



Massimiliano Carlo Pietro Rizzati

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WORK EXPERIENCE

19/01/2023 – CURRENT Brescia, Italy

POST-DOC RESEARCHER AT THE UNIVERSITY OF BRESCIA UNIVERSITÀ DEGLI STUDI DI BRESCIA, DIPARTIMENTO DI ECONOMIA E MANAGEMENT

Assegno di ricerca (post-doc research grant) in the Italian scientific sector (SSD) SECS (Economic and Statistical Sciences) P/01 (economics) and SECS P/02 (economic policy). The title is "Modellizzazione della transizione energetica ed ecologica con modelli ad agenti e spaziali" (Modeling the energy and ecological transition with agent based and spatial models). Engaging in research activities focused on investigating the energy transition within modern economies and climate change, utilizing diverse modeling approaches. Developing peer-reviewed scientific articles as research output.

2022 – CURRENT Brescia, Italy

ADJUNCT PROFESSOR IN MICROECONOMICS UNIVERSITÀ DEGLI STUDI DI BRESCIA, DIPARTIMENTO DI ECONOMIA E MANAGEMENT

Teaching for the "Economia Politica 1" (microeconomics) class in the Economics and Business Administration course (bachelor's degree), academic year 2022/2023. 60 Hours of direct teaching, plus office hours and examinations.

03/01/2022 – CURRENT Milan, Italy

RESEARCHER IN THE FEEM MET PROGRAM FONDAZIONE ENI ENRICO MATTEI (FEEM)

Research activity in the Agent-Based model (ABM) project under the Modelling the Energy Transition (MET) research program. Development and extension of the MATRIX (Multi-Agent Model for Assessing Transition Risks). Collaborating within the

MET research project to achieve its research objectives. Producing scientific articles, dissemination materials, and participating in international conferences. Development of Integrated Assessment Model (IAM) to study Carbon Capture Utilization and Storage applications.

30/07/2019 – 31/12/2021 Milan, Italy

RESEARCHER IN THE FEEM FACTS PROGRAM FONDAZIONE ENI ENRICO MATTEI (FEEM)

Researcher for the FACTS (Firms and Cities Towards Sustainability) research project, within the "Cities in the modern Age (CitAge)" and the "Spatial Modeling & Urban Sustainability (SpatialModUS)" research projects.

Main activities:

- Research activities on sustainability and energy transition topics through empirical applications based on spatial data, with the goal of publishing in peer-reviewed journals.
- Organization of events and webinars, particularly the "Pathways to Sustainability" series.
- Development and organization of the "FEEM Autumn School on Spatial Analysis and Policy Evaluation" (first and second editions).
- Fundraising activities and collaboration with funded projects such as COACCH (CO-designing the Assessment of Climate Change cost).
- Scientific consultancy for the REVALUE impact assessment model (Saipem) on water consumption and biodiversity themes.
- Evaluation of external working papers for publication in the "Note di Lavoro" FEEM series.

2022 – 2023 Brescia, Italy

ADJUNCT PROFESSOR IN ENVIRONMENTAL AND ENERGY ECONOMICS UNIVERSITÀ CATTOLICA DEL SACRO CUORE

Economia dell'Ambiente e dell'Energia, corso di laurea triennale in Matematica, Università Cattolica del sacro cuore, Dipartimento di Matematica e Fisica – Brescia, Italia

2021 – 2022 Brescia, Italy

ADJUNCT PROFESSOR IN MACROECONOMICS UNIVERSITÀ CATTOLICA DEL SACRO CUORE

Economia Politica II, corso di laurea triennale in Matematica. Dipartimento di Matematica e Fisica – Brescia, Italia

2018 – 2021 Milan, Italy

ADJUNCT PROFESSOR IN MATLAB PROGRAMMING (MATHEMATICS) UNIVERSITÀ DEGLI STUDI DI MILANO BICOCCA

Milan/Brescia, Italy

TEACHING ASSISTANT/CULTORE DELLA MATERIA VARIOUS UNIVERSITIES

Tutorials and seminars:

