

Filippo Gusella – Curriculum Vitae

Nationality Italy
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Website My Website

Current Position

From 01/05/2024 Post-doc research fellow
Catholic University of the Sacred Heart, Milan / Italy
Department of Economics and Finance

From 01/12/2020 Fellow
Complexity Lab in Economics.
Catholic University of the Sacred Heart, Milan / Italy

From 01/12/2021 Fellow
Florence Center For Data Science, Florence / Italy

Previous Positions

2022-2024 Post-doc research fellow
University of Florence, School of Economics and Management
Complexity Lab in Economics , Milan / Italy

2020-2021 Post-doc research fellow
University of Florence, School of Economics and Management
Complexity Lab in Economics , Milan / Italy

Education

2016-2020 Ph.D. in Economics – *Excellent grade* - University of Siena - Firenze - Pisa, IT
Course - Economics
Thesis title: Essays on Economic Inequality and Financial Instability.

2018-2019 Ph.D. visiting period, Kings College London, UK
Department of European & International Studies

2014-2016 Master of Science in Economics - vote 110/110 cum laude - University of Florence
Course - Economics
Thesis Title: Critical analysis of Piketty's thought.

2010-2014 Bachelor of Science in Economia e Commercio - University of Florence
Course - Analisi Economica
Thesis Title: Cause e conseguenze del blocco del mercato interbancario.

Research Interests

Macroeconomics – Heterogeneous Agents Models – Financial Instability – Economic Inequality – Agent Based Model – Network Analysis

Publications

Delli Gatti, Domenico, Gusella, Filippo & Ricchiuti, Giorgio (2025). *Endogenous vs exogenous fluctuations: unveiling the impact of heterogeneous expectations*. *Macroeconomic Dynamics*. 29:e125.

Gusella, Filippo & Ricchiuti, Giorgio (2024). *Endogenous cycles in heterogeneous agent models: a state-space approach*. *Journal of Evolutionary Economics*. <https://doi.org/10.1007/s00191-024-00870-w>

Gusella, Filippo (2022). *Detecting and Measuring Financial Cycles in Heterogeneous Agents Models: An Empirical Analysis*. *Advances in Complex Systems*. Vol. 25, No. 02n03, 2240002.

Gusella, Filippo & Variato, Anna Maria (2022). *Financial Instability and Income Inequality: Why the Minsky-Piketty Connection Matters for Macroeconomics*. *Review of Political Economy*. 1-34.

Gusella, Filippo & Stockhammer, Engelbert (2021). *Testing fundamentalist-momentum trader financial cycles. An empirical analysis via the Kalman filter*. *Metroeconomica*, 72(4), 758-797.

Preprint

Delli Gatti, Domenico, Ferraresi, Tommaso, Gusella, Filippo, Popyan, Lilith, Ricchiuti, Giorgio & Roventini, Andrea (2024). The complex interplay between exchange rate and real markets: an agent-based model exploration. No. 2024/24. LEM Working Paper Series. Codice ISSN(ONLINE) 2284-0400. (Revised & Resubmitted for Journal of Economic Behavior and Organization).

Gusella, Filippo & Ricchiuti, Giorgio (2022). A State Space Approach for Time-Series Prediction of an Heterogeneous Agents Model. Working Papers - Economics wp2022-20, Università degli Studi di Firenze, Dipartimento di Scienze per l'Economia e l'Impresa.

Gusella, Filippo (2020). *Notes on Piketty's model*. Quaderni del Dipartimento di Economia Politica e Statistica. University of Siena. Working Paper N. 830/2020. Codice ISSN: 17209668.

Gusella, Filippo (2020). *Essays on Economic Inequality and Financial Instability*. *Phd Thesis*. PhD Thesis

Gusella, Filippo (2019). *Modelling Minskyan financial cycles with fundamentalist and extrapolative price strategies: An empirical analysis via the Kalman filter approach*. Working Paper N. 24/2019 del Dipartimento di Scienze Economiche, Facoltà di Economia, Università degli Studi di Firenze.

Work in Progress

Entry, Survival, aging and exit: The effects of firms' life cycle on macroeconomic performance.

The Monetary-Concentration Trap: The Self-Reinforcing Dynamics of Market Power and Monetary Policy.

Simulating the economic impact of rationality through reinforcement learning and agent-based modelling.

Optimizing the calibration of ABMs through reinforcement learning.

Regime Changes and Real-Financial Cycles: Searching Minsky's Hypothesis in a Nonlinear Setting.

The Production Network of Electronic Sector.

Financial instability and wealth inequality. An out-of-equilibrium analysis.

(Not yet) a green Minsky moment.

