

DaSSWeb

Data Science and Statistics Webinar

28TH MAY | 11.30AM (WEST) | ROOM 156 | ONLINE ([HERE](#))

CLUSTERING INCOME DATA BASED ON SHARE DENSITIES: HIERARCHICAL AND NON-HIERARCHICAL ALGORITHMS

Starting from a situation where a reference population of income earners is naturally divided into subgroups, the aim is to explore the similarity of these sub-populations in terms of income inequality. To this end, a particular function, the so-called share density, strongly related to Lorenz curve and inequality measures, is considered for drawing information on income concentration. The Jensen-Shannon dissimilarity measure is proposed to evaluate the discrepancy across share densities, and some hierarchical and non-hierarchical clustering algorithms for unconventional data are defined. Obtained results on data from the Survey on Households Income and Wealth, carried out by Bank of Italy, and from EU-SILC survey, by Eurostat, are shown.

SPEAKER

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Francesca Condino is currently Associate Professor of Statistics at the Department of Economics, Statistics and Finance "Giovanni Anania" of the University of Calabria (Italy). Graduated with honors in Statistics and Actuarial Sciences, she obtained the Ph.D. in Statistics at the University "Federico II" of Naples (2010). She was a research fellow at the Institute of Neurological Sciences of the National Council of Research of Italy. She authored several publications in international journals, both methodological and applied, mainly focused on the study of parametric distributions, copula functions, income and inequality, and dynamic clustering of parametric densities.

