



# Second Workshop on methodologies for Official Statistics

### 6-7 December 2023

Aula Magna

Via Cesare Balbo, 14 Rome

REGISTER in person

REGISTER online

### WEDNESDAY, 6 DECEMBER

9.00 am - 9.30 am Welcome and opening session

Francesco Maria Chelli | Istat President, Italy

Massimo Fedeli | Head of Department for development of methods and technologies for production and dissemination of statistical information | Istat, Italy

Monica Pratesi | Head of Department for statistical production | Istat, Italy

# Session 1 | Methodologies and designs for multi-source processes with non-probability data

# 9.30 am - 11.00 am Master class | Challenges and strategies in dealing with non-probability survey samples

by Changbao Wu | University of Waterloo, Canada

Master class chair Daniela Cocchi | University of Bologna, Italy

11.00 am - 11.20 am Coffee break

#### 11.20 am - 12.50 pm Invited talks

Multi-source data: new approaches for non-standard employment statistics.

#### The Dutch and Italian experience

Danila Filipponi, Silvia Loriga | Istat, Italy

Mauricio Garnier Villarreal, Dimitris Pavlopoulos | Vrije Universiteit Amsterdam, The Netherlands Roberta Varriale | Sapienza University of Roma, Italy

Setting up a statistical register of individuals and dwellings, updated with administrative sources: approach and first steps

Aurélien Lavergne | INSEE, France

#### Producing U.S.Population statistics using multiple administrative sources

J. David Brown, Marta Murray-Close | U.S.Census Bureau, U.S.A.

Invited talks chair Piero D. Falorsi | formerly at Istat, Italy
Invited talks discussant Maria Giovanna Ranalli | University of Perugia, Italy

12.50 pm - 2.00 pm Lunch

# Session 2 | Innovative data for official statistics: Methodological challenges

## 2.00 pm - 3.30 pm Master class | Limits and challenges of incorporating innovative data in official statistics

by Stefano M. lacus | Harvard University and IQSS, U.S.A.

Master class chair Daniela Cocchi | University of Bologna, Italy

3.30 pm - 3.50 pm Coffee break

#### 3.50 pm - 5.20 pm Invited talks

#### Smart surveys: methodological issues and challenges for official statistics

Claudia De Vitiis, Fabrizio De Fausti, Francesca Inglese and Monica Perez | Istat, Italy

#### Quantification of urban green areas: an innovative remote sensing approach for official statistics

Stefano Mugnoli, Fabrizio De Fausti, Giuseppe Lancioni and Francesco Sisti | Istat, Italy

#### Machine learning in official statistics: is explainability an issue?

Maurizio Naldi | LUMSA University, Italy

Invited talks chair Brunero Liseo | Sapienza Università di Roma, Italy
Invited talks discussant Li-Chun Zhang | Statistisk Sentralbyrå, Norway and University of Southampton, U.K.

### THURSDAY, 7 DECEMBER

### Session 3 | Quality for non-traditional sources

# 9.00 am - 10.30 am Master class | Quality for innovative data sources: Progress, challenges and directions of work for the European Statistical System

by Fabio Ricciato | Eurostat

Master class chair Daniela Cocchi | University of Bologna, Italy

10.30 am - 10.50 am Coffee break

#### 10.50 am - 12.20 pm Invited speakers

#### Quality aspects using mobile network operators data for official statistics

G. Ascari, E. Cerasti, C. Faricelli, P. Mattera, S. Piombo, R. Radini, G. Simeoni and T. Tuoto | Istat, Italy

#### Navigating quality challenges in landscaping web data: new aspects and source stability

Magdalena Six, Alexander Kowarik | Statistik Austria, Austria

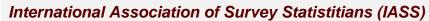
#### Assessing the quality of transaction data for use in the Consumer Price Index

Anthony Dawson, Calvin O'Brien | Central Statistical Office (An Phríomh-Oifig Staidrimh), Eire

*Invited talks chair* Li-Chun Zhang | Statistisk Sentralbyrå, Norway and University of Southampton, U.K. *Invited talks discussant* Natalie Shlomo | IASS President | University of Manchester, U.K.

### Session 4 | Machine learning methods in survey statistics

#### in collaboration with





1.40 pm - 4.35 pm Invited talks

Introduction to session 4: Overview of machine learning in survey research Natalie Shlomo | IASS President | University of Manchester, U.K.

Machine learning procedures for the treatment of unit non-response in surveys

David Haziza, John Tsang | University of Ottawa, Canada

Khaled Larbi | INSEE, France

Mehdi Dagdoug | McGill University, Montreal, Canada

3.00 pm - 3.20 pm Coffee Break

State of play and perspectives on machine learning at Istat Marco Di Zio | Istat, Italy

Machine learning in official statistics: towards statistical based machine learning Marco Puts and Petrus J.H. Daas | Centraal Bureau voor de Statistiek, The Netherlands

Invited talks chair Natalie Shlomo | IASS President | University of Manchester, U.K.

4.35 pm - 5.00 pm Closing session

Orietta Luzi | Head of Directorate for methodology and statistical process design | Istat, Italy