Generative Agents and Expectations: Do LLMs Align with Heterogeneous Agent Models?

Teaching Experience

03/09/2025 - Lecturer, New York University, US, Campus in Florence

current Course: *Introduction to Macroeconomics (Bachelor Degree, 29.4 teaching hours)*

15/09/2025 - Lecturer, University of Florence, Law School

Current Course: *Macroeconomics (Bachelor, 48 teaching hours)*

17/07/2025 - Lecturer, Catholic University of the Sacred Heart, Faculty of Economics, Milano

Current Course: *Macroeconomics (Bachelor Degree, 36 teaching hours)*

16/09/2024 - Lecturer, Catholic University of the Sacred Heart, Faculty of Economics, Milano
5/09/2025 Course: *Macroeconomics (Bachelor Degree, 36 teaching hours)*

16/09/2024 - Lecturer, University of Florence, Law School
30/04/2026 Course: *Macroeconomics (fourth year, single-cycle master degree program, 36 teaching hours)*

22/01/2025 - Lecturer, New York University, US, Campus in Florence
07/05/2025 Course: *Introduction to Macroeconomics (Bachelor Degree, 29.4 teaching hours)*

13/09/2023 - Lecturer, University of Florence, Law School
30/04/2025 Course: *Macroeconomics (Bachelor, 48 teaching hours)*

04/09/2024 - Lecturer, New York University, US, Campus in Florence
11/12/2024 Course: *Introduction to Macroeconomics (Bachelor Degree, 29.4 teaching hours)*

22/01/2024 - Lecturer, New York University, US, Campus in Florence
08/05/2024 Course: *Introduction to Macroeconomics (Bachelor Degree, 29.4 teaching hours)*

26/01/2023 - Lecturer, New York University, US, Campus in Florence
08/05/2023 Course: *Introduction to Macroeconomics (Bachelor Degree, 29.4 teaching hours)*

01/09/2022 - Lecturer, New York University, US, Campus in Florence
20/12/2022 Course: *Introduction to Macroeconomics (Bachelor Degree, 29.4 teaching hours)*

21/02/2022 - Lecturer, School of Economics and Management, University of Florence
30/04/2023 Course: *Macroeconomics (Bachelor Degree, 32 teaching hours)*

27/01/2022 - Lecturer, New York University, US, Campus in Florence
17/05/2022 Course: *Introduction to Macroeconomics (Bachelor Degree, 29.4 teaching hours)*

19/01/2022 - Lecturer, University of New Haven, US, Campus in Florence
11/05/2022 Course: *Introduction to Macroeconomics (Bachelor Degree, 45 teaching hours)*

13/09/2022 - Lecturer, Law school, University of Florence
30/04/2024 Course: *Macroeconomics (Bachelor Degree, 24 teaching hours)*

13/09/2021 - Lecturer, Law school, University of Florence
30/04/2023 Course: *Macroeconomics (Bachelor Degree, 24 teaching hours)*

19/10/2020 - Lecturer, Law school, University of Florence
0/04/2022 Course: *Macroeconomics (Bachelor Degree, 24 teaching hours)*

01/09/2025 - Teaching Assistant, Catholic University of the Sacred Heart, Faculty of Economics, Milano
current Course: *Policy Evaluation (Master Degree, 10 teaching hours)*

01/09/2025 - Teaching Assistant, Catholic University of the Sacred Heart, Faculty of Economics, Milano
current Course: *Macroeconomics (Bachelor Degree, 22 teaching hours)*

01/09/2024 - Teaching Assistant, Catholic University of the Sacred Heart, Faculty of Economics, Milano
16/12/2024 Course: *Policy Evaluation (Master Degree, 10 teaching hours)*

01/09/2024 - Teaching Assistant, Catholic University of the Sacred Heart, Faculty of Economics, Milano
16/12/2024 Course: *Macroeconomics (Bachelor Degree, 22 teaching hours)*

01/09/2023 - Teaching Assistant, Catholic University of the Sacred Heart, Faculty of Economics, Milano
31/10/2023 Course: *Macroeconomics (Bachelor Degree, 8 teaching hours)*

1/12/2021 - Teaching Assistant, School of Political Science "Cesare Alfieri", University of Florence
1/12/2022 Course: *International Economics (Bachelor Degree)*

13/09/2021 - Teaching Assistant, University of Florence, School of Economics and Management
28/02/2022 Course: *Statistical Inference (Master)*

4/09/2020 - Teaching Assistant, University of Florence, School of Economics and Management
28/02/2021 Course: *Statistical Inference (Master)*

