DAVIDE RADI, Ph.D.

CURRICULUM VITAE ET STUDIORUM (2024)

PERSONAL DATA

Date and place of birth: August 15, 1985, Pesaro (Italy)

Citizenship: Italian

Place of residence: 1, Strada Pieve, 61130, Montefelcino, Pesaro-Urbino, Italy

Mobile: (+39) 373 7243603 and (+39) 328 3561091 and (+39) 375 7965913

E-mail: **radidavide85@gmail.com**

Web Page: **https://sites.google.com/view/davideradi**

Scholar Web Page: **https://scholar.google.com/citations?hl=it&user=r9r-eYUAAAAJ&view_op=list_works**

PROFESSIONAL ADDRESS AND CONTACTS

Affiliation 1: Department of Mathematics for Economic, Financial and Actuarial Sciences (DiMSEFA), Catholic University of Sacred Heart, Milan.

Via Necchi, 9 - 20123, Milan (MI), Italy

Office Phone: +39 02 7234 2301

E-mail: **davide.radi@unicatt.it**

Web Page: **https://docenti.unicatt.it/ppd2/it/docenti/88287/davide-radi/profilo**

Affiliation 2: Department of Finance, VŠB – Technical University of Ostrava,

Sokolská 33, 701 21, Ostrava, Czech Republic

Office Phone: +420 59 732 2336

E-mail: **davide.radi@vsb.cz**

PERSONAL IDS

WoS ResearcherID: HHR-9023-2022

Scopus Author ID: 57202134372

ORCID ID: 0000-0001-7809-1166

CURRENT POSITIONS

1/06/2022 – present - Associate Professor of "Mathematical Methods of Economy and Actuarial and Financial Sciences" (Italian Disciplinary Sector SECS-S/06 - Competition Sector 13/D4), at the Department of Mathematics for Economic, Financial and Actuarial Sciences (DiMSEFA), Catholic University of Sacred Heart.

1/03/2020 – present - Research Fellow of Mathematics for Economics, at the Department of Finance, VŠB – Technical University of Ostrava.

1/09/2018 – present - Adjunct Professor of Game Theory, at the Department of Economics, University of Insubria.

PREVIOUS ACADEMIC EMPLOYMENTS

1/12/2020-1/06/2022 - Associate Professor of "Mathematical Methods of Economy and Actuarial and Financial Sciences" (Italian Disciplinary Sector SECS-S/06 - Competition Sector 13/D4), at the Department of Economics and Management, University of Pisa.

1/09/2018-1/03/2020 - Participation in the mobility Nr.1 - Work-stays of Post-docs from Abroad in the Czech Republic, at the Department of Finance, VŠB – Technical University of Ostrava.

1/12/2017-30/11/2020 - Tenure-Track Assistant Professor of "Mathematical Methods of Economy and Actuarial and Financial Sciences" (Italian Disciplinary Sector SECS-S/06 - Competition Sector 13/D4), at the Department of Economics and Management, University of Pisa.

1/09/2015-30/11/2017 - Non-Tenured Assistant Professor of "Mathematical Methods of Economy and Actuarial and Financial Sciences" (Italian Disciplinary Sector SECS-S/06 - Competition Sector 13/D4), LIUC - Università Cattaneo.

1/02/2014-31/08/2015 - Postdoctoral fellow (Italian Disciplinary Sector SECS-S/06) at the Department of Management, Università Politecnica delle Marche. Supervisor: Prof. Graziella Pacelli.

7/09/2015-6/10/2015 - Consultancy (object of the contract: Numerical investigation of ordinary differential equations), University of Sassari.

1/10/2012-31/01/2013 - Consultancy (object of the contract: Calibration and backtesting of nonlinear dynamical systems), University of Calabria.

2007-2008 - Consultancy (object of the contract: Tutor-portfolio), University of Urbino Carlo Bo.

VISITING POSITIONS

22/07/2019-26/07/2019 - Visiting (funded by the Erasmus+ programme of the EU) University of Bielefeld, Germany.

15/06/2017-23/06/2017 - Visiting (funded by the Erasmus+ programme of the EU) University of Bielefeld, Germany.

1/09/2016-5/09/2016 - Visiting (ISCH COST Action IS1104 Short Term Scientific Mission), University of Graz, Austria.

5/2014-6/2014 - Visiting Scholar, Ural Federal University, Yekaterinburg, Russia.

11/2012-3/2013 - Visiting Scholar, University of Technology, Sydney, Australia.

1/2012-8/2012 - Visiting Scholar, University of Bielefeld, Germany.

EDUCATION AND ACADEMIC QUALIFICATIONS

Italian National Scientific Qualification (Abilitazione Scientifica Nazionale) as Full Professor of Mathematical Methods of Economics, Finance and Actuarial Sciences, SECS-S/06 (from 20/04/2021 to 20/04/2030).

Italian National Scientific Qualification (Abilitazione Scientifica Nazionale) as Associate Professor of Mathematical Methods of Economics, Finance and Actuarial Sciences, SECS-S/06 (from 5/04/2017 to 05/04/2023).

Post-Doc (on Option Pricing and Credit Risk Models), Università Politecnica delle Marche, 2014-2015.

Ph.D. in Economics, Applied Mathematics and Operational Research, University of Bergamo, Italy, 2014.

M.S. in Economics, cum laude, University of Urbino Carlo Bo, Italy, March 2010.

B.A. Information Technology Management for Business, cum laude, University of Urbino Carlo Bo, Italy, December 2007.

Research Fields

Nonlinear Dynamics in Economics and Finance (Nonlinear Dynamical Systems and Bifurcation Theory). Game Theory (Evolutionary Game Theory, Oligopoly Models and Robust Games). Quantitative Finance (Credit Risk Modelling and Numerical Methods for Option Pricing).

Publications and Research Papers

Refereed Journal Publications *(The asterisk indicates publications in Class A - ANVUR (Italian National Agency for the Evaluation of the University and Research Systems) journals for sector 13/D4. A+, A, B and C refer to the classification of journals used by the Università Cattolica del Sacro Cuore for sector 13/D4.)*

1) Exchange rate dynamics and central bank interventions: On the (de)stabilizing nature of targeting long-run fundamentals interventions, with L. Gardini, N. Schmitt, I. Sushko and F. Westerhoff, *Nonlinear Dynamics, Psychology, and Life Sciences,* forthcoming.

2) Two-population evolutionary oligopoly with partial cooperation and partial hostility, with F. Lamantia and T. Tichy, *Computational Economics,* forthcoming (DOI: 10.1007/s10614-023-10486-0). ***(B)***

3) A robust route to randomness in a simple Cournot duopoly game where ambiguity aversion meets constant expectations, with D. Goldbaum and L. Gardini, *Annals of Operations Research,* 2023, first online (DOI: 10.1007/s10479-023-05686-8). ***(A*)***

4) Pricing transition risk with a jump-diffusion credit risk model: Evidences from the CDS market, with G. Livieri and E. Smaniotto, *Review of Corporate Finance,* forthcoming.

5) Insights on the theory of robust games, with G. P. Crespi and M. Rocca, *Computational Economics,* 2023, first online (DOI: 10.1007/s10614-023-10486-0). ***(B)***

6) A 2D piecewise-linear discontinuous map arising in stock market modeling: Two overlapping period-adding bifurcation structures, with L. Gardini, N. Schmitt, I. Sushko and F. Westerhoff, *Chaos, Solitons & Fractals*, 2023, 176, 114143. ***(A*)***

7) Sentiment-driven business cycle dynamics: An elementary macroeconomic model with animal spirits, with L. Gardini, N. Schmitt, I. Sushko and F. Westerhoff, *Journal of Economic Behavior & Organization*, 2023, 210, 342–359. ***(A*)***

8) Border collision bifurcations in a piecewise linear duopoly model, with L. Gardini, *Journal of Difference Equations and Applications*, 2023, 29(9-12), 1065–1093. ***(B)***

9) An asset pricing model with accuracy-driven evolution of heterogeneous expectations, with M. Anufriev, F. Lamantia and T. Tichy, *Communications in Nonlinear Science and Numerical Simulations*, 2023, 117, 106975. ***(A+*)***

10) Currency manipulation and currency wars: Analyzing the dynamics of competitive central bank interventions, with L. Gardini, N. Schmitt, I. Sushko and F. Westerhoff, *Journal of Economic Dynamics and Control*, 2022, 145, 104545. ***(A*)***

11) Perception of fundamental values and financial market dynamics: Mathematical insights from a 2D piecewise linear map, with L. Gardini, N. Schmitt, I. Sushko and F. Westerhoff, *SIAM Journal on Applied Dynamical Systems*, 2022, 21(4), 2314–2337.

