Curriculum Vitae

INFORMAZIONI PERSONALI

Nome	JOSEPH
Cognome	ANDRIA
Recapiti	Dipartimento SEAS, Ed.13
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FORMAZIONE TITOLI

Education and Position

2023: Italian National Scientific Habilitation for the position of Associate Professor of "Mathematical Methods of Economics, Finance and Actuarial Sciences" (13/D4).

2001-2002: CNR fellowship at the Department of Econometrics University of Geneva, Switzerland. Fellowship tutor: prof. Manfred Gilli; Project Title "Valuation and hedging of derivatives in complete and incomplete financial markets".

2001: Assistant Professor of Mathematical Methods of Economics, Finance and Actuarial Sciences.

2001: PhD in Financial Sciences for the enterprise (Università degli Studi di Napoli) Thesis: "A comparison of paraemtric models for valuing pure futures options. Advantages of a Nueral Network approach".

1997: Degree in Economcs with110/110 cum laude - Università degli Studi di Palermo. Thesis title: "Tools for financial risk control in portfolio management".

ATTIVITA' DIDATTICA

Teaching experience:

2019 - today: Mathematics for Business - Bachelor's Degree Programme in Business and Administration - Università degli Studi di Palermo;
2012 - today: Mathematical Finance - Bachelor's Degree Programme in Business and Administration - Università degli Studi di Palermo;
2010-2011: Mathematical Finance and Actuarial - Bachelor's Degree Programme in Business and Administration - Università degli Studi di Palermo;
2003-2009: Mathematical Methods for Business - Bachelor's Degree Programme in Economics and business administration - Università degli Studi di Palermo;
2002-2003: Operation Research - Bachelor's Degree Programme in Economics and business administration - Università degli Studi di Palermo;
2000: Mathematics - Bachelor's Degree Programme in Economics - Agrigento;
1999-2001: Mathematical Methods for Business - Short Degree Programme in Economics and business administration - Università degli Studi di Palermo;

PUBBLICAZIONE

Recent selected publications:

- di Tollo G., Andria J., Tanev S., Ghilardi S. (2023) Integrating the gender dimension to disclose the degree of businesses' articulation of innovation. Journal of Computational Social Science. https://doi.org/10.1007/s42001-023-00230-x;

- di Tollo G., Andria J., Filograsso G. (2023) The Predictive Power of Social Media Sentiment: Evidence from Cryptocurrencies and Stock Markets Using NLP and Stochastic ANNs. Mathematics, Volume 11(16), 2023 3441. MDPI, Basel, Switzerland. https://doi.org/10.3390/math11163441;

- Andria J., Maggistro R., Pesenti R. (2023) Sustainable Management of Tourist Flow Networks: a Mean Field Model. Journal of Optimization Theory and Applications. Springer Nature. https://doi.org/10.1007/s10957-023-02158-8;

- Andria J., di Tollo G., Kalda J. (2022) Propagation of Bankruptcy Risk over Scale-Free Economic Networks. Entropy, Volume 24(12), 2022 1713. MDPI, Basel, Switzerland. https://doi.org/10.3390/e24121713 - Published: 24 November 2022

- Andria J., di Tollo G., Kalda J. (2022) The predictive power of power-laws: An empirical time-arrow based investigation. Chaos, Solitons & Fractals, Volume 162, 2022 112425 ISSN 0960-0779. Elsevier. https://doi.org/10.1016/j.chaos.2022.112425 - First Online: 19 July 2022;

- Andria J. (2021) A computational proposal for a robust estimation of the Pareto tail index: An application to emerging markets. Applied Soft Computing, Volume 114, 2022 108048 ISSN 1568-4946. Elsevier. https://doi.org/10.1016/j.asoc.2021.108048 - First Online: 18 November 2021;

- di Tollo G., Andria J., Tanev S. (2021) Neural Networks to determine the relationships between business innovation and gender aspects. In Corazza M., Gilli M., Perna C., Pizzi C., Sibillo M. (eds). Mathematical and Statistical Methods for Actuarial Sciences and Finance. Springer, Cham. https://doi.org/10.1007/978-3-030-78965-729;

- Andria J., di Tollo G. (2021) An empirical investigation of heavy tails in emerging markets and robust estimation of the Pareto tail index. In Corazza M., Gilli M., Perna C., Pizzi C., Sibillo M. (eds). Mathematical and Statistical Methods for Actuarial Sciences and Finance. Springer, Cham. https://doi.org/10.1007/978-3-030-78965-74;

