China

## ZHENG WANG

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### **EDUCATION**

#### **European University Institute** 2017 - present PhD Candidate in Economics Italy Thesis title: Essays in the Economics and Econometrics of Networks and Peer Effect Supervisors: Andrea Ichino & Sule Alan Expected completion date: May 2023 **Aix-Marseille School of Economics** 2021 - present Visiting PhD researcher France Mentor: Prof. Yann Bramoullé **London School of Economics** 2013 - 2014MSc in Econometrics and Mathematical Economics (EME) UK 2009 - 2013Beihang University

### RESEARCH INTERESTS

BSc in Finance, with second degree in Applied Mathematics

Primary Fields: Applied Econometrics, Causal Inference, Applied Microeconomics

Secondary Fields: Networks, Peer Effects, Education, Social Mobility, Discrimination, Crimes

### REFERENCES

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### JOB MARKET PAPER

## The Linking Effect: Causal Identification and Estimation of the Effect of Peer Relationship

The endogeneity of network formation has been a major obstacle to the empirical study of peer influence for many important types of networks, including friendship networks, buyer-supplier networks, banking networks, etc. This paper puts forward the first identification strategy in a causal framework to study the effect of non-randomly formed peer relationships. It reveals the minimum set of assumptions needed for causal identification, which, unlike existing approaches, needs neither a network formation model nor an outcome model to be parametrically specified. I show that this is because the propensity scores of the unobserved confounders can be non-parametrically identified and estimated from the distribution of network links. Using the proposed method, I empirically estimate the causal effect of high school friendships on students' bachelor's degree attainment. While previous literature finds that being exposed to more high-achieving boys in high school makes girls less likely to obtain a bachelor's degree, I show that this is not true when these high-achieving boys are considered friends by the girls. In fact, one additional high-achieving male friend increases the probability that a female student graduates from college by 3 p.p. Further analysis suggests that this positive influence is not a result of increased academic ability but rather a significant confidence boost. These results imply that instead of shielding girls from high-achieving boys, it could be more effective to foster friendly interactions among them.

#### WORK IN PROGRESS – Econometrics

#### The Perils of Pairwise Peer Effect

Joint with Yann Bramoullé and Pierre-Philippe Combes

Pairwise regressions have been increasingly more commonly used to study peer influence, noticeably after the influential paper by Bayer, Ross and Topa (2008). In this paper we show both the identification and inference issues coming from pairwise regressions.

## WORK IN PROGRESS – Applied Microeconomics

#### Competitive Peer Effect – the Case of Duolingo

This paper studies the effect of competition difficulty on one's effort exertion. Using data from the Duolingo leaderboard where language learners are randomly put into group competition, I find evidence suggesting that people react to competition difficulty differently depending on their time constraint and their level of commitment.

### Experiment on Test Performance and Implications for Fairness

Joint with Dalila Figueiredo

Ongoing pilot.

#### Victimization and Crime Overlap

Joint with Christian Dustmann, Rasmus Landersø and Mikkel Mertz

Using Danish administrative data, we study whether and how different aspects of victimization causally affect the future criminal activities of the victims.

### TEACHING EXPERIENCE

Econometrics and Statistics I (Causality)

Fall 2019

EUI PhD Core Course, TA to Prof. Andrea Ichino

Econometrics and Statistics II (Microeconometrics)

Spring 2018

EUI PhD Core Course, TA to Prof. Michèle Belot

# WORK EXPERIENCE

Research assistant for Prof. Andrea Ichino	2018
European University Institute	
Junior Economist	2016 - 2017
Research Department, International Labor Organization (Geneva)	
Research Intern	2015-2016
Research Department, International Labor Organization (Geneva)	
Data Analyst Intern	2015
International Federation of Red Cross and Red Crescent Societies (Geneva)	

# ADDITIONAL COURSEWORK

Summer School on The Economics of Networks	2021
Lori A. Beaman, Sanjeev Goyal, Yann Bramoullé & Habiba Djebbari	France
Summer School on The Econometrics of Peer Effects and Social Interactions	2019
Bryan Graham & Aureo de Paula	Germany

# CONFERENCES AND SEMINARS

2nd International Econometrics PhD Conference	November 2022
The Econometric Institute (EI) at Erasmus University Rotterdam	
PhD-EVS online seminar	October 2022
International online seminar for PhD candidates and early career researchers	

## GRANTS AND AWARDS

4th year PhD Grant	2021-2022
Aix-Marseille School of Economics	France
EUI Special PhD Grant – Adam Smith	2017-2021
European University Institute	Italy

# Languages

English (fluent), Mandarin (native), French (basic) R, Python, MATLAB, Stata