Magda Fontana

✉ magda.fontana@unito.it • 🌐 www.magdafontana.com

Personal information

Affiliation: Department of Economics and Statistics " Cognetti De Martiis", University of Turin, Lungo Dora Siena 100 A, 10153 Turin, Italy

Tel: +390116703888

ORCID: 0000-0002-9504-2080

Scientific National Qualification

- For the position of **Full professor** in the field: **Economic Policy (13/A2)** (expiring date 2033)
- For the position of **Associate professor** in the field: **Economic Policy (13/A2)** (expiring date 2020)
- For the position of **Associate professor** in the field: **Economics (13/A1)** (expiring date 2024)

Employment

- **Associate Professor of Economic Policy** at the Department of Economics and Statistics "Cognetti De Martiis", University of Turin, Turin, Italy (since 1/05/2020)
- **Assistant Professor of Public Economics** at the Department of Economics and Statistics "Cognetti De Martiis", University of Turin, Turin, Italy (since 1/11/2001)
- **Director of Master in Data Science for Complex Economic Systems**, Collegio Carlo Alberto and University of Turin (2016-2019)
- **Director of Master in Economics and Complexity**, Collegio Carlo Alberto and University of Turin (since 2013-16)
- **Senior Researcher at Despina Big Data Lab**, University of Turin (since 2015)
- **Researcher at E-lab - CS DC Complexity Science Digital Campus**, Complex Systems Society and UNESCO (since 2014)
- **Post-doc Research Fellowship** University of Turin (1998-2000)

Maternity Leaves

- From August 2000 to July 2001 full-time mother
- From November 2002 to September 2003 full-time mother

Education

- DATE: 1/11/95 – 1/1/99

TITLE OF QUALIFICATION: Dottorato in Studi Economici Europei/ **Ph.D in European Economic Studies**
SUBJECT: Market and Institutions an Agent-based model
NAME AND TYPE OF ORGANISATION PROVIDING EDUCATION: University and Polytechnic of Turin

o DATE: 25/9/96 – 30/9/97
TITLE OF QUALIFICATION: **Master in Political Economy**
NAME AND TYPE OF ORGANISATION PROVIDING EDUCATION: University of East Anglia, School of Economic and Social Studies

o DATE: April 1995
TITLE OF QUALIFICATION: **Advanced Degree in Law** (110/110 awarded with laude and distinction)
SUBJECT: Institutions and Organizations: market, firms, and development
NAME AND TYPE OF ORGANISATION PROVIDING EDUCATION: University of Turin

International Recognition

o **Chair FUNDEP/IEAT** for the project "Multidisciplinarity, Interdisciplinarity, and Transdisciplinarity: definitions, measurement, and effectiveness" Federal University of Minas Gerais **Institute of Transdisciplinary Advanced Studies**, 2024.

o **Invited Speaker** "Does economics have to change after the Covid-19 crisis? A discussion with pluralistic perspectives" organized by the Department of Economics at University of Zurich and **Plurale Ökonomik Zürich**, 2021.

o **Invited speaker** Forecasting the future for sustainable development: New Approaches to Modelling and the Science of Prediction, **INET@OECD**, 2021 (with B.W. Arthur, A. Jaffe, A. Pyka)

o **Invited Speaker Institute for New Economic Thinking** - **YSI Plenary 2020** session on Complexity Economics (with Cesar Hidalgo and Doyne Farmer).

o **Keynote speaker**, **Complex Systems Society**, "Trade runner 2049: Complexity, development, and the future of the economy", Thessaloniki, 2018

o **Keynote speaker**, Colloquium on Institutions and Complexity, Institute for Institutions and Innovation, **University of Bremen**, Bremen 2016.

o **Research coordinator** of the Complexity Economics Area, **European Association for Evolutionary Political Economy**

o **Keynote speaker**, **15th Conference of the Schumpeter Society,** Foundation of Economic Change: Behavior, Interaction and Aggregate Outcomes, Jena, 2015.

o **Invited Speaker** Connected Countries: Italian- Israeli Roundtable on Networks, Special Session of **NetSci-X 2017**, Tel Aviv, January 2017.

o **Researcher at the Patterns and Processes in Organizational Networks group**, **Institute for Advanced Studies, Hebrew University of Jerusalem**, 2012

Selected Seminars

- **Invited speaker** Does economics have to change after the Covid-19 crisis? A discussion with pluralistic perspectives, **University of Zurich**, 2021

- **Invited speaker** , Tracking innovation trajectories in the complex economy. Network Analysis and big data for risk mitigation, **INET-EAEPE Colloquium**, Turin, 2019

- **Invited speaker**, GREDEG-CNRS, **Université de Nice-Sophia Antipolis**, Seminar on Complexity Economics, 2019

- **Invited Speaker** , Joint Research Center, **EU Commission**, Ispra, May 2017.