- Andria J., di Tollo G., Pesenti, R. (2021) Fuzzy multi-criteria decision-making: An entropy-based approach to assess tourism sustainability. Tourism Economics, Volume 27, Issue 1, pages: 168-186. Sage. https://doi.org/10.1177/1354816619885207 - First Online: 20 November 2019;

- Andria J., di Tollo G., Pesenti, R. (2020) A Heuristic Fuzzy Algorithm for assessing and managing tourism sustainability. Soft Computing, Volume 24, pages: 4027-4040. Springer Berlin Heidelberg. https://doi.org/10.1007/s00500-019-04170-5 - First Online: 25 June 2019;

- Andria J., di Tollo G., Pesenti, R. (2019) A Fuzzy Evaluation of Tourism Sustainability. In: Moscato P., de Vries N., (eds) Business and Consumer Analytics: New Ideas, pages: 911-932. Springer, Cham; https://doi.org/10.1007/978-3-030-06222-424 - First Online: 31 May 2019;

- Andria J., di Tollo G., Lokketangen A. (2018) Distance Measures for Portfolio Selection. In: Masri H.,

Pérez-Gladish B., Zopounidis C. (eds) Financial Decision Aid Using Multiple Criteria. Multiple Criteria Decision Making, pages: 113-129. Springer, Cham; https://doi.org/10.1007/978-3-319-68876-35 - First Online**:** 12 October 2017;

- Andria, J., di Tollo, G., Pesenti, R. (2015) Detection of Local Tourism Systems by Threshold Accepting; Computational Management Science, Volume 12, pages: 559:575. Springer. https://doi.org/10.1007/s10287-015-0238-x;

- Andria J., di Tollo G. (2015) Clustering Local Tourism Systems by Threshold Acceptance. In: Mora A., Squillero G. (eds) Applications of Evolutionary Computation. EvoApplications 2015. Lecture Notes in Computer Science, vol 9028. Springer, Cham; https://doi.org/10.1007/978-3-319-16549-351 - First Online:17 March 2015

ATTIVITA' SCIENTIFICHE

Conferences/Workshops

- 18.10.2023: J. Andria, M. Corazza, G. di Tollo: **A Proposal for Optimal VaR and CVaR parameters estimation**; *DySES 2023 Conference - Dynamics of Socio Economic Systems; Universidad de Almeria (Spain), 17-20 October 2023* http://www2.ual.es/DySESconference2023/
- 22-24.9.2022: AMASES 2022: Annual Conference of the Association for Mathematics Applied to Social and Economic Sciences; *Organizing committee and scientific co-organizer and chair* of the session "***Intelligent Methods in Economics, Finance and Insurance***", https://amases2022.community.unipa.it/program
- 24.09.2022: J. Andria, G. di Tollo, J. Kalda: **The Problem of Time Arrow in Financial Time Series**; *Annual Conference of the Association for Mathematics Applied to Social and Economic Sciences; Session: Intelligent Methods in Economics, Finance and Insurance;* https://drive.google.com/file/d/1nKzMqFBopg4bU74R2ALjRIRBGQ6SEo/view
- 15.09.2021: J. Andria, R. Maggistro, R. Pesenti: **Sustainability and tourist flow networks: a mean field bi-level optimization approach**; *Annual Conference of the Association for Mathematics Applied to Social and Economic Sciences; Session: Mathematical methods for sustainability challenges;* https://www.amases.org/annual-conference-2021-parallel/
- 18.12.2020: J. Andria, G. di Tollo, S. Ghilardi: **Gender analysis and attention to gender: An experimental framework**; *Workshop on Machine Learning for Finance*, Ca' Foscari University of Venice, Department of Economics; https://www.unive.it/data/agenda/3/45054
- 18-22,25.9.2020: eMAF2020: Mathematical and Statistical Methods for Actuarial Sciences and Finance; *Organizing committee and scientific chair* of the session "**Evolutionary and heuristic computation in finance**", https://www.unive.it/pag/40972/
- 22.9.2020: J. Andria, G. di Tollo - **An empirical investigation of heavy tails in emerging markets and robust estimation of the Pareto tail index**; eMAF2020: Mathematical and Statistical Methods for Actuarial Sciences and Finance; https://www.unive.it/pag/40973/
- 18.9.2020: J. Andria, G. di Tollo, S. Tanev - **Neural networks to determine the relationships between business innovation and gender aspects**; eMAF2020: Mathematical and Statistical Methods for Actuarial Sciences and Finance; Session: Machine learning and related methods https://www.unive.it/pag/40973/

AMBITI DI RICERCA

Research interests:

His scientific activity is devoted to solve real-world problems in the field of Applied Mathematics, Artificial Intelligence, Artificial Neural Network, Management Science and Computational Methods.