12) Causes of fragile stock market stability, with L. Gardini, N. Schmitt, I. Sushko and F. Westerhoff, *Journal of Economic Behavior & Organization*, 2022, 200, 483–498. ***(A*)***

13) Catastrophic and systemic risk in the non-life insurance sector: A micro-structural contagion approach, with G. Torri and H. Dvoráckoví, *Finance Research Letters*, 2022, 47(Part B), 102718. ***(B)***

14) Hybrid evolutionary oligopolies and the dynamics of corporate social responsibility, with T. Tichý and F. Lamantia, *Journal of Economic Interaction and Coordination*, 2022, 17(1), 87–114. ***(B)***

15) A revised version of the Cathcart & El-Jahel model and its application to CDS market, with V. P. Hoang, G. Torri and H. Dvorácková, *Decisions in Economics and Finance*, 2021, 44(2), 669–705. ***(*)***

16) Hybrid dynamics of multi-species resource exploitation, with T. Tichý and F. Lamantia, *Decisions in Economics and Finance*, 2021, 44(2), 559–577. ***(*)***

17) Offshoring, reshoring, unemployment and wage dynamics in a two-country evolutionary model, with F. Lamantia and G.I. Bischi, *Macroeconomic Dynamics*, 2021, 25(3), 705–732. ***(B*)***

18) Residential segregation: The role of inequality and housing subsidies, with P. Harting, *Journal of Economic Behavior & Organization*, 2020, 178, 801–819. ***(A*)***

19) Chaos, border collisions and stylized empirical facts in an asset pricing model with heterogeneous agents, with M. Anufriev and L. Gardini, *Nonlinear Dynamics*, 2020, 102, 993–1017. ***(A+*)***

20) Modeling CDS spreads: A comparison of some hybrid approaches, with L. V. Ballestra and G. Pacelli, *Journal of Empirical Finance*, 2020, 57, 107–124. ***(A*)***

21) On the numerical solution of ordinary, interval and fuzzy differential equations by use of F-transform, with L. Sorini and L. Stefanini, *Axioms*, 2020, 9(1), 15.

22) Does the "uptick rule" stabilize the stock market? Insights from adaptive rational equilibrium dynamics, with F. Dercole, *Chaos, Solitons & Fractals*, 2020, 130, 109426. ***(A*)***

23) Valuing strategic investments under stochastic interest rates: A real option approach, with L. V. Ballestra and G. Pacelli, *Corporate Ownership and Control*, 2019, 16(3), 89–97.

24) Some reflections on past and future of nonlinear dynamics in economics and finance, with M. Anufriev and F. Tramontana, *Decisions in Economics and Finance*, 2018, 41(2), 91–118. ***(*)***

25) Piecewise smooth model of evolutionary game for residential mobility and segregation, with L. Gardini, *Chaos: An Interdisciplinary Journal of Nonlinear Science*, 2018, 28(5), 055912. ***(A*)***

26) Evolutionary technology adoption in an oligopoly market with forward-looking firms, with F. Lamantia, *Chaos: An Interdisciplinary Journal of Nonlinear Science*, 2018, 28(5), 055904. ***(A*)***

27) On the stochastic sensitivity and noised-induced transitions of a Kaldor-type business cycle model, with I. Bashkirtseva, L. Ryashko and T. Ryazanova, *Computational Economics*, 2018, 51(3), 699–718. ***(B)***

28) Walrasian versus Cournot behavior in an oligopoly of boundedly rational firms, *Journal of Evolutionary Economics*, 2017, 27(5), 933–961. ***(B*)***

29) Robust games: Theory and application to a Cournot duopoly model, with P. G. Crespi and M. Rocca, *Decisions in Economics and Finance*, 2017, 40(1-2), 177–198. ***(*)***

30) Valuing investment projects under interest rate risk: Empirical evidence from European firms, with L. V. Ballestra and G. Pacelli, *Applied Economics Incorporating Applied Financial Economics*, 2017, 49(56), 5662–5672. ***(C)***

31) Computing the survival probability in the Madan-Unal credit risk model: Application to the CDS market, with L. V. Ballestra and G. Pacelli, *Quantitative Finance*, 2017, 17(2), 299–313. ***(A*)***

32) A note on Fergusson and Platen: "Application of maximum likelihood estimation to stochastic short rate models", with L. V. Ballestra and G. Pacelli, *Annals of Financial Economics*, 2016, 11(04), 1650018 (7 pages).

33) A very efficient approach to compute the first-passage probability density function in a time-changed Brownian model: Applications in finance, with L. V. Ballestra and G. Pacelli, *Physica A: Statistical Mechanics and its Applications*, 2016, 463, 330–344. ***(A)***

34) A very efficient approach for pricing barrier options on an underlying described by the mixed fractional Brownian motion, with L. V. Ballestra and G. Pacelli, *Chaos, Solitons & Fractals*, 2016, 87, 240–248. ***(A*)***

35) Evolutionary competition between boundedly rational behavioral rules in oligopoly games, with F. Lamantia and L. Cerboni Baiardi, *Chaos, Solitons & Fractals*, 2015, 79, 204–225. ***(A*)***

36) Entry limitations and heterogeneous tolerances in a Schelling-like segregation model, with L. Gardini, *Chaos, Solitons & Fractals*, 2015, 79, 130–144. ***(A*)***

37) On a discrete-time model with replicator dynamics in renewable resource exploitation, with G. I. Bischi and L. Cerboni Baiardi, *Journal of Difference Equations and Applications*, 2015, 21(10), 954–973. ***(B)***

38) Use of Chebyshev Polynomial Kalman Filter for pseudo-blind demodulation of CD3S signals, with Y. Moussa, L. Gardini and V. Freschi, *International Journal of Control, Automation and Systems*, 2015, 13(5), 1193–1200. ***(B)***

39) An evolutionary Cournot model with limited market knowledge, with G.I. Bischi and F. Lamantia, *Journal of Economic Behavior & Organization*, 2015, 116, 219–238. ***(A*)***

40) Valuing strategic investments under stochastic interest rates: A real option approach, with L. V. Ballestra and G. Pacelli, *International Journal of Management Cases*, 2015, 17(4), 35–44 (Special issue 13th SGBED Conference).

41) Exploitation of renewable resources with differentiated technologies: An evolutionary analysis, with F. Lamantia, *Mathematics and Computers in Simulation*, 2015, 108, 155–174. ***(A)***

42) The role of constraints in a segregation model: The asymmetric case, with L. Gardini and V. Avrutin, *Discrete Dynamics in Natural and Society*, 2014, Article ID 569296. ***(C)***

43) The role of constraints in a segregation model: The symmetric case, with L. Gardini and V. Avrutin, *Chaos, Solitons & Fractals*, 2014, 66, 103–119. ***(A*)***

44) Reaching consensus on rumors, with U. Merlone, *Physica A: Statistical Mechanics and its Applications*, 2014, 406, 260–271. ***(A)***

45) A prey-predator fishery model with endogenous switching of harvesting strategy, with G. I. Bischi and F. Lamantia, *Applied Mathematics and Computation*, 2013, 219(20), 10123–10142. ***(A*)***

46) Multi-species exploitation with evolutionary switching of harvesting strategies, with G. I. Bischi and F. Lamantia, *Natural Resource Modeling*, 2013, 26(4), 546–571. ***(C)***

47) An extension of the Antoci–Dei–Galeotti evolutionary model for environment protection through financial instruments, with G. I. Bischi, *Nonlinear Analysis: Real World Applications*, 2012, 13(1), 432–440. ***(A*)***

48) Financial tools for the abatement of traffic congestion: A dynamical analysis, with A. Antoci and M. Galeotti, *Computational Economics*, 2011, 38(3), 389–405. ***(B)***

Papers (submitted to scientific journals)

49) Leaning against the wind in the New Keynesian model with heterogeneous expectations, with M. Anufriev, F. Lamantia and T. Tichy. *R&R*.

50) Pricing CDSs under stochastic recovery rate: A hybrid model of credit risk, with L.V. Ballestra and G. Pacelli. *R&R*.

51) On boom-bust stock market dynamics, animal spirits and the destabilizing nature of temporarily attracting virtual fixed points, with L. Gardini, N. Schmitt, I. Sushko and F. Westerhoff. *Submitted*.

52) Bifurcation structures of a two-dimensional piecewise-linear discontinuous map representing a cobweb model, with L. Gardini, N. Schmitt, I. Sushko and F. Westerhoff. *Submitted.*

Editorials

53) Foreword of the special issue: Nonlinear models and tools in economics, finance and social sciences, with L. Gardini and F. Tramontana, *Communications in Nonlinear Science and Numerical Simulations*, 2023, 119, 107078.