- **Invited Speaker** , Joint Research Center, **EU Commission**, Petten, July 2016.

- **Invited speaker**, Agent-based modelling and networks in Energy Market, **European Academy, Bolzano** , December 2016.

- **Invited speaker**, Economic Futures, Imaginaries, Narratives and Calculations, **Max Planck Institute for the Study of Societies**, Paris, 2016.

- **Invited researcher** Joint Research Center, **EU Commission**, Institute for Energy and Transport , Petten, the Netherlands December 2015

- **Invited speaker**, Studies in Complexity, **Scuola superiore di studi universitari e di perfezionamento Sant'Anna**, Pisa, 2015.

- **Invited Speaker,** Seminar on "Specialization in mainstream economics", **Max Planck Institute of Economics**, Jena, 2014

- **Invited speaker**, Cabdyn Complexity Centre, **Institute for New Economic Thinking**, University of Oxford, 2012

- **Invited speaker**, "Methodological and Theoretical Assessment of Complexity Economics" Esalen Conference on Complexity Economics, **Institute for New Economic Thinking** , University of Oxford, Big Sur, CA, 2012

- **Invited speaker** "The physics of conflict and competition", Galway, Department of Economics **National University of Ireland**, Galway, 2012

- **Invited speaker** ,"Complexity an Interdisciplinary Approach" Racah Department of Physics,Hebrew **University of Jerusalem**, Jerusalem 2012.

Teaching Activity

International Teaching Experiences

- **Winner of an ERASMUS+ grant for teaching mobility, Agent-based modeling** (Advanced Degree in Economics), **Poznan University**, Poznan, May 2018 (20 hours, about 40 students).

- **Invited Professor, Complexity Economics** (PhD course), Economic Policy and Self-Government Department,**Poznan University**, Poznan September 2017 (20 hours, about 30 students)

- **Winner of an Italian-Argentinian Grant for teaching mobility. Public Economics** (First Degree in Economics), **Universidad Nacional de Cordoba**, Argentina, 2006 (30 hours, about 40 students)

-

Phd, Master, Advanced degrees, and First degrees courses

2021-22

- o **Complexity Economics**, Advanced Degree in Economia dell'Ambiente della Cultura e del Territorio since 2014 (36 hours, about 40 students), also attended by the students of the Advanced Degree in Metodi Statistici ed Economici per le Decisioni (36 hours, about 40 students) and Erasmus Mundus + Epog students. The course is held in English
- o **Individual and Organizational Decision Making**, Advanced Degree in Economia, Management e Istituzioni (30 hours, about 15 students. The course is held in English
- o **Storia del Pensiero Economico**, Advanced degree in Giurisprudenza (44 hours, about 10 students).
- o **Politiche pubbliche e dei servizi**, Advanced degree in Società e Sviluppo Locale (20 hours, about 20 students)
- o **Stato e Mercato** Advanced Degree in Scienze Politiche, Economiche, Sociali e delL'amministrazione (60 hours, about 20 students)

2020-21

- o **Complexity Economics**, Advanced Degree in Economia dell'Ambiente della Cultura e del Territorio since 2014 (36 hours, about 40 students), also attended by the students of the Advanced Degree in Metodi Statistici ed Economici per le Decisioni (36 hours, about 40 students) and Erasmus Mundus + Epog students. The course is held in English
- o **Teorie e Modelli Economici**, Advanced Degree in Scienze del Governo (54 hours, about 30 students) School of Political Sciences
- o **Politica Economica**, First Degree in Consulenza del lavoro e gestione delle risorse umane, School of Law (36 hours, about 200 students)

2019-20

- o **Complexity Economics**, Advanced Degree in Economia dell'Ambiente della Cultura e del Territorio since 2014 (36 hours, about 40 students), also attended by the students of the Advanced Degree in Metodi Statistici ed Economici per le Decisioni (36 hours, about 40 students)