Research Activity

- 1/05/2024-current** Topics: *Origin, effects, and mitigation of global risks.*
Catholic University of the Sacred Heart, Milan / Italy
Department of Economics and Finance
- 1/6/2022-30/04/2024** Topics: *Global value chains and exports: between growth, development and local resilience*
University of Florence, School of Economics and Management
Complexity Lab in Economics , Milan / Italy
- 1/6/2022-30/04/2024** Topics: *Economic-financial models with heterogeneous agents and learning: theoretical and empirical approach*
University of Florence, School of Economics and Management
Complexity Lab in Economics , Milan / Italy
- 1/07/2019-05/07/2019** Topics: *Comparative Macroeconomics/Comparative finance/Trade agreements and trading blocs*
King's College London, London, UK

Presentations at Conferences and Seminars

- 3rd DISEI-Workshop on Heterogeneity, Evolution and Networks in Economics, Novoli Campus of Social Science, Florence, (September 8-10, 2025, forthcoming)
- International Conference on Empirical Economics, Pennsylvania State University at Altoona, USA, (August 2-3, 2025).
- 7th Behavioral Macroeconomics Workshop, University of Bamberg, Germany (June 26-28, 2025)
- 28th Annual Workshop on Economics with Heterogeneous Interacting Agents. Queen Mary University of London, UK (June 9-11, 2025)
- 28th Forum for Macroeconomics and Macroeconomic Policies (FMM), Berlin, Germany (October 24-26 , 2024)
- 27th Annual Workshop on Economics with Heterogeneous Interacting Agents. (July 9-11, 2024. University of Bamberg)
- 27th Forum for Macroeconomics and Macroeconomic Policies (FMM), Berlin, Germany (October 19-21 , 2023)
- Internal Seminar on Macroeconomics at University of Florence (part 2), DISEI Department, (October 3, 2023)
- Internal Seminar on Macroeconomics at University of Florence (part 1), DISEI Department, (September 28, 2023)
- 35th Annual European Association for Evolutionary Political Economy conference, Leeds, UK (September 13-15, 2023)
- DISEI Workshop on Heterogeneity, Evolution and Networks in Economics, University of Florence, Florence, Italy (September 7-8, 2023)
- International Conference on Empirical Economics, Pennsylvania State University at Altoona, USA, (August 5, 2023).
- The SCE 29th International Conference on Computing in Economics and Finance, Université Côte d'Azur in Nice, France (July 3-6, 2023)
- 26TH Annual Workshop On Economic Science With Heterogeneous Interacting Agents, University of Primorska, Koper, Slovenia (June 22-24, 2023)
- Annual Workshop "Young Research", Fondazione Ciriotti, Pistoia (February 22, 2023)
- 63rd Annual Conference of the Italian Economic Association, Torino (October 20-22, 2022)
- Workshop on Economic Science with Heterogeneous Interacting Agents (WEHIA), Department of Economics and Business, University of Catania, Italy (June 22, 23, 24, 2022)
- 6th International workshop on Financial Markets and Nonlinear Dynamics, Paris (June 2-3, 2022)
- 62nd Annual Conference of the Italian Economic Association, (October 28, 2021)
- ASSET Conference (Association of Southern-European Economic Theorists), (October 22, 2021)

24.5th Workshop on Economics with Heterogeneous Interacting Agents, Università Cattolica del Sacro Cuore, (15 October, 2021).

DISEI Workshop on Heterogeneity, Evolution and Networks in Economics. Università degli Studi di Firenze, (September 7, 2021), Florence, Italy

The Society for Computational Economics, 27th International Conference Computing in Economics and Finance, (June 17, 2021)

The Complexity Lab in Economics (CLE), Università Cattolica del Sacro Cuore, Milano, Italy. Internal Seminar, (26 May 2021)

International Conference Minsky at 100 Revisiting Financial Instability, (December 17, 2019). Università Cattolica del Sacro Cuore, Milano, Italy

SPE Post-Graduate Research Seminars, King's College London, (November 26, 2019), London, UK

Department of Economics and Management (DISEI Seminar), (October 2019), University of Florence, Italy.

