

ITACOSM 2105



Survey Sampling Group of
the Italian Statistical Society



SAPIENZA
UNIVERSITÀ DI ROMA

ITACOSM 2015

4th ITAlian Conference on Survey Methodology

Rome, June 24-26, 2015

Programme

June 24

09.30-11.30 - Registration

11.30-12.00 - Opening addresses

12.00-13.00 - Plenary Session

New Methodological Challenges in the Production of Official Statistics (B1)

D. Pfeffermann

Chair: M. Pratesi

13.00-14.15 - Lunch

14.15-15.30 - Specialized sessions

Session title: *Design-based approach to spatial sampling* (B1)

Org. L. Barabesi, P.F. Perri

Talks:

- *Mixed model regression estimation for spatial sampling*

G.E.Montanari

- *Spatially correlated Poisson sampling*

A.Grafström

- *Replicated environmental sampling for diversity indexes estimation*

C. Pisani, M. Marcheselli

Chair: P.F. Perri

Session title: *Small area Estimation for Business Data* (B2)

Org. M.R. Ferrante

Talks:

Calibration of Small Area Estimates in Business Statistics

N. Shlomo, R. Priam

Small Area Estimation in Business Statistics: new perspectives at Istat

O. Luzi, R. Monducci, F. Solari

Bayesian small area estimation methods for business survey statistics

E. Fabrizi, C. Trivisano

Chair: M.R. Ferrante

15.30-16.45 - Spontaneous sessions

Session title: *Resampling methods in finite populations* (B1)

Talks:

- *On the impact of weights approximation in resampling based on pseudo-populations*

F. Andreis, F. Mecatti, P.L. Conti

- *Bootstrap in finite populations: a unified approach*

D. Marella, P.L. Conti, F. Mecatti

- *On some parametric bootstrap MSE estimator*

T. Żądło

Chair: D. Pfeffermann

Session title: *Survey sampling under non-standard conditions* (B2)

Talks:

- *Web-respondent-driven sampling*

A. Bianchi, S. Biffignandi

- *Impact of linkage on small area estimators*

L. Di Consiglio, T. Tuoto

- *Dealing with multiple list frames to improve population coverage: a simulation study*

E. Furfaro, F. Mecatti

Chair: M.G. Ranalli

16.50-18.30 - Welcome cocktail and Poster session (Roof garden)

Poster:

- *Robust small area estimation under spatial non-stationarity*
C. Baldermann, T. Schmid, N. Salvati
- *Bayesian estimation of a total population under linkage uncertainty*
D. Briscolini, B. Liseo, A. Tancredi, G.S. Datta
- *Empirical Processes in Finite Population Sampling*
A. Di Iorio
- *Bayesian M-quantile regression in Small Area Estimation*
E. Fabrizi, G. Riccardi, N. Salvati, C. Trivisano
- *Estimating the correlation between sensible behaviours dealing with item missing data*
A. Gaia
- *Ratio type estimation with application to rotating surveys*
B. Kowalczyk
- *Combining HBS and LFS data for education level evaluation*
O. Lysa
- *Reviewing the use of Coefficients of Variation (CVs) and associated terminology to describe data quality*
S. Manclossi, R. Sanderson, C. Davies
- *The Use of Big Data in a Vector Error Correction Model for Preliminary Estimation of Economic Indicators: an Application to the Italian Rate of Unemployment*
S. Falorsi, A. Naccarato, A. Pierini
- *A Comparison of Small Area Estimation Methods for Poverty Mapping under Box-Cox Type Transformations*
N. Rojas-Perilla, T. Schmid, N. Tzavidis

June 25

09.00-10.35 - Spontaneous session + Solicited session

Session title: *Multivariate statistical methods in the presence of complex sampling designs* (B1)

Talks:

- *Non-parametric Bayesian Network for measurement error correction in 2008 SHIW*
P. Vicard, D. Marella

- *A multilevel approach to investigate student performances in PISA 2012*
V. Vitale, G. Bove, D. Marella

- *Estimation from Multi-Source Data Based on Latent Class Models*

R. Varriale, U. Guarnera

The Fade-Away Effect under non-stationary conditions: theoretical ideas and empirical results from the German Panel Labour Market and Social Security (PASS)

U. Rendtel

Chair: S. Zaccarin

Session title: *Spatial sampling: some advances and applications in social and business surveys* (B2)

Org. R. Benedetti

Talks:

- *Quasi systematic sampling*
M. Wilhelm, Y. Tillé

- *Spatially balanced sampling of continuous populations*

A. Grafström

- *Assessing the effects of locational errors in spatial sampling*
M.M. Dickson, G. Espa, D. Giuliani