2018-9

- o **Complexity Economics**, Advanced Degree in Economia dell'Ambiente della Cultura e del Territorio since 2014 (36 hours, about 40 students), also attended by the students of the Advanced Degree in Metodi Statistici ed Economici per le Decisioni (36 hours, about 40 students).
- o **Agent-based modeling**, Master in Data Science for Complex Economics Systems, also attended by the Phd Students of the Vilfredo Pareto Curriculum in Complexity Economics (20 hours, about 12 students)

2017-8

- o **Complexity Economics**, Advanced Degree in Economia dell'Ambiente della Cultura e del Territorio also attended by the students of the Advanced Degree in Metodi Statistici ed Economici per

le Decisioni (36 hours, about 40 students).

o **Agent-based modeling**, Master in Data Science for Complex Economics Systems, also attended by the Phd Students of the Vilfredo Pareto Curriculum in Complexity Economics (20 hours, about 20 students)

o **Economics**, Advanced Degree in Giurisprudenza (20 hours, about 150 students)

2016-17

o **Complexity Economics**, Advanced Degree in Economia dell'Ambiente della Cultura e del Territorio 4 also attended by the students of the Advanced Degree in Metodi Statistici ed Economici per le Decisioni (36 hours, about 45 students).

o **Agent-based modeling**, Master in Data Science for Complex Economics Systems, also attended by the Phd Students of the Vilfredo Pareto Curriculum in Complexity Economics (20 hours, about 20 students)

o **Economics**, Advanced Degree in Giurisprudenza (20 hours, about 150 students)

2015-16

o **Complexity Economics**, Advanced Degree in Economia dell'Ambiente della Cultura e del Territorio also attended by the students of the Advanced Degree in Metodi Statistici ed Economici per le Decisioni (36 hours, about 45 students).

o **Agent-based modeling**, Master in Data Science for Complex Economics Systems, also attended by the Phd Students of the Vilfredo Pareto Curriculum in Complexity Economics (20 hours, about 20 students)

o **Economics**, Advanced Degree in Giurisprudenza (20 hours, about 150 students)

2014-15

o **Complexity Economics**, Advanced Degree in Economia dell'Ambiente della Cultura e del Territorio also attended by the students of the Advanced Degree in Metodi Statistici ed Economici per le Decisioni (36 hours, about 45 students).

o **Complexity Economics**, Master Complexity Economics, also attended by the Phd Students of the Vilfredo Pareto Curriculum in Complexity Economics (20 hours, about 20 students)

o **Economics**, Advanced Degree in Giurisprudenza (20 hours, about 150 students)

o **Didattica dell'Economia Pubblica**, Tirocinio Formativo Attivo, (Training program for high school teachers) (16 hours, about 30 students)

2013-14

o **Complexity Economics**, Master in Economics and Complexity, also attended by the Phd Students of the Vilfredo Pareto Curriculum in Complexity Economics (20 hours, about 12 students)

o **Local Government and Fiscal Federalism**, First Degree in Scienze dell'Amministrazione e Consulenza del Lavoro, (36 hours, about 20 students)

o **Didattica dell'Economia Pubblica**, Tirocinio Formativo Attivo, (Training program for high school teachers) (16 hours, about 30 students)

2012-13

o **Public Economics**, Advanced Degree in Giurisprudenza (42 hours, 80 students)

- **Complexity Economics**, Master in Economics and Complexity, also taken by the Phd Students of the Vilfredo Pareto Curriculum in Complexity Economics (20 hours 12 students)
- **Didattica dell'Economia Pubblica**, Tirocinio Formativo Attivo, (Training program for high school teachers) (16 hours, about 30 students)

2011-12

- **Research leave**

2010-11
- **Public Economics**, First Degree in Scienze Giuridiche, Sede di Cuneo (40 hours, about 50 students)
- **Economics**, First Degree in Scienze del Diritto Italiano ed Europeo, (60 hours, 150 students)
- **Economics**, Advanced Degree in Giurisprudenza, (60 hours, about 150 students)
- **Complexity Economics**, Vilfredo Pareto Doctorate in Economics (12 hours, about 10 students)

2009-10

- **Public Economics**, First Degree in Scienze Giuridiche, Sede di Cuneo (40 hours, about 50 students)
- **Complexity Economics**, Vilfredo Pareto Doctorate in Economics (12 hours, about 10 students)

2008-09

- **Economics**, Advanced Degree in Giurisprudenza, (60 hours, about 200 students)
- **Public Economics**, First Degree in Scienze Giuridiche, Sede di Cuneo (40 hours, about 50 students)
- **History of Complexity Economics**, Vilfredo Pareto Doctorate in Economics (12 hours, about 10 students)

