Martina Iori

ASSISTANT PROFESSOR OF APPLIED ECONOMICS

Università Cattolica del Sacro Cuore, Milan

✉ martina.iori@unicatt.it | ORCID: 0000-0001-6825-2165

Current Position

2025–present	**Assistant Professor of Applied Economics (RTT),** Department of Economic Policy, Università Cattolica del Sacro Cuore, Milan
2025–present	**Affiliate Researcher,** Institute of Economics, Sant'Anna School of Advanced Studies, Pisa

Previous Positions

2021 - 2024	**Assistant Professor of Economic Policy (RTD-a),** Institute of Economics & L'EMbeDS, Sant'Anna School of Advanced Studies, Pisa
2019 - 2021	**Postdoctoral Research Fellow,** Institute of Economics & l'EMbeDS, Sant'Anna School of Advanced Studies, Pisa. Research Projects: "Networks and technological change in the 4th industrial revolution" and "Technological change, industry evolution and employment dynamics" (PRIN 201799ZJSN).
2020 - 2021	**Research Collaborator,** Department of Economics, Bocconi University, Milan. Research Project: "The role of M&A on innovation and economic growth"
2019	**Research Collaborator,** Department of Economic Policy, Catholic University of the Sacred Heart, Milan. Research Project: "The impact of industry 4.0 technologies on occupation"
2019	**Research Fellow,** Department of Economics and Statistics, University of Turin, Turin. Research Project: "Interdisciplinarity and novelty indicators in science: impact and economic growth"
2018	**Research Collaborator,** Collegio Carlo Alberto, Turin. Research Project: "The analysis of socio-economic drivers of switching behaviours in retail electricity markets"

Education

"VILFREDO PARETO" DOCTORATE IN ECONOMICS *Turin*
University of Turin and Collegio Carlo Alberto *2015 - 2019*
- Dissertation title: "Three essays on interdisciplinarity and novelty in science and technology"
- Final grade: Excellent
- Advisor: Prof. Magda Fontana. Committee: Prof. Marco Guerzoni, Prof. Nicolas Carayol, Dr. Ismael Rafols

VISITING PHD STUDENT *Budapest*
Center for Network Science, Central European University *2017 - 2018*
- Research project: "Interdisciplinarity, novelty, and impact in physics"

MASTER OF ARTS IN ECONOMICS AND COMPLEXITY *Turin*
Collegio Carlo Alberto *2014 - 2015*
- Main courses: microeconomics, macroeconomics, econometric theory, applied economics, economics of innovation, network analysis, python, agent-based models
- Average grade: 29.8/30

MASTER DEGREE IN PHYSICS - THEORETICAL PHYSICS CURRICULUM *Turin*
University of Turin *2011 - 2013*
- Master's thesis developed at SISSA (International School for Advanced Studies) - Statistical Physics group, Trieste
- Title: "Thermodynamic properties of ultracold fermions with spin-orbit coupling"
- Final grade: 110/110 cum Laude and Distinction

Bachelor Degree in Physics   *Bologna*
Alma Mater Studiorum - University of Bologna   *2008 - 2011*
- Final grade: 110/110 cum Laude

Research Consultancy

2021 - 2025   **External Consultant**, Compagnia di San Paolo, Turin
Analysis of networks among partners of Compagnia di San Paolo's projects (Territori Inclusivi and Cultura per Crescere) as a collaborator of the Impact Evaluation Unit – Collegio Carlo Alberto (Turin).

2015   **External Consultant**, European Commission
Expert for the European Commission, Joint Research Center - Institute for Energy and Transport - Energy Security, Systems and Market Unit, Petten (NL).

Publications

Peer-Reviewed Journals

G. Biggi, M. Iori, J. Mazzei and A. Mina (2025), *Green Intelligence: The AI content of green technologies*, Eurasian Business Review, DOI: 10.1007/s40821-024-00288-1.

M. Fontana and M. Iori (2023), *The fragmentation of the mainstream and communication in Economics: A view from the top*, OEconomia, 13 (2), DOI: 10.4000/oeconomia.16153.

M. Fontana, M. Iori, V. Leone Sciabolazza, and D. Souza (2022), *The interdisciplinarity dilemma: Public versus private interests*, Research Policy, 51 (7), DOI: 10.1016/j.respol.2022.104553.

M. Fontana, M. Iori, F. Montobbio, and R. Sinatra (2020), *New and atypical combinations: An assessment of novelty and interdisciplinarity*, Research Policy, 49 (7), DOI: 10.1016/j.respol.2020.104063.

M. Fontana, M. Iori, and C. Nava (2019), *Switching behavior in the Italian electricity retail market. Logistic and mixed effect Bayesian estimations of consumer choice*, Energy Policy, 129, DOI: 10.1016/j.enpol.2019.01.060.

