DSS Statistics Seminar
May 28, 2020, 2:00 p.m.
https://meet.google.com/iyx-jxjn-nea

A Hierarchical Bayesian model for quality check of the Italian population counts, estimated using Administrative Data

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The aim of the work is to evaluate the consistency of population size disaggregated by year, region, sex and age, using the demographic time series published by the Italian National Institute. For each of the cells, identified by the four variables mentioned before, we want an estimate of the population counts. The estimate takes into account both the relationship between the stocks and flows of the demographic balance, and the relationship among observed Administrative data. The last data are affected by coverage error and non-observable "true" values without error (measurement error models). The Bayesian model presented is able to include both aspects.

SAPIENZA
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Seminar Series
New challenges in Official Statistics

In recent decades, National Statistical Institutes moved toward producing official statistics by exploiting multiple sources of information. The relevance of multi-source statistics in such a context is becoming increasingly evident and it led to important research projects in the field. With this seminar series, we aim to give an up-to-date picture of current developments. The highlight will be on observed progress in the direction of using formal statistical models, and potential future areas of research.
The list of topics covered in the series is:

1. Data Integration and issues related to integrating information from different sources
2. Methods for population estimation with multisource data
3. Mixed mode data collection
4. Small area estimation
5. Seasonal adjustments

This is the first attempt to join forces from ISTAT and the department of Statistics to give access to the directions of current development and the definition of new areas of interest in official statistics.

The Organizers
Marco Di Zio, Danila Filipponi (ISTAT)
Marco Alfò, Giovanna Jona Lasinio, Roberto Rocci (Sapienza)

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