

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** (Room B1)

12.00-13.00 - **Plenary Session** (invited - Room B1)

Chair: M. Pratesi

New Methodological Challenges in the Production of Official Statistics

D. Pfeffermann

13.00-14.15 - **Lunch**

14.15-15.30 - **Specialized (invited) sessions**

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

Org. L. Barabesi, P.F. Perri

Chair: 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

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

Org. M.R. Ferrante

Chair: 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

15.30-16.45 - **Spontaneous sessions**

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

Chair: D. Pfeffermann

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

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

Chair: M.G. Ranalli

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

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
- *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*** (Spontaneous - Room B1)

Chair: S. Zaccarin

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

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

Org. R. Benedetti

Chair: 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. Filipponi, F. Piersimoni

10.35-11.00 - **Coffee break**

11.00-12.00 - **Plenary session** (Invited - Room B1)

Chair:

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

P. Lavallée

12.00-13.15 - **Specialized (invited) sessions**

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

Org. A. Petrucci

Chair: A. Petrucci

Talks:

- *Web surveys: quality and errors*

S. Biffignandi

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

S. Marchetti, C. Giusti, M. Pratesi

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

Session title: ***Poverty mapping*** (Room B2)

Org. I. Molina

Chair: 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

13.15-14.30 - **Lunch**

14.30-15.30 - **Plenary session** (Invited - Room B1)

Chair: G.E. Montanari

On Two Extensions to ELL Poverty Mapping Methodology

R. Chambers (with S. Das)

15.30-16.00 - **Coffee break**

16.00-17.15 - **Specialized (invited) sessions**

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

Org. N. Salvati

Chair: 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

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

Org. S. Falorsi, C. De Vitiis

Chair: S. Falorsi

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

June 26

9.00-10.15 - **Spontaneous sessions**

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

Chair: P. Vicard

Talks:

- *Ratio type estimators in median ranked set sampling*
N. Koyuncu
- *A proposal for multipurpose stratification in agriculture sample surveys*
M. D'Orazio, E. Catanese
- *Optimal sample allocation for the Stratified Simple Random Sampling and the Incomplete Stratified Sampling design*
P. Righi, C. De Vitiis, M.D. Terribili

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

Chair: D. Marella

Talks:

- *Assisting total estimation in spatial populations*
D. Cocchi, F. Bruno, A. Vaghegini
- *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

10.15-11.00 - **Coffee break**

11.00-12.00 - **Plenary session** (Invited – Room B1)

Chair: P.L. Conti

Multiple Frame Surveys: a unified principled framework to estimation

F. Mecatti

12.00-13.15 - **Specialized (invited) session + solicited session**

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

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

Chair: O. Giambalvo

Talks:

- *Indicators for assessing the representativeness of response in a web survey on academic careers at the University of Florence*
E. Rocco, A. Petrucci
- *When election polls go wrong: coping with polling problems*
K. Francovich
- *Questions and answers.... How to translate them in data and statistics*
M. Pessato

Session title: ***Benchmarking Small Area Estimates*** (Solicited - Room B2)

Org. B. Liseo

Chair: 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