2007-08

- **Economics**, Advanced Degree in Giurisprudenza, (60 hours, about 200 students)
- **Public Economics**, First Degree in Scienze Giuridiche, Sede di Cuneo (40 hours, 50 students)
- **Economics**, First Degree in Giurisprudenza, Sede di Cuneo (40 hours, about 40 students)
- **History of Complexity Economics**, Vilfredo Pareto Doctorate in Economics (12 hours, about 10 students)

2006-07

- **Economics of the Public Sector**, First Degree in Diritto delle Pubbliche Amministrazioni e delle Organizzazioni Internazionali (20 hours, about 150 students)
- **Public Economics**, First Degree in Scienze Giuridiche, Sede di Cuneo (40 hours, about 50 students)

2005-06

- **Statistics**, First Degree in Scienze Giuridiche, Sede di Cuneo (20 hours, 50 students)
- **Economics**, First Degree in Giurisprudenza, Sede di Cuneo (40 hours, about 40 students)
- **Economics**, Advanced Degree in Giurisprudenza, (60 hours, about 200 students)

2004-05

- **Economics**, First Degree in Diritto per le Imprese e le Istituzioni (60 hours, about 400 students)
- **Public Economics**, First Degree in Scienze Giuridiche, Sede di Cuneo (40 hours, about 50 students)

2002-03

- **Public Economics**, First Degree in Scienze Giuridiche, Sede di Cuneo (40 hours, about 50 students)

Teaching evaluation..

Students teaching evaluation always very high. Systematically in the top quartile of the distribution

Administrative and Steering Activities

- Member of the steering organims of **ERASMUS MUNDUS+ EPOG** (since 2020)
- Member of **Commissione Monitoraggio e Riesame** of the Degree in Scienze del Governo, Department of Culture, Politics and Society
- **Responsible for teaching timetable for the MASTER in Economics of the Environment, culture and territory Teaching Committee** member (Collegio dei Docenti) Vilfredo Pareto Doctorate in Economics University of Turin Doctoral School in Human and Social Sciences (since 2014)
- **Deputy Coordinator** of the curriculum Economics & Complexity at Vilfredo Pareto Doctorate in Economics University of Turin - Doctoral School in Human and Social Sciences (2013-2017)
- **Director** of the Master Degree Complexity Economics, Collegio Carlo Alberto and University of Turin (2013-2016)
- **Director** of the Master Degree in Data Science for Complex Economic Systems, Collegio Carlo Alberto and University of Turin (since 2016)
- Member of the **Research Committee** of the Department of Economics and Statistics, University of Turin (since 2014)
- Responsible for **Students Orientation**, Advanced Degree in Economics of the Environment, Culture and Territory (2012)
- Member of the **Statute Committee**, Department of Economics and Statistics, University of Turin (since 2011)
- Member of the **Department Board**, Department of Economics and Statistics, University of Turin (2011-13)

- Responsible for the **organization of Seminars**, Department of Economics and Statistics, University of Turin (2007 and 2005)
- Member of the Committee responsible for the implementation of **University Reform** introduced by the Law n.10, February 2000, n. 30, School of Law, University of Turin (2004-2006) (300 hours)

PhD Supervision

- Azzurra Gigante, - **Interpreting recent institutional economic theory: a theoretical and empirical contribution to Institutional Cognitive Economics** (Vilfredo Pareto Doctorate in Economics)

- Ilaria Bertazzi, **Three essays on Economic and Complex Behaviour** (Vilfredo Pareto Doctorate in Economics)
- Tommaso Panini – **Three Essays on Agent-based modelling and Network Analysis** (Vilfredo Pareto Doctorate in Economics)
- Paolo Racca - **Data Mining and Computational Modelling for Knowledge Discovery in Social Science** (Vilfredo Pareto Doctorate in Economics)
- Martina Iori – **Three Essays on Interdisciplinarity and Novelty in Science and Technology** (Vilfredo Pareto Doctorate in Economics)
- Giulia Chersoni – **Diffusion of smart technologies in the EU** (in collaboration with EURAC) – in progress
- Daniel Fernando De Souza – **Interdisciplinarity and Economic Growth** - in progress
- Velia Bigi - **Urban Flood Defences** (Dottorato Interateneo in Urban and Regional Development, University and Polytechnic of Turin) (co-tutorship)
- Federico Musu (Vilfredo Pareto Doctorate in Economics (in progress)

