

2024-2025 PhD Subject Proposition

Proposition de Sujet de Thèse 2024-2025

**Changes in the Public Political Opinions as Modulated Responses to
Socio-Economic Stresses**

Doctoral School: Doctoral School in Law, Political Science, Economics and Management (ED DESPEG)

Thesis supervisor: Maxime Menuet

Host laboratory: GREDEG

Subject description: Contemporary Western liberal democracies face a crisis as trust in political institutions dwindles and populist forces gain strength. This PhD proposal investigates whether these democracies are experiencing an opinion crisis as a result of increasing polarisation and rejection of established political elites. To address this challenge, the research project intends to create a model for detecting, estimating, and forecasting public political expectations in order to predict voting intentions. Traditional survey methods have biases, prompting the investigation of alternative methodology such as Agent-based Computational Economics Models (ACE) enhanced by evolutionary algorithms. The research goals include finding characteristics that influence public voting intentions, creating a theoretical framework that combines evolutionary game theory and political economics theory, conducting micro-macro simulations, and testing the model against historical data. Methodologically, the project expands on prior research on household responses to macroeconomic shocks and employs ACE approaches to simulate consumption patterns. Psychological, cultural, demographic, and political data will guide the development of a political expectation function that is dynamically reliant on spatial density distribution, demographic features, and political culture of households. The study attempts to contribute to a more comprehensive knowledge of political behaviour considering factors influencing public opinions and voting intentions in contemporary democracies.

References

- Bourguignon, F. and Bussolo, M. (2013). « Income Distribution in Computable General Equilibrium Modeling ». In *Handbook of Computable General Equilibrium Modeling*, vol. 1, chap. 21, p. 1383-1437.
- Chernozhukov, Fernandez-Val and Blaise Melly (2013). « Inference on Counterfactual Distributions ». *Econometrica*, vol. 81(6), pp. 2205–2268.
- Ding, F., Liu, Y., Shen, B. and Si, X.-M. (2010). « An evolutionary game theory model of binary opinion formation ». *Physica A: Statistical Mechanics and its Applications*, vol. 389(8), pp.1745–1752.
- Fudenberg, D., Lanzani, G. and Strack, P. (2022). « Selective Memory Equilibrium », mimeo.
- Short, M., D’orsogna, M., Pasour, V., Tita, G., Brantingham, P., Bertozzi, A. and Chayes, L. (2008). « A Statistical model of criminal behavior ». *Mathematical Models and Methods in Applied Sciences*, vol. 18, p. 1249-1267.
- Swathi Battula, Leigh Tesfatsion, and Zhaoyu Wang. (2020). « A Customer-Centric Approach to Bid-Based Transactive Energy System Design ». *IEEE Transactions on Smart Grid*, vol. 11(6), pp. 4996-5008.