D. Borra, M. Iori, C. Borean, and F. Fagnani (2015), *A Reputation-based Distributed District Scheduling Algorithm for Smart Grids*, EAI Endorsed Transactions on Cognitive Communications, 15(2), DOI: 10.4108/cogcom.1.2.e3.

Peer-Reviewed Book Chapters

C. Bottai and M. Iori (2024), *The Knowledge Complexity of the European Metropolitan Areas: Selecting and Clustering Their Hidden Features*, In: Handbook of Complexity Economics.

M. Iori, T. Macrì, and A. Trombettoni (2021), *Thermodynamic properties of ultracold Fermi gases across the BCS-BEC crossover and the Bertsch problem*, In: Mathematical Challenges of Zero-Range Physics, DOI: 10.1007/978-3-030-60453-0_1.

A. Sciullo, E. Vallino, M. Iori, and M. Fontana (2019), *Paths and processes in complexity electricity markets: the agent based perspective*, In: Handbook of Energy Economics, DOI: 10.4324/9781315459653.

M. Fontana, M. Iori, and C. Nava (2018), *Barrier to switching in retail electricity markets: a regional analysis of the Italian market*, In: Smart and Sustainable Planning for Cities and Regions, Green energy and Technology, DOI: 10.1007/978-3-319-75774-2_32.

Working Papers

C. Bottai, J. Di Iorio, and M. Iori (2024), *Reinterpreting Economic Complexity: A co-clustering approach*, pre-print available at: arxiv.org/pdf/2406.16199.

G. Biggi and M. Iori (2024), *Innovation and environmental well-being: Exploring the nexus between industrial development and soil contamination across European regions*, available at Research Square, DOI: 10.21203/rs.3.rs-4393783/v1.

S. Rocchetta, M. Iori, A. Mina, and R. Gillander (2023), *Technological diversification and the growth of regions in the short and long run*, LEM Working Papers (ISSN 2284-0400) 2023/46, available at: lem.sssup.it/WPLem/files/2023-46.pdf.

R. Danna, M. Iori, and A. Mina (2022), *A numerical revolution: The diffusion of practical mathematics and the growth of pre-modern European economies*, LEM Working Papers (ISSN 2284-0400) 2022/18, available at SSRN, DOI: 10.2139/ssrn.4143442.

M. Iori, A. Martinelli, and A. Mina (2021), *The direction of technical change in AI and the trajectory effects of government funding*, LEM Working Papers (ISSN 2284-0400) 2021/41, available at: lem.sssup.it/WPLem/files/2021-41.pdf.

C. Bottai and M. Iori (2015), *Knowledge clusters and multidimensional proximity: An agent based simulation*, Working Paper 28/2015 Be.Compl.Ex Dipartimento di Economia e Statistica "Cognetti de Martiis", University of Turin.

Conference Proceedings

M. Iori and M. Fontana (2019), *Novelty as recombination of knowledge*, ISSI 2019 conference proceedings.

Policy Briefs

M. Fontana, M. Iori, C.R. Nava, and P. Terna (2019), *Analysis of socio-economic drivers of switching behaviours in retail electricity markets. A report*, European Commission, JRC/PTT/0052/RC-AMI.

Awards, Fellowships, & Grants

Awards

2024	**Best Paper Award in memory of Paul A. David – Workshop on the organization, economics and policy of scientific research**, *A Numerical Revolution: Mathematical innovation and the growth of pre-modern European economies*, coauthored with Raffaele Danna and Andrea Mina.
2022	**DRUID Best Paper Award**, *A numerical revolution: The diffusion of practical mathematics and the growth of pre-modern European economies*, coauthored with Raffaele Danna and Andrea Mina.
2022	**Finalist – SMS Annual Conference – Knowledge and Innovation Group Best Paper Award**, *The direction of technical change in AI and the trajectory effects of government funding*, coauthored with Arianna Martinelli and Andrea Mina.
2020	**European Commission Seal of Excellence**, Project proposal *The origin of Breakthrough Innovations: culture, technology, and industry* (H2020-MSCA-IF-2019, score 91.4; funding threshold 91.6).
2019	**Finalist – 'Premio SIE per Tesi di dottorato di ricerca in discipline economiche'**, PhD thesis *Three Essays on Interdisciplinarity and Novelty in Science and Technology*.

