# ZHENG WANG

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## EDUCATION

**European University Institute**                                        2018 – 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: Yann Bramoullé

**European University Institute**                                          2017 – 2018
*MRes in Economics*                                                              Italy

**London School of Economics**                                             2013 – 2014
*MSc in Econometrics and Mathematical Economics (EME)*                             UK

**Beihang University**                                                     2009 – 2013
*BSc in Finance, with second degree in Applied Mathematics*                      China

## RESEARCH INTERESTS

**Primary Fields**: Applied Econometrics, Causal Inference, Applied Microeconomics
**Secondary Fields**: Networks, Peer Effects, Education, Inequality, Gender, Crimes

## REFERENCES

**Andrea Ichino**
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**Yann Bramoullé**
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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 study of peer influence. This paper proposes a causal identification solution in the potential outcome framework. Combining results from multiple causal inference and statistical network analysis, I show that confounding can be addressed by inferring propensity scores of network link formation from the adjacency matrix. This identification strategy imposes minimum restrictions on the data-generating process and, unlike existing econometric solutions, does not rely on any parametric modelling. As an application, I estimate the effect of high school friendships on bachelor's degree attainment. While previous literature finds that exposure to more high-achieving boys makes girls less likely to obtain a bachelor's degree, I show that if the girls consider the boys as friends, their interactions induce a positive impact instead. Since friendship endogeneity has been addressed, the estimated effect is causal.

## 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

### Can Women be More Competitive than Men? Evidence from Duolingo

The endogeneity of network formation has been a major obstacle to the study of peer influence. This paper proposes a causal identification solution in the potential outcome framework. Combining results from multiple causal inference and statistical network analysis, I show that confounding can be addressed by inferring propensity scores of network link formation from the adjacency matrix. This identification strategy imposes minimum restrictions on the data-generating process and, unlike existing econometric solutions, does not rely on any parametric modelling. As an application, I estimate the effect of high school friendships on bachelor's degree attainment. While previous literature finds that exposure to more high-achieving boys makes girls less likely to obtain a bachelor's degree, I show that if the girls consider the boys as friends, their interactions induce a positive impact instead. Since friendship endogeneity has been addressed, the estimated effect is causal.

### The Effect of Familiarity on Test Performance and its Implications on Fairness
*Joint with Dalila Figueiredo*

In this paper, we design and conduct an experiment to examine whether students' familiarity with test topics used in IELTS, a standardised English test commonly used for college admission, affects their test performance. Then, with a survey, we investigate whether familiarity disparities across groups lead to unfair examinations for students of different genders, cultures, and socioeconomic status.

### 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

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|---|---|
| **Econometrics and Statistics I (Introductory Econometrics and Causality)** | Fall 2019 |
| *EUI PhD Core Course, TA to Prof. Andrea Ichino* | |
| **Econometrics and Statistics III (Microeconometrics)** | Spring 2018 |
| *EUI PhD Core Course, TA to Prof. Michèle Belot* | |

## WORK EXPERIENCE

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|---|---|
| **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

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| **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

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| **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

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| **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