## Gender bias in the Erasmus network of universities

Luca De Benedictis<sup>1</sup> and Silvia Leoni<sup>2</sup>

<sup>1</sup>Università di Macerata <sup>2</sup>Università Politecnica delle Marche

September 4, 2020

## Abstract

Many social phenomena rely upon a network structure. In fact, it is possible to identify a network wherever a system of relationships exists. Among these phenomena, the structure of the mobility of Erasmus students can also be looked at through a network perspective. The Erasmus Program (EuRopean Community Action Scheme for the Mobility of University Students) is a student exchange program financed by the European Union and launched in 1987. It is characterized by a strong gender bias. Female students participate to the program more than male students. This work quantifies the gender bias in the Erasmus program between 2008 and 2013, using novel data at the university level. It describes the structure of the program in great detail, carrying out the analysis across fields of study, and identifies key universities as senders and receivers. In addition, it tests the difference in the degree distribution of the Erasmus network along time and between genders, giving evidence of a greater density in the female Erasmus network with respect to the one of the male Erasmus network.

**Keywords:** Erasmus, Gender bias, Network Analysis, Degree distribution.