Grants

2022	**PRIN Research Grant**, Member of the PRIN project *Automation, Trade, and Global Value Chains: New Empirical Evidence and Theory Development* (grant number: 2022ACJ2WS - PI: Daniele Moschella).	*€ 234,520*
2018	**European Commission Tender**, Service contract for the analysis of socioeconomic drivers of switching behaviours in retail electricity markets (grant number: JRC/PTT/2017/C.3/0052/RC-AMI).	*€ 18,500*
2017 - 2018	**COST Action Grant**, Short Term Scientific Mission granted by the European Commission COST Action program (grant number: CA15109 - 37875).	*€ 2,000*
2019	**Accommodation and Travel Grant**, 2nd Workshop in Economic Complexity, Innovation & Economic Geography, Utrecht University, Utrecht.	
2018	**Accommodation and Travel Grant**, Workshop in Innovation, Economic Complexity & Economic Geography - INET-YSI Summer Workshop, MIT MediaLab, Boston.	

Fellowship

2017 - 2018	**Doctoral Support Program Fellowship**, Full tuition waiver as a visiting PhD student at the Center of Network Science, Central European University, Budapest
2015 - 2018	**Intesa San Paolo PhD Fellowship**, Three-year PhD Fellowship, "Vilfredo Pareto" Doctorate in Economics, University of Turin
2014 - 2015	**Collegio Carlo Alberto Master Fellowship**, Full tuition waiver and fellowship, Master in Economics and Complexity, Collegio Carlo Alberto, Turin

| 2013 | **Research Training Fellowship,** Research training fellowship for undergraduate students, SISSA (International School for Advanced Studies), Trieste |

Research Projects

From 2023	**Automation, Trade, and Global Value Chains: New Empirical Evidence and Theory Development,** Ministry of University and Research PRIN research grant (grant number: 2022ACJ2WS). PI: Daniele Moschella, Sant'Anna School of Advanced Studies.
From 2022	**When green meets digital: Understanding the twin transition in the economy and society,** Ministry of University and Research PRO3 research grant (GREEN DIGIT). PI: Federico Tamagni, Sant'Anna School of Advanced Studies.
2020–2023	**Technological change, industry evolution and employment dynamics,** Ministry of University and Research PRIN research grant (grant number: 201799ZJSN). PI: Marco Vivarelli, Università Cattolica del Sacro Cuore. Unit coordinator: Daniele Moschella, Sant'Anna School of Advanced Studies.
2018	**The analysis of socioeconomic drivers of switching behaviors in retail electricity markets,** European Commission Tender (grant number: JRC/PTT/2017/C.3/0052/RC-AMI).
2017–2018	**Interdisciplinarity, novelty and impact in Physics,** European Commission COST Action program (grant number: A15109 - 37875). PI: Martina Iori.

Presentations

INVITED TALKS

2024	**Workshop on Green and Digital Transformations: Skills, Jobs and Policy,** University of Ferrara, Ferrara
2024	**PRIN Workshop on Circular Economy Innovation and the socio-economic impacts on sectors and regions,** University of Turin, Turin
2024	**UNU-MERIT Seminar Series,** UNU-MERIT, Maastricht
2024	**IID Seminar Series,** Joint Research Center – European Commission, Seville
2023	**Economic Policy Department seminar series,** Catholic University of the Sacred Hearth, Milan
2023	**OECD workshop on Using microdata for start-up and venture capital analyses,** Organisation for Economic Co-operation and Development, Paris
2022	**Seminars in Economics of Innovation and Knowledge,** Collegio Carlo Alberto, Turin
2022	**ANET Lab seminar series,** ELKH Centre for Economic and Regional Studies, Budapest
2021	**Centre for Science and Technology Studies seminar series,** Centre for Science and Technology Studies, Leiden
2019	**Department of Computer Science seminar series,** University of Turin, Turin
2018	**Workshop on Data Science and Economics,** University of Turin, Turin
2018	**CNS seminar series,** Center for Network Science, Central European University, Budapest

CONFERENCE PRESENTATIONS

2025	**XXII Workshop Annuale della Società Italiana di Economia e Politica Industriale (SIEPI),** University of Bologna, Bologna
2024	**65a Riunione Scientifica Annuale della Società Italiana di Economia 2024,** University of Urbino Carlo Bo, Urbino
2024	**Workshop on the organization, economics and policy of scientific research,** Collegio Carlo Alberto, Turin
2024	**12th Italian Association of Environmental and Resource Economists Annual Conference,** Gabriele d'Annunzio University, Pescara
2024	**GEOINNO2024,** University of Manchester, Manchester