54) Foreword of the special issue: Nonlinear economic dynamics (2019), with L. Gardini and F. Tramontana, *Journal of Economic Interaction and Coordination*, 2022, 17(1), 1-2.

55) Nonlinear dynamics in economic modelling, with L. Gardini, F. Lamantia, F. Szidarovszky and F. Tramontana, *Decisions in Economics and Finance*, 2021, 44(2), 485–487.

56) Proceedings of the MDEF (Modelli Dinamici in Economia e Finanza – Dynamic models in economics and finance) workshop, Urbino 6th–8th September 2018, with L. Gardini and F. Tramontana, *Chaos, Solitons & Fractals*, 2020, 132, 109523.

Book Reviews

57) Continuous and Discontinuous Piecewise-Smooth One-Dimensional Maps. Invariant Sets and Bifurcation Structures: by V. Avrutin, L.Gardini, I. Sushko, and F. Tramontana, World Scientific Series on Nonlinear Science Series A, Vol. 95, 2019, ISBN: 978-981-4368-82-7, *Journal of Difference Equations and Applications*, 2021, 27(8), 1259–1261.

Refereed Conference Proceedings

58) A quantitative assessment of interest rate uncertainty in real option analysis, with L.V. Ballestra and G. Pacelli. In: Corporate Governance: Search for the Advanced Practices, Rome, 2019. DOI:10.22495/cpr19a1.

59) Evolutionary competition of behavioral rules in oligopoly games with memory, with F. Lamantia. In: Proceedings of the 9th International Scientific Conference on Managing and Modelling of Financial Risks, VŠB -Technical University of Ostrava, Faculty of Economics, Department of Finance, 2018. ISBN 978-80-248-4225-7.

60) An asset pricing model with heterogeneous beliefs: Stubborn versus fickle traders, with F. Lamantia. In: Proceedings of the 9th International Scientific Conference on Managing and Modelling of Financial Risks, VŠB -Technical University of Ostrava, Faculty of Economics, Department of Finance, 2018. ISBN 978-80-248-4225-7.

61) Minority influence in opinion spreading, with U. Merlone and A. Romano. In: Proceedings of the 2015 Winter Simulation Conference (WSC), IEEE, Huntington Beach, CA, pp. 3997 - 4008, DOI:10.1109/WSC.2015.7408554.

62) Fuzzy differential equations by fuzzy-transform, with L. Stefanini. In: 2015 Annual Conference of the North American Fuzzy Information Processing Society (NAFIPS) held jointly with 2015 5th World Conference on Soft Computing (WConSC), IEEE, Redmond, WA, 2015, pp. 1–6. DOI: 10.1109/NAFIPS-WConSC.2015.7284180.

63) Does the volatility of interest rates affect the value of investment projects? A real option investigation, with L. Ballestra and G. Pacelli. In: Referred Proceedings of the 13th International Conference of the Society for Global Business and Economic Development Managing the "Intangibles": Business and Entrepreneurship Perspectives in a Global Context. Ancona 16-18 July 2014 Università Politecnica delle Marche, pp.137-146. ISBN:978-88-907795-7-2.

Articles in Edited Volumes

64) Knowledge spillovers, congestion effects, and long run location patterns, with G. I. Bischi, M. Kopel and F. Lamantia. In: P. Commendatore, I. Kubin, S. Bougheas, A. Kirman, M. Kopel, G. Bischi (eds) 'The Economy as a Complex Spatial System. Springer Proceedings in Complexity'. Springer, Cham, 2018, pp. 192–215.

65) Evolutionary oligopoly games with heterogeneous adaptive players, with G.I. Bischi and F. Lamantia. In: L. C. Corchón and M. Marini (eds) 'Handbook of Game Theory and Industrial Organization, Volume I Theory'. Edward Elgar Publishing, Cheltenham UK and Northampton MA USA, 2018, pp. 343–370.

66) Qualitative methods in continuous and discrete dynamical systems, with G.I. Bischi and F. Lamantia. In: G.I. Bischi, A. Panchuck and D. Radi (eds) 'Qualitative Theory of Dynamical Systems, Tools and Applications for Economic Modelling'. Springer Proceedings in Complexity. Springer, Cham, 2016, pp. 1–159.

67) Dynamic modeling in renewable resource exploitation, with F. Lamantia and L. Sbragia. In: G.I. Bischi, A. Panchuck and D. Radi (eds) 'Qualitative Theory of Dynamical Systems, Tools and Applications for Economic Modelling'. Springer Proceedings in Complexity. Springer, Cham, 2016, pp. 257–289.

68) Opinion dynamics on networks, with U. Merlone and A. Romano. In: P. Commendatore, M. Matilla-García, L. Varela, J. Cánovas (eds) Complex Networks and Dynamics. Lecture Notes in Economics and Mathematical Systems, vol 683. Springer, Cham, 2016, pp. 49–63.

Working Papers

69) Ambiguity aversion as a route to randomness in a duopoly game, with L. Gardini. Preprint arXiv:2311.11366, 2023 - arxiv.org.

70) Remarks on the paper: "Non-existence of Shilnikov chaos in continuous-time systems", with L. Gardini. Preprint arXiv:1404.1463, 2014 - arxiv.org.

Ph.D. Thesis

71) Essays on Nonlinear Dynamics, Heterogeneous Agents and Evolutionary Games in Economics and Finance, 2014, DTs in Economics, Applied Mathematics and Operational Research, available online: https://aisberg.unibg.it/retrieve/handle/10446/30390/15417/DT_Radi_Davide_2014.pdf.

METRICS AND DETAILS (updated at 8/06/2023)

- *h*-index: 11 (Scopus), 10 (Web of Science), 12 (Google Scholar).
- *i10*-index: 20 (Google Scholar).
- Total number of citations: 420 (Scopus), 355 (Web of Science), 559 (Google Scholar).
- Citing articles: 272 (Scopus), 240 (Web of Science).
- Co-authors: 40 (Scopus).

PRIZES AND AWORDS

- 13TH November 2023 – The Dean's Award for the best publication at Faculty of Economics, VŠB – Technical University of Ostrava, for the year 2022. Best publication for the paper: Catastrophic and systemic risk in the non-life insurance sector: A micro-structural contagion approach.
- 7TH September 2021 – The Dean's Award for the best publication at Faculty of Economics, VŠB – Technical University of Ostrava, for the year 2020. Best publication for the paper: Residential segregation: The role of inequality and housing subsidies.

INSTITUTIONAL SERVICES AND ORGANIZATIONAL RESPONSIBILITIES

- 2023-now: Member of the joint committee (commissione paritetica), Università Cattolica del Sacro Cuore.
- 2023-now: Member of the Board of the PhD Program in Finance, VSB-Technical University of Ostrava.
- 2023-2024: Member of the Board of the PhD Program in Methods and Models for Economic Decisions (XXXIX), Università degli Studi dell'Insubria.
- 2023: Member of the Evaluation Committee for "Procedura di valutazione per il reclutamento di n. 1 assegno per la collaborazione ad attività di ricerca per il settore scientifico-disciplinare SECS-S/06 METODI MATEMATICI DELL'ECONOMIA E DELLE SCIENZE ATTUARIALI E FINANZIARIE presso la Facoltà di Economia dell'Università Cattolica del Sacro Cuore presso la Facoltà di Economia dell'Università Cattolica del Sacro Cuore". BANDO DR n. 10380 - 9 ottobre 2023. Assegno finanziato su PRIN-2022, PI Davide Radi.
- 2023: Reviewer of a Doctoral Thesis and Effective Member of the Evaluation Committee, PhD program in Finance, VSB-Technical University of Ostrava.
- 2023: Reviewer of a Doctoral Thesis and Effective Member of the Evaluation Committee, PhD program in Economics and Political Economy, University of Genova.
- 2023: Member of the Evaluation Committee for "Procedura di valutazione per il reclutamento di n. 1 ricercatore a tempo determinato per il settore concorsuale 13/D4 METODI MATEMATICI DELL'ECONOMIA E DELLE SCIENZE ATTUARIALI E FINANZIARIE, settore scientifico-disciplinare SECS-S/06 METODI MATEMATICI DELL'ECONOMIA E DELLE SCIENZE ATTUARIALI E FINANZIARIE presso la Facoltà di Economia dell'Università Cattolica del Sacro Cuore". BANDO DR n. 9140 del 24 ottobre 2022.
- 2023: Member of the Evaluation Committee for "PROCEDURA PUBBLICA DI SELEZIONE PER LA COPERTURA DI N. 1 POSTO DI RICERCATORE UNIVERSITARIO A TEMPO DETERMINATO AI SENSI DELL'ART 24, COMMA 3, LETTERA A) DELLA LEGGE 240/10 PRESSO L'UNIVERSITA' DEGLI STUDI DI BERGAMO - SETTORE CONCORSUALE 13/D4 – Metodi matematici dell'economia e delle scienze attuariali e finanziarie -SETTORE SCIENTIFICO-DISCIPLINARE SECS-S/06 – Metodi matematici dell'economia e delle scienze, attuariali e finanziarie - DIPARTIMENTO DI Scienze Economiche". BANDO DR REP. N. n. 1131/2023 DEL 07 dicembre 2022 - AVVISO PUBBLICATO IN G.U. N. 98. - 4^SERIE SPECIALE - DEL 13 dicembre 2022.
- 2022: Member of the Evaluation Committee for "PROCEDURA DI SELEZIONE PER IL CONFERIMENTO DELL'INCARICO DI INSEGNAMENTO IN QUANTITATIVE FINANCE NELL'AMBITO DEI CORSI DELLA SCUOLA NORMALE SUPERIORE DI PISA PER L'A.A. 2022/2023 - s.s.d. SECS-S/06 - (Avviso n. 58 del 13.10.2022)".
- 2022-2023: Member of the Board of the PhD Program in Methods and Models for Economic Decisions (XXXVIII), Università degli Studi dell'Insubria.
- 2021-2022: Coordinator of the International Master in Risk Management: A Modern Approach for Finance, Insurance and Business, University of Pisa.
- 2021-2022: Member of the Scientific Committee, Area 13, (Commissione scientifica, AREA 13, Università di Pisa).