- Economia dell'ambiente e dell'energia (A.A. 2019/2020, 2020/2021), Università Cattolica del sacro cuore, Dipartimento di Matematica e Fisica – Brescia
- Economia Politica (A.A. 2018/2019, 2019/2020, 2020/2021), Università Cattolica del sacro cuore, Economia e gestione dei beni culturali e dello spettacolo - Milano
- Microeconomia (A.A. 2018/2019), Politecnico di Milano, Ingegneria Gestionale, Milano
- Advanced Macroeconomics (A.A. 2018/2019), Università degli studi di Milano, Milano
- Macroeconomia (A.A. 2016/2017, 2017/2018), Università Cattolica del sacro cuore, Economia e Management, Milan

01/11/2014 – 31/01/2015 Brussels, Belgium

BLUE BOOK TRAINEESHIP EUROPEAN COMMISSION, DG ECONOMIC AND FINANCIAL AFFAIRS

Administrative traineeship in the European Commission Directorate-General for Economic and Financial Affairs, unit B2 (Structural reforms, competitiveness and innovation). Collaboration in the development of database for internal use, collaboration on qualitative and econometric policy analysis, redaction of country fiches for internal use. Research assistance provided for the European Commission's Institutional Paper 31: "State-Owned Enterprises in the EU: Lessons Learned and the Way Forward in a Post-Crisis Context."

EDUCATION AND TRAINING

13/11/2014 – 12/11/2018 Milan, Italy

PH.D. IN ECONOMICS Università Cattolica del sacro cuore & Università degli studi di Milano Bicocca

Supervisor: Professor Domenico Delli Gatti (Università Cattolica del Sacro Cuore - Complexity Lab in Economics)

The program included 1.5 years of advanced economics courses.

Field of study Economics | **Thesis** Heterogeneity in Space: An Agent-based Economic Geography model.

19/09/2011 – 22/01/2013 Louvain-la-Neuve, Belgium

MASTER'S DEGREE IN ECONOMICS, RESEARCH FOCUS (JOINT DEGREE) Université catholique de Louvain

Advanced economics courses. Joint degree with the Università degli studi di Milano.

Field of study Economics | **Final grade** Grande Distinction (Magna cum Laude) |

Thesis "Economic Geography as an Evolutionary Game". Supervisors: Carmen Camacho (IRES), Francesco Guala (DEMM)

19/09/2011 – 18/01/2013 Milan, Italy

LAUREA SPECIALISTICA IN ECONOMICS AND POLITICAL SCIENCE (JOINT DEGREE) Università degli Studi di Milano

Curriculum Economic analysis and Policy. Selected for the "International Joint degree program" with the Université Catholique de Louvain.

Final grade 110/110

01/09/2010 – 01/03/2011 Coimbra, Portugal

ERASMUS PROGRAM Universidade de Coimbra

Portuguese class. Economics courses in the Economics faculty.

21/09/2007 – 20/12/2010 Milan, Italy

BACHELOR'S DEGREE IN POLITICAL SCIENCE - MINOR IN ECONOMICS Università degli Studi di Milano

Minor in Economics. Selected for a scholarship within the Erasmus mobility program.

Field of study Political science; Economics | **Final grade** 110/110 with honors |

Thesis "Il mercato privato dell'energia rinnovabile". Supervisor: Antonio Filippin

Final grade 100/100

ADDITIONAL INFORMATION

CONFERENCES AND SEMINARS

05/10/2023 – 06/10/2023 – online

European Climate + energy Modelling Forum ECEMP 2023. Net Zero, intermediate targets, and sectoral decarbonization facing geopolitical and macroeconomic challenges Work presented: "Warming the MATRIX: a Climate Assessment under Uncertainty and Heterogeneity"

28/08/2023 – 01/09/2023 – Alicante, Spain

62nd ERSA congress, "Urban Challenges and Sustainable Technological Revolution" - University of Alicante
Works presented:

- "Too Hot or Too Cold? Temperature and Human Mortality: Evidence from Daily and Disaggregated Data in Italy"
- "Heterogeneity and Economic Geography: An agent-based model on the formation of Spatial Inequality"

22/06/2023 – 24/06/2023 – Koper, Slovenia

26th annual Workshop on Economic Science with Heterogeneous Interacting Agents (WEHIA) - University of Primorska Work presented: "Warming the MATRIX: a Climate Assessment under Uncertainty and Heterogeneity".

