

**6th Baltic-Nordic Conference on Survey Statistics  
21–25 August 2023, Helsinki, Finland**

<https://wiki.helsinki.fi/display/BNU/BANOCOSS2023+Programme>

**SCIENTIFIC PROGRAMME**

Venue: All keynote and invited sessions will be in Soc&kom, Festsal, Snellmaninkatu 12 and in the Zoom virtual room A. In parallel sessions, parallel session A is in room Festsal (Snellmaninkatu 12), B in room 210 (Snellmaninkatu 12) and C in room 209 (Snellmaninkatu 12). The corresponding Zoom links are "BaNoCoSS2023: Virtual room A", "BaNoCoSS2023: Virtual room B" and "BaNoCoSS2023: Virtual room C". There is one exception to this, which is in parallel session 3B where the room is 209 and the virtual room is C.

**Monday 21 Aug. 2023**

12:00-16:00 Workshop on Multilevel regression and poststratification (MRP),  
Soc&kom, Festsal, Snellmaninkatu 12, University of Helsinki and  
BaNoCoSS2023: Virtual room A

18:00-19:30 Welcome reception hosted by Vice-Dean Hanna Wass  
Main building, Christina, Unioninkatu 34

**Tuesday 22 Aug. 2023**

8:00-9:00 Registration, Soc&kom, lobby, Snellmaninkatu 12, University of Helsinki

9:00-9:15 Opening Maria Valaste

9:15-10:00 Session 1: Keynote

CHAIR Risto Lehtonen

Jae-Kwang Kim, Iowa State University

Lecture 1: [Semiparametric adaptive estimation under informative sampling](#)

10:00-10:30 Refreshments

10:30-12:00 Session 2 Special invited session: New methods in official statistics: the Italian experience

ORGANIZER Chiara Bocci

CHAIR Henri Luomaranta

Chiara Bocci, University of Florence: [Unit level small area models for business survey data](#)

Veronica Ballerini, University of Florence: [Municipalities' size estimation correcting administrative data for coverage errors and misclassification: A Bayesian approach](#)

Brunero Liseo, Sapienza University of Rome: [Bayesian survey sampling: the legacy of D. Basu](#)

12:00-13:00 Lunch

Parallel sessions

13:00-14:20 Session 3A Contributed papers on probability and nonprobability sampling  
CHAIR Brunero Liseo

Łukasz Chrostowski and Maciej Beręsewicz: [nonprobsvy -- an R package for non-probability samples](#)

Lyndon Ang, Robert Clark, Bronwyn Loong and Anders Holmberg: [Sampling strategies for probability samples used together with non-probability data](#)

Vilma Nekrašaitė-Liegė, Andrius Čiginas and Danutė Krapavickaitė: [Estimating proportions from integrated probability and non-probability samples](#)

Ieva Burakauskaitė and Andrius Čiginas: [Integration of a voluntary sample assuming the not missing at random response mechanism](#)

13:00-14:20 Session 3B Contributed papers  
**(Note. Room 209 and virtual room C in Zoom)**  
CHAIR Kimmo Vehkalahti

A. Dzhoha and I. Rozora: [Multi-armed bandit policy under delays for the design of clinical trials](#) (online)

Lucyna Błażejczyk-Majka: [The problem of data comparability in the Polish transition period of 1990-2004 and a proposal for its solution](#)

A. Pererva and H. Livinska: [Evaluation of the Efficiency in healthcare using queueing modelling: A case study of Intensive Care Units in Kyiv](#)

Mauno Keto and Risto Lehtonen: [Comparing combinations of estimator and sample allocation when estimating population and domain-specific proportions for a binary variable](#)

14:20-15:00 Poster session and Refreshments

15:00-16:30 Session 4 Keynote paper  
CHAIR Maciej Beręsewicz

Camelia Goga, University of Franche-Comté

Lecture 1: [Model-assisted estimation in a high-dimension setting for survey data](#)

Lecture 2: [Random-forest model-assisted estimation](#)

16:30-16:45 Break

16:45-18:00 Session 5 Panel discussion: The contribution of statistical science to the paradigm shift of official statistics possibly progressing right now in many countries?

PANELISTS

Jan A. van den Brakel, Statistics Netherlands and Maastricht University

Andrew Gelman, Columbia University

Camelia Goga, University of Franche-Comté

Jae-Kwang Kim, Iowa State University

Li-Chun Zhang, University of Southampton; Statistics Norway; University of Oslo

MODERATOR Risto Lehtonen, University of Helsinki

**Wednesday 23 Aug. 2023**

9:00-10:30 Session 6 Keynote

CHAIR Kaja Sõstra, Statistics Estonia

Jan A. van den Brakel, Statistics Netherlands and Maastricht University

Lecture 1: [New data sources and inferences methods for official statistics](#)

Lecture 2: [Quantifying discontinuities in time series obtained with repeated surveys](#)

10:30-11:00 Refreshments

11:00-12:15 Session 7 Invited papers

CHAIR Mare Vähi

Danutė Krapavickaitė, Lithuania: [Acceptance sampling in statistical quality control](#)

Jaan Õmblus, Statistics Estonia: [Artificial intelligence business viability index](#)

DISCUSSANT Risto Lehtonen, University of Helsinki

12:15-13:15 Lunch

13:15-14:30 Session 8 Invited papers

CHAIR Andrius Čiginas

Jurijs Ņikišins, University of Latvia (online): [The European Social Survey in Latvia: Insights from face-to-face to self-completion survey mode comparison](#)