- 2021-2022: Member of the Board of the PhD Program in Methods and Models for Economic Decisions (XXXVII), Università degli Studi dell'Insubria.

- 2021: Reviewer of a Doctoral Thesis, PhD program in Applied Economics and Management, Department of Management, Economics and Quantitative Methods, University of Bergamo.

- 2020-2021: Coordinator of the International Master in Risk Management: A Modern Approach for Finance, Insurance and Business, University of Pisa.

- 2020-2021: Member of the Board of the PhD Program in Methods and Models for Economic Decisions (XXXVI), Università degli Studi dell'Insubria.

- 2018-2020: Member of the Scientific Committee, Area 13, (Commissione scientifica, AREA 13, Università di Pisa).

- 2017: Active member of the Selection Committee for the PhD program in Management, Finance and Accounting (LIUC – Università Cattaneo).

- 2016-2017: Member of the Graduate School Committee of the PhD Program in Management, Finance and Accounting (XXXII), LIUC – Università Cattaneo.

- 2016-2017: Member of the Teaching and Research Quality Committee (Presidio della Qualità di Ateneo, LIUC – Università Cattaneo).

PROJECTS & RESEARCH GRANTS

Research projects as principal investigator (PI):

- 2023-2024: Grant from Italian Ministry of Research and Education (MIUR) under project: Project ID: PRIN-2022JRY7EF (ERC Sector: SH1) - Title of the project: *Qnt4Green - Quantitative Approaches for Green Bond Market: Risk Assessment, Agency Problems and Policy Incentives*, (Budget: 182.384,00 EURO).

- 2020-2022: Grant from Czech Science Foundation (Grantová agentura České republiky, GACR) under project: Project ID 20-25660Y. Title of the project: *Modeling credit risk and systemic risk in the non-life insurance sector* (Budget: 4.498.000,00 CZK). ***[Final Evaluation: Excellent]***

Research projects as member:

- 2023-2025: Grant from Czech Science Foundation (Grantová agentura České republiky, GACR) under project: Project ID 23-06282S. Title of the project: *Evolutionary economic dynamics with finite populations: Modeling and Applications* (Budget: 4.995.000,00 CZK).

- 2023-2024: Grant from University of Urbino Carlo Bo. Title of the project: *Optimal timing and control to eradicate the heterogeneity of firms on polluting activities: The economic-environmental roles of fiscal and monetary policies* (Budget: 3.000,00 EURO).

- 2023: Grant from the second joint call of EELISA Communities - Project ID MATH4MP. Title of the project: *Mathematical approaches for multidisciplinary projects*. PI of the project Prof. Andrea Tellini (UPM) and Prof. Antonela Toma (UPB) (Budget: around 8.500,00 EURO).

- 2022-2024: Grant from Czech Science Foundation (Grantová agentura České republiky, GACR) under project: Project ID 22-28882S. Title of the project: *Interaction between Financial Markets and Real Sectors: Modeling, Experiments, and Policy* (Budget: 4.995.000,00 CZK).

- 2022: Grant from the first joint call of EELISA Communities - Project ID MATH4SDG. Title of the project: *Mathematical Approaches for Sustainable Development Goals (SDGs)*. PI of the project Prof. Andrea Tellini (UPM), Prof. Giulia Livieri (SNS) and Prof. Antonela Toma (UPB) (Budget: around 2.400,00 EURO).

- 2020-2022: Grant from Czech Science Foundation (Grantová agentura České republiky, GACR) under project: Project ID 20-16701S. Title of the project: *Hybrid Evolutionary Games and Economic Applications* (Budget: 4.995.000,00 CZK).

- 2019-2021: Grant from University of Urbino Carlo Bo. Title of the project: *Modelli di economia comportamentale per lo sviluppo sostenibile (Behavioral Model for Sustainable Development in Economics)* (Budget: 6.000,00 EURO).

- 2018-2020: Grant from University of Pisa, under project: Progetti di Ricerca di Ateneo PRA-2018-12. Title of the project: *Istituzioni, Mercati Imperfetti e Problemi di Policy* (Budget: 56.100,00 EURO).

- 2016-2018: Grant from University of Urbino Carlo Bo. Title of the project: *Modelli dinamici per l'economia comportamentale (Dynamic Models in Behavioral Economics)* (Budget: 7.000,00 EURO).

- 2012-2016: European COST Action IS1104 "The EU in the new complex geography of economic systems: Models, tools and policy evaluation" (Budget: around 400.000,00 EURO).

RESEARCH PROJECTS FUNDED BY PRIVATE COMPANIES

- 2024-2025: Scientific director and coordinator of the research project: *Modelli probabilistici, algoritmi e software per la valutazione di crediti insoluti (Probabilistic models, algorithms and software for the evaluation of nonperforming loans)* funded by WMGconsulting.Srl (Budget: 4.000,00 EURO).

TEACHING EXPERIENCES

At the Catholic University of Sacred Heart, in Milan (Italy)

- Fall 2023, Mathematics for Management, MSc (Laurea Magistrale) in Management (in English, 4 ECTS, 30 hours, main lecturer).
- Fall 2023, Mathematics, BSc (Laurea di I livello) in Economics (in Italian, 9 CFU, 60 hours, main lecturer).
- Fall 2023, Mathematics, BSc (Laurea di I livello) in Economics and Management (in English, 6 ECTS, 40 hours, main lecturer).
- Spring 2023, Mathematical Finance, BSc (Laurea di I livello) in Economics (in Italian, 5 CFU, 30 hours, main lecturer).
- Winter 2023, Financial Mathematics, BSc (Laurea di I livello) in Economics and Management (in English, 5 ECTS, 40 hours, main lecturer).
- Fall 2022, Mathematics, BSc (Laurea di I livello) in Economics and Management (in English, 6 ECTS, 40 hours, main lecturer).
- Fall 2022, Mathematics for Management, MSc (Laurea Magistrale) in Management (in English, 4 ECTS, 30 hours, main lecturer).
- Spring 2022, Mathematical Finance, BSc (Laurea di I livello) in Economics (in Italian, 5 CFU, 30 hours, main lecturer).
- Winter 2022, Mathematics, BSc (Laurea di I livello) in Economics and Management (in English, 3 ECTS, 20 hours, lecturer).
- Fall 2021, Mathematics, BSc (Laurea di I livello) in Economics (in Italian, 9 CFU, 60 hours, main lecturer).

At the Università di Pisa and Sant'Anna School of Advanced Studies, in Pisa (Italy)

- Spring 2022, Mathematical Methods for Financial Markets, Master of Science (Laurea Magistrale) in Economics (in English, 6 ECTS, 42 hours, main lecturer).
- Fall 2021, Mathematical Methods for Economics, Master of Science (Laurea Magistrale) in Economics (in English, 2 ECTS, 18 hours).
- Spring 2021, Mathematical Methods for Financial Markets, Master of Science (Laurea Magistrale) in Economics (in English, 6 ECTS, 42 hours, main lecturer).
- Spring 2020, Mathematical Methods for Financial Markets, Master of Science (Laurea Magistrale) in Economics (in English, 6 ECTS, 42 hours, main lecturer).
- Spring 2019, Mathematical Methods for Financial Markets, Master of Science (Laurea Magistrale) in Economics (in English, 6 ECTS, 42 hours, main lecturer).
- Spring 2018, Mathematical Methods for Financial Markets, Master of Science (Laurea Magistrale) in Economics (in English, 6 ECTS, 42 hours, main lecturer).

