

Filippo Zimmario

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EDUCATION

PhD in AI for Society, *University of Pisa, University of Bologna* (Nov 2021 - Present)

Mathematical models of social phenomena. Supervisors: J. Kertész (Central European University, Vienna), E. Mingione (Bologna), P. Contucci (Bologna), T. Squartini (IMT Lucca), E. Pavan (Trento)

MSc Physics of Complex Systems, *Polytechnic of Turin* (Oct 2019 - Oct 2021)

Mark: 110/110 with honors. Thesis: “Semi-supervised classification in the Censored Block Model”

Supervisors: Prof. Romain Couillet (GIPSA Lab, Grenoble), Lorenzo Dall’Amico (GIPSA Lab, Grenoble), Prof. Alfredo Braunstein (PoliTo)

MSc Physics of Complex Systems, *Université Paris 1 Sorbonne* (Oct 2019 - Jul 2021)

BSc Physics, *Sapienza University of Rome* (Oct 2017 - Oct 2019)

Mark: 110/110. Thesis: “Modelli meccanici della termodinamica e ipotesi ergodica”
Supervisor: Prof. Angelo Vulpiani

EXPERIENCE

Visiting Researcher *Central European University* (Sept 2022 - Dec 2022)

Department of Network and Data Science Central European University, Vienna

Teaching Assistant (Jan 2022 - Present)

Course of Mathematical Physics 1, BSc in Mathematics University of Bologna

Research intern *GIPSA Lab, Grenoble* (Feb 2021 - Jul 2021)

Visiting Student *ICTP and SISSA, Trieste* (Oct 2019 - Feb 2020)

ACADEMIC ACTIVITIES

Spring College on the Physics of Complex Systems (20 Feb - 20 Mar 2021)

International Centre of Theoretical Physics (ICTP), Trieste

Convegno SIFS (20-22 June 2022)

Convegno Società Italiana di Fisica Statistica Parma, Italy

AI & Society 2022 Summer School (4-8 July 2022)

Summer school of the National PhD of AI & Society Pisa, Italy

Lipari Summer School 2022 Data Science (17-23 July 2022)

Data Science: Models, Algorithms, AI and Beyond Lipari, Italy

Workshop “Matematica per AI e il Machine Learning” (22 November 2022)

Organizer: Polytechnic of Turin. *Regular talk*. Turin, Italy

First CIVICA Conference on European Polarisation (15 February 2023)

Organizers: CIVICA, Sciences Po, Bocconi, CEU. *Regular talk*. Online

Workshop on Inequality Across Scales, Space, Time and Domains (17-21 April 2023)

International Centre of Theoretical Physics (ICTP) Trieste, Italy

Workshop "Mathematical Physics of Complex Systems" Organizers: Indam, University of Bologna Cortona, Italy	(12-16 June 2023)
Workshop "Complexity 72h", 4th edition Institute for Cross-Disciplinary Physics and Complex Systems (IFISC) Palma de Mallorca, Spain	(26-30 June 2023)
NetSci 2023 conference Poster session Vienna, Austria	(10-14 July 2023)
Summer School on Computational Social Science ISI Foundation, Turin, Italy	(24-28 July 2023)
Workshop "Mathematics for AI and Machine Learning" Bocconi University, Milan, Italy	(17-19 January 2024)
NetSciX 2024 conference University of Venice, Venezia, Italy	(22-25 January 2024)
2024 AI Governance Modelling Workshop Teesside University, Middlesbrough, UK	(12-14 March 2024)

CERTIFICATES

IELTS Academic , <i>British Council</i> Overall Band Score 7.5	(Mar 2019)
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PUBLICATIONS

Ferromagnetic Ising Model on multiregular random graphs Alberici D., Contucci P., Mingione E., Zimmaro F., in <i>ArXiv preprint</i>	(2024)
Trust AI Regulation? Discerning users are vital to build trust and effective AI regulation Alalawi Z., Bova P., Cimpeanu T., Di Stefano A., Hong Duong M., Fernandez Domingos E., Han T.A., Krellner M., Ogbo B., Powers S., Zimmaro F., in <i>ArXiv preprint</i>	(2024)
Asymmetric games on networks: mapping to Ising models and bounded rationality Zimmaro F., Galam S., Javarone M.A., to appear in <i>Chaos, Solitons & Fractals</i>	(2024)
Emergence of Cooperation in the one-shot Prisoner's Dilemma through Discriminatory and Samaritan AIs Zimmaro F., Miranda M., Ramos Fernández J.M., Moreno López J., Booker T., Reddel M., Widler V., Antonioni A. and Han T.A., in <i>ArXiv preprint</i>	(2023)
Voter-like Dynamics with Conflicting Preferences on Modular Networks Zimmaro F., Contucci P., Kertesz J., in <i>Entropy</i>	(2023)

ADDITIONAL

- Expert in: Python, LaTeX.
- Other programming languages known: R, Julia, C++
- Languages: Italian (Mother tongue), English (C1), French (B2), Portuguese (A2)