



3rd Workshop on Methodologies for Official Statistics

4-5 December 2024

Istat | Aula Magna

Via Cesare Balbo, 14 – Rome, Italy

WEDNESDAY, 4 DECEMBER

8:30 am Participant Registration

9:00 - 9:30 am Welcome and opening session

Francesco Maria Chelli | Istat President | Istat

Monica Pratesi | Head of Department for statistical production | Istat

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

Session 1 | Methods for multisource statistics

9:30 - 11:00 am Master class: Matching of a non-probability sample with a probability sample affected by nonignorable sampling and nonresponse

by Daniel Pfeffermann | University of Southampton, Hebrew University of Jerusalem and former National Statistician and Director General of Israel's Central Bureau of Statistics

joint work with

Daniela Marella | Sapienza University of Rome

Donato Summa | Istat

Master class Chair

Marco Alfò | Sapienza University of Rome, Italy, Istat Advisory Committee on statistical methods

11:00 - 11:20 am Coffee break

11:20 am - 12:50 pm Invited talks

Optimization of surveys: The 'Integrated Census and Social Surveys System' project

Claudia De Vitiis, Stefano Falorsi, Alessio Guandalini, Francesca Inglese, Silvia Loriga, Matteo Mazziotta, Federica Piersimoni, Rita Ranaldi, Monica Russo, Marco Dionisio Terribili | Istat

Roberto Benedetti | "G. d'Annunzio" University of Chieti and Pescara

Linearization approach for measuring the accuracy of multinomial outcomes from a statistical register

Stefano Falorsi, Diego Chianella, Romina Filippini and Simona Toti | Istat

Nina Deliu, Piero D. Falorsi | Sapienza University of Rome

Combining survey data and mobile network operator data for commuting statistics

Erika Cerasti, Loredana Di Consiglio, Danila Filippini, Tiziana Pichiorri, Alessandro Piovani, Tiziana Tuoto | Istat

Li-Chun Zhang | Statistics Norway, University of Southampton, Istat Advisory Committee on statistical methods

Invited talks Chair and Discussant

David Haziza | University of Ottawa, Istat Advisory Committee on statistical methods

12:50 pm - 2:00 pm *Lunch*

Session 2 | Methods for non-probabilistic data sources

2:00 - 3:30 pm Master class: Analysis of voluntary samples

by **Jae-Kwang Kim** | Iowa State University

Master class Chair

Piero D. Falorsi | Sapienza University of Rome, Istat Advisory Committee on statistical methods

3:30 - 3:50 pm *Coffee break*

3:50 - 5:20 pm Invited talks

Harnessing AI in official statistics: Expected outcomes of the ESSNet One-Stop-Shop Project

Francesca Kay | Central Statistics Office of Ireland

Statistical use of Automatic Identification System (AIS) data

Fabrizio M. Arosio, Marco Di Zio, Anna E. Martino, Giulio Massacci, Francesco Ortame, Angela Pappagallo, Francesco Pugliese, Norina Salamone, Francesco Sisti, Silvia Talice, Luca Valentino | Istat

Statistical matching and informative sampling

Daniela Marella | Sapienza University of Rome

Daniel Pfeffermann | University of Southampton, Hebrew University of Jerusalem, Former National Statistician and Director General of Israel's Central Bureau of Statistics

Invited talks Chair and Discussant

Piet Daas | Statistics Netherlands, Eindhoven Technology University, Istat Advisory Committee on statistical methods

THURSDAY, 5 DECEMBER

Session 3 | Data, data science and official statistics

9:00 - 10:30 am Master class: Data, data science and official statistics

by **Yves Tillé** | Université de Neuchâtel

Master class Chair

Daniela Cocchi | University of Bologna, Istat Advisory Committee on statistical methods

10:30 - 10:50 am *Coffee break*

10:50 am - 12:20 pm Invited talks

Uncertainty-based analysis for non-probability samples

by **Pier Luigi Conti, Daniela Marella** | Sapienza University of Rome

Conformal Prediction(s)

by **Brunero Liseo, Nina Deliu** | Sapienza University of Rome

Invited talks Chair and Discussant **Li-Chun Zhang** | Statistics Norway, University of Southampton, Istat Advisory Committee on statistical methods

12:20 - 1:40 pm *Lunch*

Session 4 | New data sources for small area estimation

in collaboration with

International Association of Survey Statisticians (IASS)



1:40 - 3:00 pm Master class: New data sources and inference methods for official statistics

by Jan van den Brakel | Statistics Netherlands and Maastricht University

Master class chair Natalie Shlomo | IASS President, University of Manchester, Istat Advisory Committee on statistical methods

3:00 - 3:20 pm Coffee Break

3:20 - 4:35 pm Invited talks

Official Statistics: Bayesian small area estimation of origin-destination matrix

Loredana Di Consiglio, Fabrizio Solari, Tiziana Pichiorri, Emanuela Scavalli, Massimo Armenise, Lorenzo Asti, Carolina Ciccaglioni, Isabella Corazziari, Luca Faustini | Istat

Controlling selection bias in non-probability sample using small area estimation: an application to official statistics

Francesco Schirripa Spagnolo, Gaia Bertarelli, Nicola Salvati, Stefano Marchetti | University of Pisa

Monica Pratesi | Head of Department for statistical production | Istat - University of Pisa

Donato Summa | Istat

Monica Scannapieco | formerly at Istat

Invited talks chair Natalie Shlomo | IASS President, University of Manchester, Istat Advisory Committee on statistical methods

Invited talks discussant M. Giovanna Ranalli | University of Perugia, Istat Advisory Committee on statistical methods

4:35 - 5:00 pm Closing session

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