At the Università di Pisa, in Pisa (Italy)

- Winter 2024, Finance and Derivatives, International Master (of Level I) in Risk Management. Models and Data Science for Finance, Insurance and Business (in English, 20 hours, main lecturer).
- Fall 2023, Stochastic Processes and Applications in Risk Management, International Master (of Level I) in Risk Management. Models and Data Science for Finance, Insurance and Business (in English, 10 ECTS, 32 hours, main lecturer).
- Spring 2022, Modelli per la valutazione dei derivati, MSc (Laurea Magistrale) in Banking (in Italian, 6 CFU, 42 hours, main lecturer).

- Spring 2022, Mathematical Finance, BSc (Laurea di I livello) in Banking (in Italian, 6CFU, 42 hours, main lecturer).

- Winter 2022, Finance and Derivatives, International Master (of Level I) in Risk Management. Models and Data Science for Finance, Insurance and Business (in English, 10 hours, main lecturer).

- Fall 2021, Stochastic Processes and Applications in Risk Management, International Master (of Level I) in Risk Management. Models and Data Science for Finance, Insurance and Business (in English, 32 hours, main lecturer).

- Spring 2021, Mathematical Finance (Strumenti Derivati), MSc (Laurea Magistrale) in Banking (in Italian, 6CFU, 42 hours, main lecturer).

- Spring 2021, Mathematical Finance, BSc (Laurea di I livello) in Banking (in Italian, 6CFU, 42 hours, main lecturer).

- Winter 2021, Finance and Derivatives, International Master (of Level I) in Risk Management (in English, 10 hours, main lecturer).

- Fall 2020, Stochastic Processes and Applications in Risk Management, International Master (of Level I) in Risk Management (in English, 30 hours, main lecturer).

- Spring 2020, Mathematical Finance, BSc (Laurea di I livello) in Banking (in Italian, 6CFU, 42 hours, main lecturer).

- Winter 2020, Finance and Derivatives, International Master (of Level I) on Risk Management (in English, 10 hours, main lecturer).

- Fall 2019, Stochastic Processes and Applications in Risk Management, International Master (of Level I) in Risk Management (in English, 30 hours, main lecturer).

- Spring 2019, Mathematical Finance, BSc (Laurea di I livello) in Banking (in Italian, 6CFU, 42 hours, main lecturer).

- Winter 2019, Finance and Derivatives, International Master (of Level I) on Risk Management (in English, 10 hours, main lecturer).

- Fall 2018, Stochastic Processes and Applications in Risk Management, International Master (of Level I) in Risk Management (in English, 30 hours, main lecturer).

- Spring 2018, Mathematical Finance, BSc (Laurea di I livello) in Banking (in Italian, 6CFU, 42 hours, main lecturer).

At the University of Bielefeld, in Bielefeld (Germany)

- Spring 2019, Hybrid Evolutionary Games (mini course of 8 hours, under the auspicious of the Erasmus+ program), PhD in Economics and Management BiGSEM (in English).

- Spring 2017, Evolutionary Game Dynamics in Economics (mini course of 10 hours, under the auspicious of the Erasmus+ program), PhD in Economics and Management BiGSEM (in English).

At the Università Bocconi, in Milan (Italy)

- Spring 2019, Teaching Assistant for Applied Mathematics, BSc (Laurea di I livello) in Economics (in Italian).

- Spring 2018, Teaching Assistant for Applied Mathematics, BSc (Laurea di I livello) in Economics (in Italian).

- Spring 2017, Teaching Assistant for Applied Mathematics, BSc (Laurea di I livello) in Economics (in English).

- Spring 2017, Teaching Assistant for Applied Mathematics, BSc (Laurea di I livello) in Economics (in Italian).

- Spring 2016, Teaching Assistant for Applied Mathematics, BSc (Laurea di I livello) in Economics (in Italian).

At the LIUC – Università Cattaneo, in Castellanza (Italy)

- Fall 2017, Calculus I and II, BSc (Laurea di I livello) in Industrial Engineering (in Italian, main lecturer).

- Fall 2017, Mathematics for Business, Economics and Finance, BSc (Laurea di I livello) in Economics (in English, main lecturer).

- Spring 2017, Mathematics for Business, Economics and Finance, BSc (Laurea di I livello) in Economics (in Italian, lecturer).
- Fall 2016 and spring 2017, Mathematics for Business, Economics and Finance, BSc (Laurea di I livello) in Economics (in English, lecturer).
- Fall 2016 and spring 2017, Calculus I and II, BSc (Laurea di I livello) in Industrial Engineering (in Italian, 104 hours, main lecturer).
- Spring 2016, Mathematics for Business, Economics and Finance, BSc (Laurea di I livello) in Economics (in Italian, lecturer).
- Fall 2015 and spring 2016, Calculus I and II, BSc (Laurea di I livello) in Industrial Engineering (in Italian, lecturer).
- Fall 2015, Pre-course in Calculus for Engineers, BSc (Laurea di I livello) in Industrial Engineering (in Italian, main lecturer).

At the Università degli Studi dell'Insubria, in Varese (Italy)

- Fall 2023, Game Theory, BSc (Laurea di I livello) in Economics and Management (in Italian, CFU 6, 40 hours, main lecturer).
- Fall 2022, Game Theory, BSc (Laurea di I livello) in Economics and Management (in Italian, CFU 6, 40 hours, main lecturer).
- Fall 2021, Game Theory, BSc (Laurea di I livello) in Economics and Management (in Italian, CFU 6, 40 hours, main lecturer).
- Fall 2020, Game Theory, BSc (Laurea di I livello) in Economics and Management (in Italian, CFU 6, 40 hours, main lecturer).
- Fall 2019, Game Theory, BSc (Laurea di I livello) in Economics and Management (in Italian, CFU 6, 40 hours, main lecturer).
- Fall 2018, Game Theory, BSc (Laurea di I livello) in Economics and Management (in Italian, CFU 6, 40 hours, main lecturer).
- Fall 2017, Games and Decisions, BSc (Laurea di I livello) in Economics and Management (in Italian, CFU 6, 40 hours, main lecturer).
- Fall 2016, Games and Decisions, BSc (Laurea di I livello) in Economics and Management (in Italian, CFU 6, 40 hours, main lecturer).
- Fall 2016, Mathematics II for Economics, BSc (Laurea di I livello) in Economics and Management (part-time) (in Italian, CFU 6, 40 hours, main lecturer).
- Fall 2015, Mathematics II for Economics, BSc (Laurea di I livello) in Economics and Management (part-time) (in Italian, CFU 6, 40 hours, main lecturer).

At the Ural Federal University, Department of Applied Mathematics, in Yekaterinburg (Russia)

- Spring 2014, Economic Dynamics (one-week intensive course, Invited Lecturer), PhD in Applied Mathematics.

At the Università Politecnica delle Marche, in Ancona (Italy)

- Fall 2014, Teaching Assistant in Portfolio Theory, MSc (Laurea Magistrale) in Finance.
- Fall 2014, Teaching Assistant in Financial modeling, MSc (Laurea Magistrale) in Finance.
- Fall 2014, Teaching Assistant in Quantitative Methods for Management, MSc (Laurea Magistrale) in Management.

At the Università degli Studi di Urbino Carlo Bo, in Urbino (Italy)

- Spring 2014, Teaching Assistant in Financial Mathematics, BSc (Laurea di I livello) in Economics.
- Spring 2013, Teaching Assistant in Quantitative Methods Applied to Management, MSc (Laurea Magistrale) in Economics.
- Fall 2011, Teaching Assistant in Mathematical Methods for Economics and Finance, MSc (Laurea Magistrale) in Economics.

- Fall 2010, Teaching Assistant in Mathematical Methods for Economics and Finance, MSc (Laurea Magistrale) in Economics.

THESIS SUPERVISOR

- 3 theses on Quantitative-Finance topics **(**@Catholic University of Sacred Heart**).**
- More than 50 theses on Quantitative-Finance topics **(**@University of Pisa**).**
- More than 20 theses on Game Theory **(**@University of Insubria**).**
- 1 thesis on Asset Pricing Models **(**@LIUC – Università Cattaneo**).**

ACTIVITIES FOR THIRD MISSION OF THE UNIVERSITY SYSTEM

- 26/03/2021, Speaker at the "The Butterfly Effect" - annual meeting of *Giovani Imprenditori di Confindustria Nord Est* (30 minutes, venue: Verona).
- 27/02/2017 – 9/03/2017, Mini Course of Mathematics for Economics and Finance, for high school students (8 hours, venue: LIUC – Università Cattaneo).
- 15/02/2016 – 26/02/2016, Mini Course of Mathematics for Economics and Finance, for high school students (8 hours, venue: LIUC – Università Cattaneo).
- 15/02/2016 – 26/02/2016, Mini Course of Mathematics for Economics and Finance, for high school students (8 hours, venue: LIUC – Università Cattaneo).

