

Qingchao Zeng

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Employment

2025 - present Post-doctoral Fellow

University of Fribourg

Research Interests

Microeconomics, Game Theory, Evolutionary Game Theory, Social Networks;

Education

2019 - present Ph.D. student of Economics, **University of Economics**

- Supervisors: Simon Weidenholzer and Friederike Mengel

2016 - 2019 Master's Degree in Statistics, **Beihang University**

2012-2016 Bachelor's Degree in Mathematics, **Beihang University**

Research Interests

Microeconomics, Game Theory, Evolutionary Game Theory, Social Networks;

Working in Progress

Network Formation with Local Benefits

abstract: We consider a non-cooperative model of network formations where agents decide on whom to form costly links to. Links are unilaterally formed and payoff flows one way to the active side. We study discontinuous information flows where agents only receive benefits from other agents that are at a distance of two in the network. For the static game, we show that the set of Nash equilibria encompasses a multiplicity of core-periphery network structures. We further study a noisy best response process to obtain long-run predictions. Doing so, we find that the set of stochastically stable states retains a multiplicity of network structures, many of which are not efficient.

Stochastic Stability in Coordination Games Under Heterogeneous Constraints

abstract: In this paper, we present an evolutionary model of coordination and network formation where agents have two different linking constraints. We examine the agents' choices regarding both actions in coordination games and linking strategies, with a focus on stochastic stability. We find that an increase in the constraints leads to a higher inclination toward risk-dominant strategies. The co-existence of risk-dominant action and the payoff-dominant action starts to emerge when the lower constraint decreases and the higher constraint increases.

Publications

Ping, Li et al. (2018). "The relationship among China's fuel oil spot, futures and stock markets". In: *Finance Research Letters* 24, pp. 151–162.

Zeng, Qingchao (2019). "Social Coordination and Network Formation with Heterogeneous Constraints". In: *Game Theory for Networking Applications*, pp. 153–162.

Conferences and Seminar Presentations

2024: Royal Economic Society 2024 Annual Conference

2023: 10th China Meeting on Game Theory and Its Applications (CMGTA)

Teaching

Assistant Lecturer Intermediate Microeconomics (2022 -23, 2023-24)

Assistant Lecturer Mathematical Methods in Economics (2023 Spring, 2024 Spring)

Assistant Lecturer Introduction to Econometric Methods (2022 Autumn, 2023 Autumn)

Scholarships

Social Sciences Doctoral Scholarship, University of Essex, 2019-2023

Second-class Academic Scholarship, Beihang University, 2017

National Scholarship for postgraduate students, Beihang University, 2016

National Endeavor Scholarship, Beihang University, 2014

Lguage

Fluent in English, Native in Madarin, Advanced in R and MatLab

Reference

Prof. Simon Weidenholzer

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Prof. Friederike Mengel

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