PhD Committees

Thesis Defense

- 2023 Kevin Wirtz, Phd in Economics, University of Strasburg
- 2019 Carlo Bottai, Doctorate in Economics, University of Turin
- 2017 Andrea Mazzocchetti, Computational Economics and Finance, University of Genova
- 2013 Davoud Taghawi Nejad, Doctorate in Economics, University of Turin
- 2012 Irene Bonafine , Doctorate in Economics, University of Turin

Students Selection

- 2017 Vilfredo Pareto Doctorate in Economics (External Expert - scholarship in Agent-based modelling Network analysis of the electricity market funded by EURAC)
- 2017 Vilfredo Pareto Doctorate in Economics
- 2015 Vilfredo Pareto Doctorate in Economics
- 2014 Vilfredo Pareto Doctorate in Economics

External Examiner

- Mathew Tuxford, "Complexity Economics: A Mechanistic Methodological Framework for Economic Science", Macquarie University, Sydney

First Degree and Advanced Degree Students Supervision

- Since 2001 she has acted as thesis advisor for students graduating in Giurusprudenza (Cuneo and Torino) (**Economics, about 40**, **Public Economics, about 40**), and **Economics of the Public Sector, about 5**), in Economics of the Environment, Culture and Territory (**Complexity Economics, about 15**), and in Metodi Statistici ed Economici per le Decisioni (**Complexity Economics, about 5**)

Academic tutor

- Chikte Aliya, South Africa **Erasmus Mundus EPOG**, a.y. 2020-21
- Mostafa Fariha, Bangladesh, **Erasmus Mundus EPOG**, a.y. 2020-21
- Sofronova Uruidana , Russia **Erasmus Mundus EPOG**, a.y. 2020-21

Editorial and other Scientific Activities

- Member of the **Editorial Board** of Œconomia
- Member of the **Editorial Board** of the Journal of Policy and Complex Systems
- **Editor** of the Book Series in Complexity Economics, Elsevier.
- **Editor** of the Special Issue of Œconomia 2020 vol 10 issue 2, (with A. Kirman, J. Davis, M. Dal Pont Legrand, C. Hédoin), Simulations in Economics: Methodological and Historical Perspectives. DOI: 10.4000/oeconomia.8141
- **Organizer** (with F. Montobbio and P. Racca) of the Special Session on The Geography of Scientific Knowledge, Conference on the Geography of Innovation. Barcelona, 2018.
- **Organizer** (with W. Elsner and T. Heinrich) of the special session on History, definition and theoretical cores of Heterodox Economics, EAEPE Conference 2018, Nice
- **Organizer** (with T. Heinrich, A. Caiani and A. Roventini of the special session on Machine learning, AI, and Robotization: Effects on socio-economic systems and opportunities for economic analysis, EAEPE Conference 2019, Warsaw
- **Scientific Committee** of the Master in Data Science for Business Intelligence, University of Turin
- **Scientific Committee** of the Center for Laboratory Simulations and Experimental Research - CLOSER, University of Turin.
- **Scientific Committee** INET-EAEPE Colloquium, Tracking innovation trajectories in the complex economy. Network Analysis and big data for risk mitigation, Turin, 2019
- **Scientific Committee** INET@OECD Forecasting the future for sustainable development: New Approaches to Modelling and the Science of Prediction, 2021

Participation in Research Projects

- 2017, Winner of a tender (JRC-Petten, JRC/PTT/0052/RC-AMI) for a research on **Socio-economic Drivers of Switching Behaviours in Retail Electricity Markets** (20,000 euros).
- 2017, Research funding from EURAC (PI of the project **Agent-based Modeling of Energy Markets**) to finance a 4-year doctoral grant (108,000 euros).
- PRIN 2007 (Area 13), **Il problema della complessità nella teoria economica: il concetto in differenti contesti storico-analitici**. PI Prof. Roberto Marchionatti.
- PRIN 2002 (Area 13), **Matematica ed economia. Una prospettiva storica**. PI Prof. Roberto Marchionatti.

