Thursday January 09, 2020 at 14:30
Politecnico di Torino, DISMA, Aula Buzano (third floor)

Matteo BIZZARRI

PhD candidate at Università Bocconi

On the Coevolution of Epidemics, Immunization choices and Pseudoscience Attitudes

A joint work with Fabrizio Panebianco and Paolo Pin.
Prof. Giacomo Como introduces the seminar.

Abstract

Motivated by the social homophily observed in vaccine sentiment, we study a model of coevolution of an epidemics and attitudes toward a vaccine that can immunize against the infection. Consistently with the social norm interpretation, we use the cultural transmission model from Bisin and Verdier (2001) to represent the evolution of vaccine sentiments. We show that under intermediate level of the anti-vax bias there is a steady state with endemic infection and persistent heterogeneity in vaccine sentiment. Moreover, homophily has an ambiguous effect: it decreases the steady state infection level, but increases the risk of small perturbations from such a steady state. We argue that our results suggests caution in public health policies that affect social segregation, such as forbidding access to public schools to non-vaccinated kids.

Biography

Matteo Bizzarri studied Mathematics at Università di Torino and Economics at Collegio Carlo Alberto, and currently works on network economics and applications under the supervision of Prof. Vega-Redondo.