s00780-008-0086-4	
		<i>Proveniente dall'Archivio Istituzionale di UNIROMA2 con codice 2108/38727</i>	
14	2008	Renault, J, SCARLATTI, SERGIO, Scarsini, M. (2008). Discounted and finitely repeated minority games with public signals. MATHEMATICAL SOCIAL SCIENCES, vol. 56, p. 44-74, ISSN: 0165-4896, doi: 10.1016/j.mathsocsci.2007.12.004	
		<i>Proveniente dall'Archivio Istituzionale di UNIROMA2 con codice 2108/41787</i>	
15	2005	SCARLATTI, SERGIO, Renault, J, Scarsini, M. (2005). A folk theorem for minority games. GAMES AND ECONOMIC BEHAVIOR, vol. 53, p. 208-230, ISSN: 0899-8256, doi: 10.1016/j.geb.2004.09.013	
		<i>Proveniente dall'Archivio Istituzionale di UNIROMA2 con codice 2108/46298</i>	

16	2004	SCARLATTI, SERGIO, Breyer, L, Piccioni, M. (2004). Optimal scaling of MaLa for non linear regression. THE ANNALS OF APPLIED PROBABILITY, vol. 14, p. 1479-1505, ISSN: 1050-5164, doi: 10.1214/105051604000000369  <i>Proveniente dall'Archivio Istituzionale di UNIROMA2 con codice 2108/48367</i>
17	1998	PICCIONI M., SCARLATTI S, TROUVE A. (1998). A variational problem arising from speech recognition. SIAM JOURNAL ON APPLIED MATHEMATICS, vol. 58, p. 753-771, ISSN: 0036-1399
18	1996	SCARLATTI S, CIPRIANI F, GUIDO D. (1996). A remark on trace properties on K-cycles. JOURNAL OF OPERATOR THEORY, vol. 35, p. 179-189, ISSN: 0379-4024
19	1996	SCARLATTI S, GUIDO D, ISOLA T (1996). Non Symmetric Dirichlet forms on semifinite Von Neumann algebras. JOURNAL OF FUNCTIONAL ANALYSIS, vol. 135, p. 50-75, ISSN: 0022-1236
20	1996	SCARLATTI S, ALBEVERIO S, PONOSOV A, GUIDO D (1996). Singular traces and compact operators. JOURNAL OF FUNCTIONAL ANALYSIS, vol. 137, p. 281-302, ISSN: 0022-1236
21	1995	SCARLATTI S, SERVA M., PASQUINI M. (1995). Large deviations for Ising spin glasses with constrained disorder. JOURNAL OF STATISTICAL PHYSICS, vol. 80, p. 337-356, ISSN: 0022-4715
22	1994	PICCIONI M., SCARLATTI S (1994). An iterative Monte Carlo Scheme for generating Lie-group valued random variables. ADVANCES IN APPLIED PROBABILITY, vol. 26, p. 616-628, ISSN: 0001-8678
23	1992	ALBEVERIO S., HOEGH-KROHN R., PAYCHA P., SCARLATTI S (1992). A global and stochastic analysis approach to bosonic strings and associated quantum fields. ACTA APPLICANDAE MATHEMATICAE, vol. 26, p. 103-195, ISSN: 0167-8019
24	1990	Scarlatti S, Teta A (1990). Derivation of the time-dependent propagator for the three-dimensional Schrödinger equation with one point interaction. JOURNAL OF PHYSICS. A, MATHEMATICAL AND GENERAL, vol. 23, p. 1033-1035, ISSN: 0305-4470
25	1986	Albeverio S, Høegh-Krohn R, Paycha P, Scarlatti S (1986). Path space measure for the Liouville quantum field theory and the construction of relativistic strings . PHYSICS LETTERS. SECTION B, vol. 174, p. 81-86, ISSN: 0370-2693

**Books:** Albeverio S, Jost R, Paycha P, Scarlatti S: A mathematical introduction to string theory, Cambridge University Press (1997).