Advice to Policy Makers and NPOs

- (2023-25) Network analysis for project evaluation "Cultura per Crescere" **Compagnia di Sanpaolo**
- (2021-23) Network analysis for project evaluation "Territori inclusivi" **Compagnia di Sanpaolo**

- o (2021) **Scientific Board of Forwardto**
- o (2021) Expert for the **Centre of Advance Studies of the Joint Research, EU Commission** within the **Computational Social Science for Policy (CSS4P) Project**, with the aim of exploring applications of computational methods in different social sciences domains to address specific policy questions.
- o (2020) Design of evaluation framework and data analysis for the Impact Evaluation Unit of the Collegio Carlo Alberto on the project "Territori Inclusivi" of **Compagnia di Sanpaolo**.
- o (since 2015) Consultant to the **Joint Research Centre, EU Commission**, Institute for Energy and Transport, Petten, the Netherlands for modeling of consumers' choice in electricity markets.
- o (2004-06) Researcher at the **Osservatorio sull'Attuazione della Riforma del Titolo V della Costituzione, Regione Piemonte**.
- o (2001) Researcher at the **Scuole di Sussidiarietà, Fondazione Giovanni Agnelli**, Torino

Publications

Articles..

- o Canepa A, G. Chersoni, M. Fontana, The Role of Environmental and Financial Concerns on Energy-Saving Investments: A Stochastic Dominance Analysis. *Quarterly Review of Economics and Finance* DOI:https://doi.org/10.1016/j.qref.2023.07.001
- o Magda Fontana and Martina Iori (2023), The fragmentation of the Mainstream and communication in economics: A view from the top,*Œconomia, History, Methodology and Philosophy.* 13/2 DOI:10.4000/oeconomia.16153
- o Magda Fontana, Martina Iori, Valerio Leone Sciabolazza, Daniel Souza (2022) The interdisciplinarity dilemma: Public versus private interests, Research Policy, Volume 51, Issue 7, 104553. DOI:10.1016/j.respol.2022.104553.
- o Giulia Chersoni, Nives DellaValle, Magda Fontana (2022) Modelling thermal insulation investment choice in the EU via a behaviourally informed agent-based model, Energy Policy, Volume 163, DOI: 10.1016/j.enpol.2022.112823.
- o Bigi V., E. Comino, M. Fontana, A. Pezzoli, M. Rosso (2021), Flood Vulnerability Analysis in Urban Context: A Socioeconomic Sub-Indicators Overview, Climate 2021, 9(1), 12; https://doi.org/10.3390/cli9010012
- o Fontana M., M. Iori, F. Montobbio, R. Sinatra (2020), "New and atypical combinations: An assessment of novelty and interdisciplinarity", *Research Policy*, Volume 49, Issue 7, September 2020, 104063. DOI:10.1016/j.respol.2020.104063,
- o Fontana M, F. Montobbio, P. Racca (2019), "Topics and Geographical Diffusion of Knowledge in Top Economic Journals", *Economic Inquiry* Volume 57, Issue 4, October 2019, 1771-1797 DOI: 10.1111/ecin.12815
- o Fontana M., M. Iori, C.R. Nava (2019), "Switching behavior in the Italian electricity retail market: Logistic and mixed effect Bayesian estimations of consumer choice", *Energy Policy*, 129, 339-351. DOI: 10.1016/j.enpol.2019.01.060 (FASCIA A 13 Economic Sciences)
- o Beretta E., M. Fontana, M. Guerzoni, A. Jordan (2018), "Cultural dissimilarity: Boon or Bane for Technology Diffusion?" *Technological Forecasting and Social Change*, 133, 95-103. DOI: 10.1016/j.techfore.2018.03.008 (FASCIA A 13 Economic Sciences)
- o Ambrosino A, M. Fontana, A. Gigante (2017), "Shifting boundaries in Economics: the Institutional Cognitive strand and the Future of Institutional Economics" *Journal of Economic Surveys*, 32, 3, 767–791. DOI: 10.1111/joes.12214 (FASCIA A 13 Economic Sciences)
- o Cedrini M., M. Fontana (2018), "Just Another Niche in the Wall: How Specialization is Changing the Face of Mainstream Economics", *Cambridge Journal of Economics*, 42, 2, 427-51.

