



FOURTH WORKSHOP ON METHODOLOGIES FOR OFFICIAL STATISTICS

1-2 **DECEMBER 2025**

Istat | Aula Magna Via Cesare Balbo, 14 – Rome, Italy REGISTER FOR IN-PERSON EVENT

REGISTER FOR ONLINE EVENT

MONDAY, 1 DECEMBER

8:30 am

Participant Registration

9:00 - 9:20 am

Opening Session

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

Cristina Freguja | Head of Department for social and demographic statistics | Istat

Stefano Menghinello | Head of Department for economic, environmental and national accounts statistics | Istat

SESSION 1

Statistical Models for Official Statistics

in collaboration with International Association of Survey Statisticians (IASS)

9:20 - 10:50 am

Master Class

On Adversarial Risk Analysis in Official Statistics

by F. Ruggeri | Italian National Research Council (CNR), Milan, Italy

Master Class Chair

N. Shlomo | Former President of IASS, University of Manchester, Istat Advisory Committee on Statistical Methods

10:50 - 11:10 am Coffee Break

11:10 am - 12:40 pm

Invited Talks

Statistical Inference for a Finite Population Mean with Machine Learning-Based Imputation for Missing Survey Data

D. Haziza | University of Ottawa, Canada

M. Dagdoug | McGill University, Montreal, Canada

A Contamination Model for Multivariate Zero-Inflated Data

D. Di Cecco, D. Filipponi | Istat

U. Guarnera | Italian Revenue Agency, Rome, Italy

Small Area Estimation via Spatio-Temporal M-Quantile Modeling

N. Salvati, F. Schirripa Spagnolo | University of Pisa, Italy

M. Bugallo, D. Morales | Miguel Hernández University of Elche, Spain

Invited Talks Chair

N. Shlomo | Former President of IASS, University of Manchester, Istat Advisory Committee on Statistical Methods Invited Talks Discussant

M. Alfò | Sapienza University of Rome, Italy and Istat Advisory Committee on Statistical Methods

12:40 - 2:00 pm Lunch

2:00 - 2:10 am

President Welcome

Francesco M. Chelli | Istat President | Istat

SESSION 2

AI/ML for Official Statistics

2:10 - 3:40 pm

Master Class

Predictive Inference of Machine Learning for Official Statistics

by Li-Chun Zhang | Statistics Norway, University of Southampton and Istat Advisory Committee on Statistical Methods

Master Class Chair

D. Haziza | University of Ottawa, Canada and Istat Advisory Committee on Statistical Methods

3:40 - 4:00 pm Coffee Break

4:00 - 5:30 pm

Invited Talks

Generative Al and Large Language Models in Official Statistics: from Prototypes to Practice

J. Engdahl | Statistics Sweden

Language Models for Automated Coding in Official Statistics: Risks and Opportunities

M. Bruno, M. Di Zio, F. Ortame | Istat

Transfer Learning for Tourism Flash Estimates with Mobile Network Operator Data

T. Tuoto, A. Piovani, C. Faricelli | Istat

Invited Talks Chair and Discussant

B. Liseo | Sapienza University of Rome, Italy and Istat Advisory Committee on Statistical Methods

TUESDAY, 2 DECEMBER

SESSION 3

Multisource Analyses for Official Statistics

9:00 - 10:30 am

Master Class

Generalized Calibration for Non-Response and Non-Probability Samples

by Alina Matei | University of Neuchatel, Switzerland

Master Class Chair

Daniela Cocchi | University of Bologna, Italy and Istat Advisory Committee on Statistical Methods

10:30 - 10:50 am Coffee Break

10:50 am - 12:20 pm

Invited Talks

Innovations in the Quality of EU-SILC Survey Estimates

D. Chianella, M. D'Alò, S. Gerosa, M. Terribili, C. De Vitiis | Istat

As changes on Definition of Population Units reflect on SBS Surveys System

M. Ballin, A. Guandalini, M. Rinaldi | Istat

A Constrained Optimization Approach for adjusting Misclassified Proxy Variables

F. Solari, R. Filippini, V. Quondamstefano, S. Toti | Istat

Invited Talks Chair and Discussant

G. Ranalli | University of Perugia, Italy and Istat Advisory Committee on statistical methods

12:20 - 1:40 pm Lunch

SESSION 4

Software Open Source implementing Statistical Methods for Official Statistics

1:40 - 3:10 pm

Master Class

Open-source Software for the Implementation of New Statistical Methods

by R. Lesur | INSEE, Methodology, Head of Data Science Lab, previously Director on IT directorate

Master class Chair

P. D. Falorsi | Former Director at Istat

3:10 - 3:30 pm Coffee Break

3:30 - 5:00 pm

Invited Talks

ARTIC: An R Procedure for the Automatic Random Error Treatment and Imputation for Categorical Variables

R. Filippini, S. Toti | Istat

Statistical Open Source Software for Official Statistics: State of Play and Future Directions

O. ten Bosch | CBS, the Netherlands

Methodological Framework for developing Open Source Software Tools at Istat

M. D'Orazio | Istat

Invited Talks Chair and Discussant A. Kowarik | Statistics Austria 5:00 **–** 5:10 pm **Closing Session** O. Luzi | Head of Directorate for Methodology and Statistical Process Design | Istat