SERVICE

Member of the Editorial Board: Associate Editor for *Journal of Difference Equations and Applications (Taylor & Francis).*

Member of the Advisory Board: Advisory Editor for *Communications in Nonlinear Science and Numerical Simulation (Elsevier).*

Member of the Executive Committee: Italian Society for Chaos and Complexity (S.I.C.C.).

Lead Guest Editor: Special Issue *`Discrete time dynamic modelling in economics finance and social sciences'* for the journal Decisions in Economics and Finance (in progress). Special Issue '*Stability and Bifurcations in Nonlinear Economic Systems'* in Decisions in Economics and Finance, 2018, volume 41, issue 2, 91--533.

Guest Editor: Special Issue *`Climate change and green transition: The role of expectations, bounded rationality, heterogeneous agents and nonlinear dynamics* for the journal Energy Economics (open in Sept 2024). Special Issue *`Nonlinear Dynamics and Game-Theoretic Modeling in Economics and Finance'* for the journal Annals of Operations Research (in progress). Special Issue '*Nonlinear Models and Tools in Economics, Finance and Social Sciences'* in Communications in Nonlinear Science and Numerical Simulation. Special Issue '*Nonlinear Dynamics in Economic Modelling'* in Decisions in Economics and Finance, 2021, volume 44, issue 2, 458—779

. Special Issue '*Nonlinear Economic Dynamics 2019: Special Issue on the 11-th NED conference, Kyiv, Sept. 2019 (NED-19)'* in Journal of Economic Interaction and Coordination, 2022, volume 17, issue 1. Special Issue '*Dynamics Models in Economics and Social Sciences'* in Chaos, Solitons & Fractals, 2020, 132, 109523.

Co-Editor: Qualitative Theory of Dynamical Systems, Tools and Applications for Economic Modelling. Lectures given at the COST Training School on New Economic Complex Geography at Urbino, Italy, 17-19 September 2015. Springer Proceedings in Complexity.

Organization of Scientific Events: Organizer of the "*Mini-Workshop: Nonlinear Dynamics and Economics Applications*", at Università Cattolica del Sacro Cuore, Milan, 27/10/2023. Co-organizer (with Iryna Sushko) of the stream of special sessions "*Dynamics of Smooth and Nonsmooth Maps: Theory and Applications"*, at the 28th International Conference on Difference Equations and Applications (ICDEA 2023) held in Phitsanulok, Thailand. Organizer of the 18th SICC International Tutorial Workshop "Topics in Nonlinear Dynamics", title of the event: "*Smooth and Nonsmooth Maps: Theory, Numerical Methods, and Applications to Economics and Finance*", Catholic University of Sacred Heart, Milan, June 1, 2023. Main organizer of the international conference *'Progress on Difference Equations (PODE2023)'* that took place from 29th to 31st May 2023 at the Catholic University of Sacred Heart in Milan. Co-organizer of the invited session: *Risk management in Finance* at the 31st European Conference on Operational Research - EURO 2021, Greece (11-07-2021/14-07-2021). Co-organizer of the stream of special sessions '*Nonlinear Economic Dynamics (ND)'* at the A.M.A.S.E.S. Annual Conference, Perugia, Italy (9-09-2019/11-09-2019). Member of the Organizing Committee of the MDEF Workshop, Urbino, Italy (8-09-2022/10-09-2022).

Member of the Organizing Committee of the MDEF Workshop, Urbino, Italy (5-09-2018/7-09-2018). Co-organizer of the special session '*Nonlinear Economic Dynamics (ND)'* at the A.M.A.S.E.S. Annual Conference, Napoli, Italy (13-09-2018/15-09-2018). Co-organizer of the special session '*Dynamic models in economics and finance (DF)'* at the A.M.A.S.E.S. Annual Conference, Cagliari, Italy (14-09-2017/16-09-2017).

Member of Scientific Committee: International workshop "Optimal Timing and Control to Eradicate Firms' Polluting Activities: The Roles of Fiscal and Monetary Policies", University of Urbino, June 3-4, 2024. International conference *'Progress on Difference Equations (PODE2023)'*, Catholic University of Sacred Heart, Milan, May 29-31, 2023.

Journal Referee: *Annals of Operations Research, Decisions in Economics and Finance, Journal of Economic Behavior & Organization; Journal of Economic Dynamics and Control; Journal of Evolutionary Economics; Journal of Economic Interaction and Coordination, Macroeconomic Dynamics, Computational Economics; Decisions in Economics and Finance; The European Journal of Finance; Water Resources Management; IMA Journal of Management Mathematics; Management Decision; Applied Mathematics and Computation; Physica A: Statistical Mechanics and its Applications; Mathematics and Computers in Simulation; Communications in Nonlinear Science and Numerical Simulation; Chaos, Solitons & Fractals; Journal of Information and Optimization Sciences; Chaos: An Interdisciplinary Journal of Nonlinear Science; International Journal of Bifurcation and Chaos; Journal of Difference Equations and Applications; Fuzzy Sets and Systems.*

Professional Affiliations: International Association for Mathematics and Computers in Simulations (I.M.A.C.S.), International Society of Difference Equations (I.S.D.E.), Comitato dei Matematici Applicati in Toscana (COMAT), Italian Association of Mathematics Applied to Economic and Social Sciences (A.M.A.S.E.S.), Italian Society for Chaos and Complexity (S.I.C.C.), Game Theory Society.

Expert Evaluator of Research Projects: Appointed (for the period 2023-2025) as Evaluator with Mohammed VI Polytechnique for Reviewing Research Projects.

Web Manager and Social Media Manager: Appointed (for the period 2023-2025) by International Society of Difference Equations (http://isdeds.com/home.html).

GUEST VISITING PROFESSORS:

David Goldbaum (from UTS - Sydney), from 13 Sept to 30 Oct, 2023.

Anastasiia Panchuk (from NASU - Kiev), from 21 Oct to 18 Nov, 2023.

Malgorzata Klaudia Guzowska (from Institute of Econometrics and Statistics at the University of Szczecin), from 23 Oct to 28 Oct, 2023.

Anastasiia Panchuk (from NASU - Kiev), from 21 Oct to 18 Nov, 2022.

Mikhail Anufriev (from UTS - Sydney), from 28 May to 2 Jun, 2022.

Mikhail Pakhnin (from European University at St. Petersburg), from 16 Sept to 20 Sept, 2018.

Philipp Harting (from Bielefeld University), from 17 Sept to 22 Sept, 2017.

INVITED SPEAKER AT CONFERENCES, WORKSHOPS, SEMINARS AND SCHOOLS:

2023

23-11-2023 – I presented (**invited**) the paper: "Ambiguity aversion as a route to randomness in a duopoly game", at the Tinbergen Institute's Complexity in Economics Seminar Series, Amsterdam.

06-11-2023 – 3-hours seminar (**invited**): "Introduction to Quantitative Finance", University of Pisa, Pisa, Italy. Seminar commissioned by the Master in Risk Management of the University of Pisa.

2022

9-11-2022 – Lunch seminar (**invited**): "Ambiguity aversion as a route to randomness in a duopoly game", at the Mathematics and Statistics Seminar Series, University of Bergamo, Bergamo, Italy.

2021

5-11-2021 – Seminar (**invited**) at the 16th SICC International Tutorial Workshop *Topics in nonlinear dynamics*. Title of the seminar: "Explaining the dynamics of financial markets via nonlinear dynamical systems" (online version).

2019

27-11-2019 – 4-hours seminar (**invited**) on: “Quantitative Finance”, at the Università Politecnica delle Marche, Ancona, Italy.

27-5-2019/30-5-2019 – I presented (as **Keynote Speaker**) the paper: “Piecewise-Smooth Models of Residential Segregation”, at the International Conference Progress on Difference Equations – PODE 2019, hosted by the Instituto Politécnico de Bragança. Bragança, Portugal.

2018

5-09-2018 – Talk (as **Keynote Speaker**) on “Evolutionary Models with Applications in Economics and Finance”, at the 9th International Scientific Conference Managing and Modelling of Financial Risks, Ostrava, Czech Republic.

2017

19-10-2017 – Seminar (**invited**): “Pricing of Credit Default Swaps (hybrid models)”, University of Bologna, Rimini, Italy.

17-07-2017/21-07-2017 – Additional lecturer (**invited**) at the Summer School in Economics and Finance (SSEF) Canazei, Italy.