DOI 10.1093/cje/bex003 (FASCIA A 13 Economic Sciences)

o Fontana M., P. Terna (2014), "From Agent-Based Models to Network Analysis (and Return): The Policy-Making Perspective", *Journal of Policy and Complex Systems*, 2,1, 77-92.
DOI: 10.18278/jpcs.2.1.8

o Fontana M. (2013), "Pluralism in Economics: lessons from Complexity and Innovation Economics", *Journal of Evolutionary Economics*, 24, 1, 189–204.
DOI:10.1007/s00191-013-0333-5 (FASCIA B 13 Economic Sciences)

o Fontana M., T. Corsatea (2013), "Empirical Evidence of Change in Economics: Scientific Interaction and Knowledge Diffusion at the Santa Fe Institute", *Complexity Economics*, 2,1, 1-29.
DOI: 10.7564/13-COEC11

o Fontana M. (2010) "The Santa Fe Perspective on Economics: Emerging Patterns in the Science of Complexity", *History of Economic Ideas*, XVII, 167-196.
DOI: 10.1400/148279 (FASCIA C 13 Economic Sciences)

o Fontana M. (2010), "Can Neoclassical Economics Handle Complexity? The Fallacy of The Oil Spot Dynamic", *Journal of Economic Behavior and Organization*, 76, 584–596.
DOI: 10.1016/j.jebo.2010.08.010 (FASCIA A 13 Economic Sciences)

o Fontana M. (2006), "Computer Simulations, Mathematics, and Economics", *International Review of Economics*, 53,1, pp. 96-124. DOI: 10.1007/BF0302985 (FASCIA C 13 Economic Sciences)

o Fontana M. (2006), "Simulation in economics: Evidence on diffusion and communication", Journal of Artificial Societies and Social Simulation, 9(2). (Impact Factor:1,061 –social science JCR) (FASCIA A Area 14/C Sociology)

o Fontana M. (2005), "A feasible route to answering how much. A Comment to D. McCloskey "The trouble with mathematics and statistics in economics", *History of Economic Ideas*,XXIII, 3, 117-120. DOI: 10.1400/18568 (FASCIA C 13 Economic Sciences)

o Fontana M. (1999), "Individualismo metodologico e modelli fondati su agenti" *Sistemi intelligenti*, 11,1, 174-178
DOI: 10.1422/3507 (FASCIA A 11/C Philosophy)

Contribution to books

o Fontana M., M.Guerzoni (2023), "Modelling Complexity with Unconventional Data: Foundational Issues in Computational Social Science" in Eleonora Bertoni, Matteo Fontana, Lorenzo Gabrielli, Serena Signorelli, Michele Vespe(eds.), *Handbook of Computational Social Science for Policy*, Springer NATURE, https://dx.doi.org/10.1007/978-3-031-16624-2, pp.107-124.

o Chersoni G., N. Della Valle, M. Fontana (2021), "The Role of Economic, Behavioral and Social Factors in Technology Adoption" in P. Ahrweiler and M. Neumann (eds.), *Advances in Social Simulation*, Springer Proceedings in Complexity, https://doi.org/10.1007/978-3-030-61503-144, pp.473-484.

o Sciullo A., E. Vallino, M. Iori, and M. Fontana (2019), "Paths and processes in complex electricity markets: the agent based perspective", Soytas U. and R. Sari (eds.), *Routledge Handbook of Energy Economics*, Chapter 36. ISBN 9781138208254

o Fontana M., Iori M., Nava C. (2018), "Barriers to switching in retail electricity markets: a regional analysis of the Italian Market" in Bisello A., Vettorato D., Laconte P., Costa S. (Eds.) *Smart and Sustainable Planning for Cities and Regions*, 477-487, Springer

o Fontana M. (2012), "On Policy in Non Linear Economic Systems", in P. Heritier - P. Silvestri (eds.), *Good Goverment. Governance and Human Complexity*, Oelscki.

o Fontana M. (2006), "Uso della simulazione in economia", in Boero – Sonnessa – Terna (eds.) *Modelli per la Complessità*, Bologna: Il Mulino, 29-46.

o Fontana M. – Sapienza M.D. (2001), "Search in artificial labour markets: a simulation study", *Simulations*

in Swarm: Agent-based Methods in Economics and Finance, Kluwer Academic Press, 283-304.

- Fontana M. (2000), "Costanza Costantino", *A Biographical Dictionary of Women Economists*, Edward Elgar, 118-121.
- Fontana M. (1998), "Path Dependency, diritti di proprietà e cambiamento istituzionale", in G. Clerico - S. Rizzello, Diritto ed Economia della Proprietà Intellettuale, CEDAM, Padova: 147-172.

Books and Handbooks

- Fontana M. (2010), *L'Economia e l'equilibrio impossibile*, Giappichelli, Torino.
- Scacciati F. and M. Fontana (2002), *Lezioni di Macroeconomia vol. I e II*, Giappichelli, Torino.