2023	**NBER Summer Institute 2023 - Science of Science Funding,** National Bureau of Economic Research, Boston
2023	**2nd International Conference on the Science of Science and Innovation,** Northwestern University, Evanston
2023	**DRUID23,** NOVA School of Business and Economics, Lisbon
2023	**Munich Summer Institute 2023,** Max Planck Institute for Innovation and Competition, Munich
2022	**YETI 2022,** IMT School for Advanced Studies, Lucca
2022	**63a Riunione Scientifica Annuale della Società Italiana di Economia 2022,** University of Turin, Turin
2022	**DRUID22,** Copenhagen Business School, Copenhagen
2022	**6th Global Conference on Economic Geography,** Trinity College Dublin and University College Dublin, Dublin
2021	**DRUID21,** Copenhagen Business School, Copenhagen
2019	**NBER Innovation Information Initiative Technical Meeting,** National Bureau of Economic Research, Boston
2019	**2nd Workshop in Economic Complexity, Innovation & Economic Geography,** Utrecht University, Utrecht
2019	**6th PhD Workshop in Economics of Innovation, Complexity and Knowledge,** Collegio Carlo Alberto, Turin
2018	**Innovation, Economic Complexity, and Economic Geography Workshop,** MIT MediaLab, Boston
2017	**5th PhD Workshop in Economics of Innovation, Complexity and Knowledge,** Collegio Carlo Alberto, Turin
2017	**European Association for Evolutionary Political Economy Annual Conference,** Corvinus University, Budapest
2017	**2nd International Conference on Smart and Sustainable Planning for Cities and Regions,** Eurac Research, Bolzano
2015	**KID 2015,** Summer School on "Knowledge Dynamics, Industrial Evolution, Economic Development", Nice

Conference Organization

2025	**Intellectual Property Rights, Science and Innovation: Implications for Drug Discovery and the Health Sector,** Università Cattolica del Sacro Cuore, Milan
2025	**Young Economists of Tuscan Institutions Meeting 2025,** Sant'Anna School of Advanced Studies, Pisa
2024	**Automation, Trade, and Global Value Chains: New Empirical Evidence and Theory Development,** University of Parma, Parma
2024	**PhD in Economics at Sant'Anna School of Advanced Studies and University of Cote d'Azur Annual Doctoral Workshop,** Sant'Anna School of Advanced Studies, Pisa
2024	**Young Economists of Tuscan Institutions Meeting 2024,** University of Florence, Florence
2023	**PhD in Economics at Sant'Anna School of Advanced Studies and University of Cote d'Azur Annual Doctoral Workshop,** Sant'Anna School of Advanced Studies, Pisa
2022	**Young Economists of Tuscan Institutions Meeting 2022,** IMT School for Advanced Studies, Lucca
2019	**6th PhD Workshop in Economics of Innovation, Complexity and Knowledge,** Collegio Carlo Alberto, Turin
2017	**5th PhD Workshop in Economics of Innovation, Complexity and Knowledge,** Collegio Carlo Alberto, Turin

Teaching Experience

2024 - 2025	**Advanced Economics of Art**, Master Degree in Economics and Management of Art, Culture and Entertainment, Università Cattolica del Sacro Cuore, Milan.
2023 - 2025	**Coding in Python**, PhD Program in Innovation for the Circular Economy; PhD Program in Comparative Analysis of Institutions, Economics and Law, University of Turin, Turin.
2022-2024	**Intermediate Microeconomics**, Sant'Anna School of Advanced Studies, Pisa.
2022-2023	**Theory of the Firm**, Sant'Anna School of Advanced Studies, Pisa.
2022-2023	**Invited lecture in Computational Scientometrics**, University of Illinois Urbana Champaign, Champaign (IL).
2019-2022	**Coding in Python**, Master of Arts in Finance, Insurance, and Risk Management; "Vilfredo Pareto" Doctorate in Economics, Collegio Carlo Alberto, Turin.
2017 - 2020	**Political Economy (Teaching Assistant)**, Department of Management, University of Turin, Turin.
2018 - 2019	**Innovation Lab: Patent and Technology Analysis**, Master in Data Science for Complex Economic Systems, Collegio Carlo Alberto, Turin.
2018 - 2019	**Macroeconomics (Teaching Assistant)**, Department of Management, University of Turin, Turin.

Language Skills

Italian, Mother tongue
English, Fluent

Computer Skills

Operation systems, Microsoft Windows (expert), GNU/Linux system (proficient)
Programming languages, Python (expert), C/C++ (competent)
Statistical tools, R (expert), Stata (proficient)
Markup languages, Latex (expert), Markdown (proficient)
Versioning systems, Git (proficient)
Tools and frameworks, Visual Studio Code (expert)
Simulation and modeling tools, Netlogo (proficient)

Academic Service

Ad-hoc reviewer

Management Science, Research Policy, Industrial and Corporate Change, Economic Geography, Nature Human Behavior, Industry & Innovation, Economics of Innovation and New Technologies, Scientometrics, Journal of the Association for Information Science and Technology, Journal of Management Studies, Business Strategy and the Environment, Energy Policy

Thesis supervision

2019	**Alice Re**, Master's thesis at the University of Turin "How the use of knowledge complexity and relatedness measures can lead to smarter bottom-up economic policies" (co-supervisor).