13/12/2022 – 15/12/2022 – Versailles, France

International Conference on Sustainability, Environment, and Social Transition in Economics and Finance (SESTEF)- 2022 Work presented: "Energy price shocks and stabilization policies in a multi-agent macroeconomic model for the Euro Area".

20/10/2022 – 21/10/2022 – Venice, Italy

University for SDGs: Giovani e futuro. Verso uno sviluppo sostenibile. Gestione Tavolo n.3 Transizione energetica. Come le scelte individuali e delle aziende devono cambiare in un'ottica di sviluppo sostenibile

28/06/2022 – 01/07/2022 – Rimini, Italy

27th EAERE annual conference, Università di Bologna Work presented: "Enter the MATRIX model: a Multi-Agent model for Transition Risks with application to energy shocks."

21/04/2022 – 22/04/2022 – Cagliari, Italy

10th IAERE annual conference, Università degli Studi di Cagliari Work presented: "Kuznets and the cities: Urban level EKC evidence from Europe".

23/04/2021 – 25/04/2021 – online

9th IAERE annual conference, Università degli studi di Brescia/FEEM Work presented: "The local costs of global climate change: spatial GDP downscaling under different climate scenarios"

06/02/2020 – 07/02/2020 – Brescia, Italy

8th IAERE annual conference, Università degli studi di Brescia/FEEM, Brescia, Italia, 06-07 Febbraio 2020 Work presented: "Projections of Electricity Demand in European Cities Using Downscaled Population Scenarios"

12/12/2019 – 13/12/2019 – Naples, Italy

57th Conference on "Sustainable development, circular economy and circular city: evaluation methods and processes", Ce.S.E.T. (Centro studi di estimo ed economia territoriale), Napoli, Italia, 12-13 Dicembre 2019 Work presented: "Projections of Electricity Demand in European Cities Using Downscaled Population Scenarios"

15/03/2019 – 16/03/2019 – Milan, Italy

FeltrinelliCamp 2019, Fondazione Giangiacomo Feltrinelli Work presented: "New Technologies and productivity differentials: Dr. Watson in the Euro Area."

21/06/2018 – 22/06/2018 – Naples

ESCoS International Conference, THE ECONOMY AS A SPATIAL COMPLEX SYSTEM (ESCoS 2018) II CICSE WORKSHOP, Università di Napoli Federico II Work presented: "Policy with multiple regions, an Agent-based Economic Geography analysis"

28/11/2017 – 28/11/2017 – Milan, Italy

DEFAP third year seminar, Università Cattolica del Sacro Cuore di Milano, Milano, Italia Work presented: "Heterogeneity and Economic Geography: The formation of Spatial Inequality"

12/06/2017 – 14/06/2017 – Milan, Italy

Workshop on Economics and Heterogeneous Interacting Agents (WEHIA) 2017, Università Cattolica del Sacro Cuore di Milano Work presented: "Heterogeneity and Economic Geography: The formation of Spatial Inequality"

15/12/2016 – 15/12/2016 – Milan, Italy

DEFAP, second year seminar, Università Cattolica del Sacro Cuore di Milano Work presented: "Heterogeneity and Economic Geography: The formation of Spatial inequality"

PUBLICATIONS

[**Energy price shocks and stabilization policies in the MATRIX model**](#) – 2023

Turco, E., Bazzana, D., Rizzati, M., Ciola, E., & Vergalli, S. (2023). Energy price shocks and stabilization policies in the MATRIX model. *Energy Policy*, 177, 113567.