Review Papers

- Fontana M. (2021), "The Paradigm of Social Complexity in the face of a pluralistic science", review of the "The Paradigm of Social Complexity" (2020) Gonzalo Castañeda, CEEY, Mexico City, Annals of the Fondazione Luigi Einaudi (forthcoming).
- Fontana M. (2008), "Agent-Based Modelling and Simulation in the Social and Human Sciences by Denis Phan and Frédéric Amblard (Eds.)", Journal of Artificial Societies and Social Simulation, 11, 2.

Reports and Policy Briefs

- Fontana M., M. Guerzoni (2021) *Systems modelling using advanced techniques and/or nonconventional data sources* EU SCIENCE HUB, Centre for Advanced Studies (JRC), Computational social science for policy (CSS4P)
- Fontana M. , M. Iori, C.R. Nava, P. Terna (2019), *Analysis of socio-economic drivers of switching behaviours in retail electricity markets. A report*, European Commission, JRC/PTT/0052/RC-AMI
- Fontana M. (2004), Decentramento amministrativo e dimensioni delle Pubbliche Amministrazioni, un modello con costi di transazione . Osservatorio sull'Attuazione della Riforma del Titolo V della Costituzione, Regione Piemonte.
- Fontana M., V. Caramelli (2001), Concorrenza e Servizi Pubblici, Fondazione Giovanni Agnelli.

Conference Proceedings and Working papers

- Alessandra Canepa, Giulia Chersoni and Magda Fontana, (09/2023) "The Role of Environmental and Financial Motivations in the Adoption of EnergySaving Technologies: Evidence from European Union Data"
- Fontana M., M. Iori, V. L. Sciabolazza D. Souza (2021), The interdisciplinarity dilemma: public versus private interests, LEM Working Papers 2021/34, Institute of Economics, Scuola Superiore Sant'Anna.
- Fontana M., M. Iori, F. Montobbio, R. Sinatra (2018), A bridge over troubled water: Interdisciplinarity, Novelty, and Impact, Quaderni del Dipartimento di Politica Economica, Università Cattolica del Sacro Cuore, 2/2018
- Cedrini M. and M. Fontana (2017), "Just Another Niche in the Wall? How Specialization Is Changing the Face of Mainstream Economics" CESMEP Working Papers, No. 2017/2
- Fontana M., M. Iori, C.R. Nava (2017), Switching Behavior and the Liberalization of the Italian Electricity Retail Market. Logistic and Mixed Effect Bayesian Estimations of Consumer Choice, Department of Economics and Statistics Cognetti de Martiis. Working Papers 201721
- Chersoni G. and M. Fontana (2017), "Economic Evaluation of Fuel Treatment Effectiveness. An Agent-Based Model Simulation of Fire Spreads Dynamics", Department of Economics and Statistics Cognetti de Martiis, Working Papers 201729, University of Turin.
- Cedrini M. and M. Fontana (2015), "Mainstreaming. Reflections on the Origins and Fate of Mainstream

Pluralism", CESMEP Working Papers, No. 2015/1

- Fontana M. (2009), The Santa Fe Perspective on Economics: emerging patterns in the science of complexity, CESMEP Working Papers, No. 2009/8

- Fontana M. (2008), The complexity approach to economics: a paradigm shift, The complexity approach to economics: a Paradigm shift, CESMEP Working Papers, No. 2008/1

- Fontana M. and R. Marchionatti (2007), Endogenous animal spirits and investment an agent-based model, *CESMEP Working paper* No. 09/2007

- Ferraris G. and M. Fontana (2006), On Classifier Systems and Genetic Algorithms Playing Iterated Prisoner's Dilemma, *Porceedings of the The First World Congress on Social Simulation* 2, 32-50

- Ferraris G. and M. Fontana (2006) *Managing Knowledge in Agent-based Models: Theoretical and Methodological Issues* Department of Economics and Statistics Cognetti de Martiis. Working Papers No. 3/2006

- Ferraris G. and M. Fontana, Beating the Tit for Tat: Using a Genetic Algorithm to Build an Effective Adaptive Behavior Department of Economics and Statistics Cognetti de Martiis. Working Papers No. 4/2006

- Fontana M.(2005) Computer simulations, mathematics and economics, CESMEP Working Papers, No. 2005/6, University of Turin.

Submissions and Ongoing Research

Turin, February 2024