



# D<sup>2</sup> SEMINAR SERIES

## *Florence Center for Data Science 'Double' Seminar Series*

Florence Center for Data Science is happy to present the next seminar of the Series on **February 17th**, from **2.30 - 4 pm**

Click on the link to register online:

[https://us02web.zoom.us/webinar/register/WN\\_SLRoRT\\_DQL-nCqVPJb6xLQ](https://us02web.zoom.us/webinar/register/WN_SLRoRT_DQL-nCqVPJb6xLQ)

### **SPEAKERS, TITLES, ABSTRACTS:**

**Elena Stanghellini - Department of Economics, University of Perugia**

Title: "Causal effects for binary variables: parametric formulation and sensitivity"

Abstract: The talk will focus on causal effects of a treatment on a binary outcome. I shall review some results for one single binary mediator, and show how these can be extended to the multiple mediator case. Particular focus shall be put on two mediators, with the aim to isolate sensitivity parameters against the identifying assumptions. If time permits, extensions to outcome dependent sampling schemes will be also addressed. This talk is based on joint work with: Paolo Berta, Marco Doretti, Minna Genbäck, Martina Raggi."

**Gianluca Iannucci - Department of Economics and Management , University of Florence**

Title: "The interaction between emission tax and insurance in an evolutionary oligopoly "

Abstract: It is now commonly accepted that polluting companies deeply contribute to climate change. Environmental losses significantly impact companies' profits so they have to manage them through different strategies to survive on the market. The model assumes two types of firms, polluting and non-polluting, playing a Cournot-Nash game. Due to the different impact on the environment, polluting firms have to pay an emission tax. Both types of firms are risk averse and can cover the potential climate change loss choosing insurance coverage. From the comparative static analysis computed at the equilibrium, it emerges a substitution effect between insurance and taxation. Moreover, insurance can help clean firms to compete with dirty ones. Finally, we endogenize the market structure through an evolutionary setting and we perform comparative dynamics to confirm the interplay of taxation and insurance that arise from analytical results in order to nudge an ecological transition.