2015

10-12-2015/11-12-2015 – **Invited speaker** at the “Social Change as a Complex Dynamical System Workshop”, Uppsala, Sweden.

2013

06-27-2013/06-28-2013 – I presented (**invited**) the paper: “Multi-species exploitation with evolutionary switching of harvesting strategies”, at the International Workshop on: Nonlinear Dynamics, Agent-based Models, and Complex Evolving Systems in Economics, Bologna, Italy.

04-04-2013/04-06-2013 – I presented (**invited**) the paper: “Multi-species exploitation with evolutionary switching of harvesting strategies”, at the Workshop on Theoretical Approaches and Related Mathematical Methods in Biology, Medicine and Environment, Milan, Italy.

01-28-2013 – I presented (**invited**) the paper: “Does the “uptick rule” stabilize the stock market? Insights from Adaptive Rational Equilibrium Dynamics”, at the Sydney Agents Seminars, Sydney, Australia.

PRESENTATIONS AT CONFERENCES, WORKSHOPS, SEMINARS AND SCHOOLS:

2023

20/22-09-2023 – I presented the paper: “A Financial Market of Heterogeneous Expectations, Mean-Semivariance Behavior and Adaptive Rational Equilibrium Dynamics”, at the XLVII A.M.A.S.E.S. Annual Conference, Bicocca University, Milan, Italy.

14/15-09-2023 – I presented the paper: “Border collision bifurcations in a piecewise linear duopoly model”, at the 21st IMACS (International Association for Mathematics and Computers in Simulation) World Congress, University of Rome ’La Sapienza’, Italy.

11/12-09-2023 – I presented the paper: “A Financial Market of Heterogeneous Expectations, Mean-Semivariance Behavior and Adaptive Rational Equilibrium Dynamics”, at the 14th international conference Financial Management of Firms and Financial Institutions, VSB-Technical University of Ostrava, Ostrava, Czech Republic.

17/21-07-2023 – I presented the paper: “Border collision bifurcations in a piecewise linear duopoly model”, at the 28th International Conference on Difference Equations and Applications, Phitsanulok,Thailand.

29-06/1-07-2023 – I presented the paper: “Exchange rate dynamics and central bank interventions: On the (de)stabilizing nature of targeting long-run fundamentals interventions”, at the 5th Behavioral Macroeconomics Workshop, Bamberg, Germany.

19/21-06-2023 – I presented the paper: “Exchange rate dynamics and central bank interventions: On the (de)stabilizing nature of targeting long-run fundamentals interventions”, at the Nonlinear Economic Dynamics (N.E.D) conference (In memoriam J. Barkley Rosser Jr.), UiA, Kristiansand, Norway.

21/22-04-2023 – Partecipation at “El Summathon comenzará el 21 de abril de 2023, a las 15:00 y finalizará el 22 de abril de 2023 a las 14:00. El evento se celebrará en la ETSI Caminos, Canales y

Puertos, Edificio Moncloa, Ciudad Universitaria" (SSERIES Summathon 2023 – EELISA – European University), Madrid, Spain.

2022

8/10-09-2022 – I presented the paper: "Exchange rate dynamics and central bank interventions: On the (de)stabilizing nature of targeting long-run fundamentals interventions", at the Eleventh M.D.E.F. Workshop, Urbino, Italy.

5-09-2022 – I presented the paper: "Exchange rate dynamics and central bank interventions: On the (de)stabilizing nature of targeting long-run fundamentals interventions", at the Eleventh M.M.F.R. Conference, Ostrava, Czech Republic.

18/22-07-2022 – I presented the paper: "Insights on the Dynamics of a Piecewise-Linear Model for the Exchange Rate", at the 27th International Conference on Difference Equations and Applications (ICDEA 2022), held at Centrale Supélec in Gif-sur-Yvette, Paris, France.

3/6-07-2022 – I presented the paper: "A hazard rate model for pricing CDS spreads", at the 32sd EURO conference, held at Aalto University, Espoo, Finland.

22/24-06-2022 – I presented the paper: "Exchange rate dynamics and central bank interventions: On the (de)stabilizing nature of targeting long-run fundamentals interventions", at the 25th Annual Workshop on Economic Science with Heterogeneous Interacting Agents (WEHIA), held at University of Catania,Catania, IT.

14/16-06-2022 – I presented the paper: "Ambiguity aversion as a route to randomness in a duopoly game", at the 23rd European Conference on Iteration Theory (ECIT), Wien, Austria.

2021

13-09-2021/15-09-2021 – Talk on "A duopoly game with robust players and adaptive expectations", at the 12th International Conference on Nonlinear Economic Dynamics (NED 2021) hosted by the Catholic University of Sacred Heart, Italy.

6-09-2021 – Talk on "CDS Pricing with Stochastic Recovery Rate", at the 13th International Conference on Financial Management of Firms and Financial Institutions 2021 organized and hosted by the Faculty of Economics of VSB-Technical University of Ostrava, Czech Republic.

26-07-2021/30-07-2021 – I presented the paper: "Chaos, Border Collisions and Stylized Empirical Facts in an Asset Pricing Model with Heterogeneous Agents", at the 26th International Conference on Difference Equations and Applications (ICDEA 2021) organized by the University of Sarajevo, Sarajevo – Bosnia and Herzegovina (online version).

19-07-2021/23-07-2021 – I presented the paper: "Insights on the Theory of Robust Games", at the 6th World Congress of the Game Theory Society - GAMES 2020/21 organized by the Institute of Economics, Centre for Economic and Regional Studies, Hungarian Academy of Sciences (CERSHAS), Budapest – Hungary (online version).

11-07-2021/14-07-2021 – I presented the paper: "A hybrid credit-risk model with stochastic recovery rate", at the 31st European Conference on Operational Research - EURO 2021 organized by University of West Attica, Athens – Greece (online version).

16-06-2021/18-06-2021 – I presented the paper: "Currency manipulation and currency wars: Analysing the dynamics of competitive central bank interventions", at the 27th International Conference Computing in Economics and Finance organized by Keio University – Japan (online version).

2020

5-02-2020 – Talk on "Dynamics of offshoring and reshoring in a two-country model", at the Research-Café Seminar organized by the Faculty of Economics of the VSB-TUO, Ostrava, Czech Republic.

2019

9-09-2019/11-09-2019 – I presented the paper: "Offshoring, reshoring, unemployment and wage dynamics in a two-country evolutionary model", at the A.M.A.S.E.S. Annual Conference, Perugia, Italy.

3-09-2019 – I presented the paper: "Modeling CDS spreads: A comparison of some hybrid approaches", at the 12th International Scientific Conference on Financial Management of Firms and Financial Institutions, Ostrava, Czech Republic.

30-06-2019/6-07-2019 – I presented the paper: "Nonlinear dynamics in a robust Cournot model", at the 19th Annual SAET (Society for the Advancement of Economic Theory) conference, Ischia, Italy.

27-06-2019/28-06-2019 – I presented the paper: "Nonlinear dynamics in a robust Cournot model", at the ICDEA (25th International Conference on Difference Equations and Applications), held at University College London, London, UK.

24-06-2019/26-06-2019 – I presented the paper: "Offshoring, reshoring, unemployment and wage dynamics in a two-country evolutionary model", at the 24th Annual Workshop on Economic Science with Heterogeneous Interacting Agents (WEHIA), held at City University of London, London, UK.

7-5-2019 – Talk on "Evolutionary modeling with fast and slow dynamics: An application to commercial fishing in the Adriatic Sea", at the Research-Café Seminar organized by the Faculty of Economics of the VŠB-TUO, Ostrava, Czech Republic.

2018

25-10-2018/27-10-2018 – I presented the paper: "Offshoring, reshoring, unemployment and wage dynamics in a two-country evolutionary model", at the at the 59ª Riunione Scientifica Annuale (RSA) by the Società Italiana degli Economisti S.I.E. (I presented in the Special Session organized with A.M.A.S.E.S.), Bologna, Italy.

13-09-2018/15-09-2018 – I presented the paper: "A Cournot duopoly model with robust players", at the A.M.A.S.E.S. Annual Conference, Napoli, Italy.

6-09-2018/8-09-2018 – I presented the paper: "A Cournot duopoly model with robust players", at the Tenth M.D.E.F. Workshop, Urbino, Italy.

3-07-2018/6-07-2018 – I presented the paper: "Robust games: theory and application to a Cournot duopoly model", at the 14th Viennese Conference on Optimal Control and Dynamic Games, Vienna, Austria.

19-06-2018/21-06-2018 – I presented the paper: "Residential Segregation: The Role of Inequality and Housing Subsidies", at the 24th International Conference on Computing in Economics and Finance, Milan, Italy.