Energy Policy, 177, 113567.

[**Warming the MATRIX: a Climate Assessment under Uncertainty and Heterogeneity**](#)

Bazzana, D., Rizzati, M., Ciola, E., Turco, E. M., & Vergalli, S. (2023). Warming the MATRIX: a Climate Assessment under Uncertainty and Heterogeneity. Nota di Lavoro 09.2023, Milano, Italy: Fondazione Eni Enrico Mattei

FEEM Working Paper 09.2023

[**Kuznets and the cities: Urban level EKC evidence from Europe**](#) – 2023

Rizzati, M. C. P., Florenzio, N., Guastella, G., & Pareglio, S. (2023). Kuznets and the cities: Urban level EKC evidence from Europe. *Ecological Indicators*, 148, 110143.

Ecological Indicators, 148, 110143.

[**The local costs of global climate change: spatial GDP downscaling under different climate scenarios**](#) – 2023

Rizzati, M., Standardi, G., Guastella, G., Parrado, R., Bosello, F., & Pareglio, S. (2023). The local costs of global climate change: spatial GDP downscaling under different climate scenarios. *Spatial Economic Analysis*, 18(1), 23-43.

Spatial Economic Analysis, 18(1), 23-43.

[**Energy Price Shocks and Stabilization Policies in a Multi-Agent Macroeconomic Model for the Euro Area**](#) – 2022

Turco, Enrico Maria, Davide Bazzana, Massimiliano Rizzati, Emanuele Ciola, and Sergio Vergalli. "Energy price shocks and stabilization policies in a multi-agent macroeconomic model for the Euro Area." (2022).

FEEM Working Paper No. 25, 2022

[**Residential electricity demand projections for Italy: A spatial downscaling approach**](#) – 2022

Rizzati, M., De Cian, E., Guastella, G., Mistry, M. N., & Pareglio, S. (2022). Residential electricity demand projections for Italy: A spatial downscaling approach. *Energy Policy*, 160, 112639.

Energy Policy, 160, 112639.

[**Projections of Electricity Demand in European Cities Using Downscaled Population Scenarios**](#) – 2021

Guastella, G., Lippo, E., Pareglio, S., & Rizzati, M. C. P. (2021). Projections of Electricity Demand in European Cities Using Downscaled Population Scenarios. *Smart and Sustainable Planning for Cities and Regions: Results of SSPCR 2019* 3, 81-97.

Smart and Sustainable Planning for Cities and Regions: Results of SSPCR 2019 3, 81-97.

[**The Effects of Air Pollution on COVID-19 Related Mortality in Northern Italy**](#) – 2020

Coker, E. S., Cavalli, L., et al. (2020). The effects of air pollution on COVID-19 related mortality in northern Italy. *Environmental and Resource Economics*, 76, 611-634.

Environmental and Resource Economics, 76, 611-634.

[**La'Sharing Mobility', contributo alla Rassegna 2019 GdL5**](#) – 2020

FEEM Policy Brief 2020.19

[**The Changing Spatial Distribution Of Electricity Demand In Europe: Insights For The Transition To Low-Carbon Cities**](#)

– 2020

FEEM Policy Brief 2020.18

[**City Networks for Sustainability: Goals Achieved and Future Developments**](#) – 2020

FEEM Policy Brief 2020.17

[**Heterogeneity in Space: An Agent-based Economic Geography model**](#) – 2018

Rizzati, M. (2018). Heterogeneity in Space: An Agent-based Economic Geography model.

Ph.D dissertation

Autorizzo il trattamento dei miei dati personali presenti nel CV ai sensi dell'art. 13 d. lgs. 30 giugno 2003 n. 196 - "Codice in materia di protezione dei dati personali" e dell'art. 13 GDPR 679/16 - "Regolamento europeo sulla protezione dei dati personali".