University of Siena, PhD Annual Meeting (June 2019), Certosa di Pontignano, Siena, Italy

University of Siena. PhD Annual Meeting (June 2018), Certosa di Pontignano, Siena, Italy

Conferences and Seminars Attended

Honouring Piero Ferri, Legacy and Contributions to Economics. Università degli Studi di Bergamo, Dipartimento di Scienze Economiche, (May, 26, 2023, Forthcoming)

Workshop Italian Trade Society Group, University of Florence, Firenze (December 1-2, 2022)

4th Behavioral Macroeconomics Workshop, University of Bamberg (June 27-29, 2022)

Creator or Destroyer? The Role of Finance in the World Economy. KCL, Strand Campus, London, UK, (2019)

Post-Keynesian Economics meets International and Comparative Political Economy. KCL, Strand Campus, London, UK, (2019)

29th PKES Annual Workshop. Goldsmiths, University of London, UK, (2019)

11th Annual PhD Student Conference. Goldsmith, University of London, Strand Campus, UK, (2019)

Financialisation, Growth and Welfare State. University of Greenwich, UK, (2018)

Assessing the crisis ten years after the Crash. KCL, Strand Building, UK, (2018)

Income-Led Growth: Challenges for Progressive Economic Policy in Korea. KCL, Strand Campus, UK, (2018)

Refereeing Activity

Metroeconomica, SN Business & Economics, Italian Economic Journal, Review of Political Economy, Journal of Economic Interaction & Coordination, Plos One, Environmental Modeling & Assessment

Organizing Committee

3rd DISEI-Workshop on Heterogeneity, Evolution and Networks in Economics, Novoli Campus of Social Science, Florence, (September 8-10, 2025, forthcoming)

PhD Annual Meeting, University of Siena (June 2025), Certosa di Pontignano, Siena, Italy PhD Annual Meeting, University of Siena (June 2024), Certosa di Pontignano, Siena, Italy

2nd Workshop on Heterogeneity, Evolution and Networks in Economics, University of Florence, September (2023), DISEI Department Firenze, Italy

PhD Annual Meeting, University of Siena (June 2023), Certosa di Pontignano, Siena, Italy

Workshop Italian Trade Society Group, University of Florence, (December 2022) DISEI, Firenze, Italy

PhD Annual Meeting, University of Siena (June 2022), Certosa di Pontignano, Siena, Italy

Workshop on Heterogeneity, Evolution and Networks in Economics, University of Florence, (September 2021), Palazzo del rettorato, Firenze, Italy

PhD Annual Meeting, University of Siena (September 2021), Certosa di Pontignano, Siena, Italy

Partecipation in projects

Project: *Global value chains and exports: between growth, development and local resilience*
University of Florence and Complexity Lab in Economics (CLE), Università Cattolica del Sacro Cuore

Grants, Scholarships and Other Academic Attainments

Post-doc research fellow. *Origin, effects, and mitigation of global risks.*
Università Cattolica del Sacro Cuore, Milan/Italy

Post-doc research fellow. *Global value chains and exports: between growth, development and local resilience*
University of Florence and Complexity Lab in Economics (CLE), Università Cattolica del Sacro Cuore

Post-doc research fellow. *Economic-financial models with heterogeneous agents and learning: theoretical and empirical approach*

University of Florence and Complexity Lab in Economics (CLE), Università Cattolica del Sacro Cuore

PhD Fellowship. *Economic Inequality and Financial Instability*
University of Siena

Supervised Theses

Luigi Cucaro, "Mercati finanziari e come la geopolitica influenza il loro andamento" (Bachelor Degree thesis, Law school)

Gianbattista Di Lettera, "Il reddito di cittadinanza tra le politiche attive del mercato sul lavoro" (Bachelor Degree thesis, Law school)

Riccardo Picciau, "Bitcoin - Il Sale del Futuro" (Bachelor Degree thesis, Law school)

Roberto Rainis, "Criptovalute: uno strumento che consente, intrinsecamente, di autodeterminarsi" (Bachelor Degree thesis, Law school)

Luca Schiavello, "Il ciclo economico e le sue fluttuazioni: analisi tra stoia, teorie e modelli" (Bachelor Degree thesis, Law school)

Antonio Azzarello, "Il finanziamento del terrorismo. Una minaccia globale all'economia e alla sicurezza analisi delle strategie, impatti e mezzi di contrasto" (Bachelor Degree thesis, Law school)

Fiorenza Annese, "Il ruolo economico delle organizzazioni criminali" (Bachelor Degree thesis, Law school)

Gabriella Florio, "Effetto domino: la reazione dei mercati europei al conflitto russo-ucraino." (Bachelor Degree thesis, Law school)

Short Schools

Complex Networks: Theory, Methods, and Applications. Lake Como School of Advanced Studies (May, 2022)

Languages

- **Italian - mother tongue**
- **English - level C1, certified according to the Common European Framework**
- **Spanish - basic**

Technical skills and competences

- **Data analysis -statistical software**
Stata
EViews

- **Programming language**

Matlab programming language code

LSD (Laboratory for Simulation Development)

Python - Spyder

- **Document preparation system**

LaTeX TexMaker

- **Mathematical equation editor**

MathType

- **Content management system**

WordPress

- **Learning management systems**

Canvas

Brightspace

Blackboard