21-05-2018/25-05-2018 – I presented the paper: "A piecewise smooth model of evolutionary game for residential mobility and segregation", at the 24th International Conference on Difference Equations and Applications, Dresden, Germany.

2017

14-09-2017/16-09-2017 – I presented the paper: "Robust games: Theory and application to a Cournot duopoly model", at the A.M.A.S.E.S. Annual Conference, Cagliari, Italy.

7-09-2017/9-09-2017 – I presented the paper: "A Schelling-type evolutionary model of residential segregation: the role played by income inequalities and housing subsidies", at the Tenth International Conference on Nonlinear Economic Dynamics (NED 2017), Pisa, Italy.

23-06-2017/25-06-2017 – I presented the paper: "Heterogeneous behavioural rules in quantity-setting oligopolies with boundedly rational firms: A spiteful firm plays the Walrasian equilibrium", at the 22nd Annual Workshop on Economic Science with Heterogeneous Interacting Agents (WEHIA), Milan, Italy.

29-05-2017/31-05-2017 – I presented the paper: "An evolutionary generalization of the Schelling's neighbourhood-tipping model: Inequality and segregation", at the conference Progress on Difference Equations (PODE), Urbino, Italy.

2016

15-09-2016/17-09-2016 – I presented the paper: "Walrasian versus Cournot behavior in an oligopoly of boundedly rational firms", at the A.M.A.S.E.S. Annual Conference, Catania, Italy.

12-07-2016/15-07-2016 – I presented the paper: "Robust and optimistic games with polyhedral uncertainty sets", at the 17th International Symposium on Dynamic Games and Applications, Urbino, Italy.

23-06-2016/25-06-2016 – I presented the paper: "Walrasian versus Cournot behavior in an oligopoly of boundedly rational firms", at the Ninth M.D.E.F. Workshop, Urbino, Italy.

26-05-2016/27-05-2016 – I presented the paper: "A segregation model of Schelling type with heterogeneous agents and adaptive dynamics", at the Final Conference COST Action IS1104 - The EU in the New Complex Geography of Economic Systems: Models, Tools and Policy Evaluation (GeComplexity), Heraklion (Crete), Greece.

2015

17-09-2015/19-09-2015 – Speaker at the "Training School on Qualitative Theory of Dynamical Systems, Tools and Applications", Urbino, Italy.

12-09-2015 – I presented the paper: "Evolutionary competition among heuristics in oligopoly games", at the A.M.A.S.E.S. Annual Conference, Padova, Italy.

25-06-2015/27-06-2015 – I presented the paper: "An evolutionary Cournot model with heterogeneous firms", at the 9th International Conference on Nonlinear Economic Dynamics (NED 2015) at Chuo University, Tokyo, Japan (invited).

2014

18-09-2014/20-09-2014 – I presented the paper: "Entry limitations and heterogeneous tolerances in a Schelling-like segregation model", at the Eighth M.D.E.F. Workshop, Urbino, Italy.

4-09-2014 – I presented (**in plenary session**) the paper: "The role of constraints in a segregation model: The symmetric case", at the A.M.A.S.E.S. Annual Conference, Reggio Calabria, Italy.

2013

10-11-2013 – I presented the paper: "Does the "uptick rule" stabilize the stock market? Insights from Adaptive Rational Equilibrium Dynamics", Department of Mathematics, University of Bologna, Italy (invited).

09-11-2013/09-13-2013 – I presented the paper: "Does the "uptick rule" stabilize the stock market? Insights from Adaptive Rational Equilibrium Dynamics", at the school organized by S.I.C.C., Urbino, Italy.

09-05-2013/09-07-2013 – I presented (**in plenary session**) the paper: "Does the "uptick rule" stabilize the stock market? Insights from Adaptive Rational Equilibrium Dynamics", at the A.M.A.S.E.S. Annual Conference, Stresa, Italy.

07-10-2013/07-12-2013 – I presented the paper: "Exploitation of renewable resources with differentiated technologies: An evolutionary analysis", at the Nineteenth International Conference on Computing in Economics and Finance (The Society for Computational Economics), Vancouver, Canada.

07-4-2013/07-6-2013 – I presented the paper: "Evolutionary Cournot games with different information sets and imitation costs", at the Eighth International Conference on Nonlinear Economic Dynamics (NED 2013), Siena, Italy.

2012

09-20-2012/09-22-2012 – I presented the paper: "Does the "uptick rule" stabilize the stock market? Insights from Adaptive Rational Equilibrium Dynamics", at the Seventh M.D.E.F. Workshop, Urbino, Italy.

09-13-2012/09-15-2012 – Talk on "Rumors spreading in small communities: A Markov chain approach", at the A.M.A.S.E.S. Annual Conference, Vieste, Italy.

06-25-2012/07-01-2012 – I presented the paper: "Multi-species exploitation with evolutionary switching of harvesting strategies" at Sixth World Congress of Nonlinear Analysts (WCNA 2012), Athens, Greece.

05-30-2012/06-02-2012 – I presented the paper: "A prey-predator fishery model with endogenous switching of harvesting strategy" at Twelfth Viennese Workshop on Optimal Control, Dynamic Games and Nonlinear Dynamics, Vienna, Austria.

2011

12-06-2011/12-07-2011 – Talk on "Optimal control theory with economic applications" at the University of Urbino Carlo Bo, Department of Economics and Quantitative Methods, Urbino, Italy.

11-08-2011/11-09-2011 – Talk on "Analysis and simulations of nonlinear dynamical models in economics and finance" at the University of Urbino Carlo Bo, Department of Economics and Quantitative Methods, Urbino, Italy.

09-15-2011/09-17-2011 – Talk on "An evolutionary model of fisheries with interacting species" at the A.M.A.S.E.S. Annual Conference, University of Pisa, Pisa, Italy.

06-01-2011/06-03-2011 – Talk on "Common-pool exploitation of renewable resources under imitation dynamic" at the Seventh International Conference on Nonlinear Economic Dynamics (NED 2011), Technical University of Cartagena, Cartagena, Spain.

2010

11-28-2010 – Talk on “Ordinary Differential Equations using MATLAB” at the University of Urbino Carlo Bo, Department of Economics and Quantitative Methods, Urbino, Italy.

11-27-2010 – Talk on “Solution of Ordinary Differential Equations” at the University of Urbino Carlo Bo, Department of Economics and Quantitative Methods, Urbino, Italy.

09-03-2010 – Talk on “Urban traffic management via environmental options: An evolutionary game model” at the A.M.A.S.E.S. Annual Conference, University of Macerata, Macerata, Italy.

07-02-2010 – Talk on “Numerical methods to investigate the global stability of dynamic models in economics, using MATLAB)” at the Tutorial Workshop on Discrete Dynamical Systems and Applications (D.D.S.A.), University of Urbino Carlo Bo, Urbino, Italy.

06-21-2010/06-25-2010 – Talk on “Urban traffic management via environmental options: An evolutionary game model” at the 2010 S.I.M.A.I. (Joint S.I.M.A.I./S.E.M.A.) Conference on Applied and Industrial Mathematics, University of Cagliari, Cagliari, Italy.

05-4-2010 – Talk on “Ordinary Differential Equations using MATLAB” at the University of Urbino Carlo Bo, Department of Economics and Quantitative Methods, Urbino, Italy.

04-27-2010 – Talk on “Solution of Ordinary Differential Equations” at the University of Urbino Carlo Bo, Department of Economics and Quantitative Methods, Urbino, Italy.

2008

11-28-2008 – Talk on “Soft Computing, Gis and Data Warehouse” at the Workshop on Business Intelligence, University of Urbino Carlo Bo, Urbino, Italy.

PARTICIPATION IN SUMMER SCHOOLS

2011

09-28-2011/09-30-2011 – I attended the course “Analysis of Innovation and Competition Processes”, Politecnico di Milano, Milan, Italy.

09-21-2011/09-23-2011 – I attended the course “International Tutorial Workshop on Topics in Nonlinear Dynamics (Nonlinear Dynamics of Piecewise-smooth Dynamical Systems)”, University of Urbino Carlo Bo, Urbino, Italy.

2010

09-28-2010/09-30-2010 – I attended the course “Analysis of Complex Networks: Structure and Dynamics” (ACN2010), Politecnico di Milano, Milan, Italy.

06-30-2010/07-03-2010 – I attended the “Tutorial Workshop on Discrete Dynamical Systems and Applications” (DDSA), University of Urbino Carlo Bo, Urbino, Italy.

2008

09-10-2009/09-11-2009 – I attended the “International Workshop on Nonlinear Maps and their Applications” (NOMA'09), University of Urbino Carlo Bo, Urbino, Italy.

Milan, January, 2024

Davide Radi

DAVIDE RADI
Universita' Cattolica del Sacro Cuore
08.01.2024 07:00:17 GMT+00:00