- *Spatially balanced sampling for undercount estimation*

R. Benedetti, D. Filippioni, F. Piersimoni

Chair: R. Benedetti

10.35-11.00 - Coffee break

11.00-12.00 - Plenary session

Sample Matching: Toward a probabilistic approach for Web surveys and Big Data?
(B1)

P. Lavallée

Chair: F. Mecatti

12.00-13.15 - Specialized sessions

Session title: *New perspectives on survey sampling* (B1)

Org. A. Petrucci

Talks:

- *The use of big data in small area estimation*

S. Marchetti, C. Giusti, M. Pratesi

- *Indicators for assessing the representativeness of response in a web survey on academic careers at the University of Florence*

E. Rocco, A. Petrucci

- *Modernizing the census by combining administrative sources and sample surveys*

F. Crescenzi

Chair: A. Petrucci

Session title: *Poverty mapping* (B2)

Org. I. Molina

Talks:

- *Estimating Poverty Rates of School-Aged Children for US Counties through Cross-Sectional and Temporal Small Area Estimation Models*

C. Franco, W.R. Bell

- *Empirical best prediction of general small area parameters based on a two-fold nested error regression model*

Y. Marhuenda, I. Molina, D. Morales, J.N.K. Rao

- *Empirical Bayes Skew-normal Poverty Mapping*

M. Diallo

Chair: I. Molina

13.15-14.30 - Lunch

14.30-15.30 - Plenary session

- *On Two Extensions to ELL Poverty Mapping Methodology (B1)*

R. Chambers (with S. Das)

Chair: G.E. Montanari

15.30-16.00 - Coffee break

16.00-17.15 - Specialized sessions

Session title: *Small area methods for the estimation of household wealth and youth unemployment (B1)*

Org. N. Salvati

Talks:

- *Small area estimation of the Gini concentration coefficient*

C. Trivisano, E. Fabrizi

- *Time series small area estimation for unemployment using latent Markov models*

G. Bertarelli, M.G. Ranalli, F. Bartolucci, Michele D'Alò, F. Solari

- *Microsimulation via Quantiles for Domain Prediction*

T. Schmid, N. Tzavidis, B. Weidenhammer, N. Salvati

Chair: N. Salvati

Session title: *Statistical methodologies for integration of surveys (B2)*

Org. S. Falorsi, C. De Vitiis

Talks:

- *Optimal sample allocation for indirect sampling design*

P.D. Falorsi, P. Lavallée, P. Righi

- *Integrated estimation based on different sources of information*

M. D'Alò, F. Solari, A. Fasulo

- *A theory of partial estimation*

L.-C. Zhang, R. Chambers

Chair: S. Falorsi

June 26

9.00-10.30 - Spontaneous sessions

Session title: *Contributions to sampling theory and methods* (B1)

Talks:

- *The design effect in social surveys based on complex designs*

C. De Vitiis, F. Inglese, A. Guandalini, M.D. Terribili

- *A proposal for multipurpose stratification in agriculture sample surveys*

M. D'Orazio, E. Catanese

- *Randomized response techniques for quantitative data in different sampling designs*

F. Porro, M. Polisicchio

- *Optimal sample allocation for the Stratified Simple Random Sampling and the Incomplete Stratified Sampling design*

P. Righi, C. De Vitiis, M.D. Terribili

Chair: P. Vicard

Session title: *Statistical inference in sample surveys* (B2)

Talks:

- *Ratio type estimators in median ranked set sampling*

N. Koyuncu

- *Assisting total estimation in spatial populations*

D. Cocchi, F. Bruno, A. Vaghettini

- *Aligning estimates for common parameters across multiple surveys using Empirical Likelihood methods*

E. Kabzinska, Y.G. Berger

- *Challenges in weighting data from a modular longitudinal survey*

S. Merad,

Chair: D. Marella

10.30-11.00 - Coffee break

11.00-12.00 - Plenary session

Multiple Frame Surveys: a unified principled framework to estimation (B1)

F. Mecatti

Chair: P.L. Conti

12.00-13.15 - Specialized session + solicited session

Session title: *Data quality in polls and surveys* (B1)

Org. O. Giambalvo, A. Petrucci, S. Zaccarin

Talks:

- *Web surveys: quality and errors*

S. Biffignandi

- *When election polls go wrong: coping with polling problems*

K. Francovich

- *Questions and answers.... How to translate them in data and statistics*

M. Pessato

Chair: O. Giambalvo

Session title: *Benchmarking Small Area Estimates* (B2)

Org. B. Liseo

Talks:

Smoothing, Clustering, and Benchmarking for Small Area Estimation

R.C. Steorts

External and Internal Benchmarking of Small Area Estimates

G.S. Datta

Benchmark strategies for small area estimation in repeated surveys

F. Solari, M. D'Alò, L. Di Biagio, S. Falorsi, A. Fasulo
Chair: B.Liseo