Thomas Laitila, Örebro University, Sweden: [Statistics Production System 4.0](#)

DISCUSSANT Danutė Krapavickaitė

14:30-14:40 Refreshments

Parallel sessions

14:40-16:00 Session 9A Contributed papers on ecology & forestry  
CHAIR Annika Kangas

Jarno Vanhatalo, Elina Numminen and Jukka Siren: [Statistics for biodiversity monitoring](#)

Minna Pulkkinen, Jürgen Zell, Adrian Lanz: [Model-assisted small-area estimation with automated model building for Swiss National Forest Inventory using two-phase sampling](#)

Santeri Karppinen, Liviu Ene, Juha Karvanen: [Value of information in the planning of cost-effective operational forest inventories](#)

Abdulhakeem Eideh and Emily Berg: [Small area prediction for exponential dispersion families under informative sampling](#)

14:40-15:40 Session 9B Contributed papers  
CHAIR Veronica Ballerini

Olga Vasylyk, Valentyna Shunder: [Outliers in loss reserving](#) (online)

Barbara Kowalczyk, Robert Wieczorkowski: [Estimation of the sensitive proportion in item count models under some assumptions violation](#)

Biruta Sloka Kristine Liepina: [Data collection methods for research on education](#)

14:40-16:00 Session 9C Contributed papers  
CHAIR Maria Valaste

N. Kruglova, O. Dykhovychnyi and M. Poprozhuk: [Technologies for creating and analyzing tests in advanced mathematics](#) (online)

Mulyk Olena, Tetiana Pryhalinska and Linieana Svystun-Zolotarenko: [Statistical analysis of the impact of the blackout caused by the Russian attack on the infrastructure of Ukraine on the educational process at NTUU «KPI»](#) (online)

M. Litova and K. Lagus: [The Self-Organizing Map for the analysis of survey data](#)

Adeline Clarke, Krista Lagus and Maria Valaste: [Open-ended questions in surveys](#)

16:00- Excursion starting from the Soc&Kom lobby (Snellmaninkatu 12)

**Thursday 24 Aug. 2023**

9:00-9:45 Session 10 Keynote  
CHAIR Jelena Voronova

Jae-Kwang Kim, Iowa State University  
Lecture 2: [Multiple bias calibration for valid statistical inference under nonignorable nonresponse](#)

9:45-10:30 Session 11 Invited paper  
CHAIR Chiara Bocci

Annika Kangas, Natural Resources Institute Finland: [Design-based and model-based inference in Finnish Forest Inventory](#)

DISCUSSANT Jae-Kwang Kim, Iowa State University

10:30-11:00 Refreshments

11:00-12:15 Session 12 Invited papers  
CHAIR Vilma Nekrašaitė-Liegė

Jacek Maślankowski, University of Gdańsk, Statistics Poland: [The use of web data for EU official statistics. Case studies on online job advertisements and online based enterprise characteristics](#) (online)

Janika Tarkoma, Statistics Finland: [National data quality framework for public sector data](#)

DISCUSSANT Jan van den Brakel, Statistics Netherlands and Maastricht University

12:15-13:15 Lunch

Parallel sessions

13:15-14:15 Session 13A Contributed papers  
CHAIR Henri Luomaranta-Helmivuo

Jelena Voronova: [Adaptive sample survey design in data collection](#)

Anastasija Meļņičuka and Jelena Voronova: [Analysis of response representativeness in case of adaptive survey design](#)

Hitoshi Motoyama: [The Bahadur representation of sample quantiles in general unequal probability sampling designs](#)

13:15-14:15 Session 13B Contributed papers  
CHAIR Pauli Ollila

Lauri Valkonen, Santtu Tikka, Jouni Helske and Juha Karvanen: [Combining population statistics, conjoint data and purchase history in price optimization](#)

Enrika Komarovaitė and Andrius Čiginas: [Estimating average wages in small population domains](#)

Mingmeng Geng and Roberto Trotta: [Selection of demographic variables in post-stratification](#)

13:15-14:15 Session 13C Contributed papers  
CHAIR Abdulhakeem Eideh

Yana Bondarenko: [Bayesian modelling of profitable landing page](#) (online)

Sofiia Myrvoda and Hanna Livinska: [Demographic patterns and prevalence of mental health disorders in Europe](#)

Oleksandr Kolesnik: [Limit theorems for sequences of records](#)

14:15-14:45 Refreshments

14:45-15:45 Session 14 Invited paper  
CHAIR Kaja Sõstra

Tetiana Ianevych, Taras Shevchenko National University of Kyiv, Ukraine: [Processing of court data](#)

DISCUSSANT Li-Chun Zhang, University of Southampton; Statistics Norway; University of Oslo

15:45-16:00 Short break

16:00-17:00 Session 15 Keynote  
CHAIR Danutė Krapavickaitė

Andrew Gelman, Columbia University  
Lecture: [Combining modeling with survey weights](#) (online)

17:00-18:00 Session 16 Invited paper  
CHAIR Danutė Krapavickaitė

Yajuan Si, University of Michigan, Ann Arbor: [On the use of auxiliary variables in Multilevel Regression and Poststratification](#) (online)

19:00- Conference Dinner, Gillet Bar & Bistro, Kasarmikatu 23

**Friday 25 Aug. 2023**

9:00-10:30 Session 17 Keynote  
CHAIR Tetiana Ianevych

Li-Chun Zhang, University of Southampton; Statistics Norway; University of Oslo  
Lecture: [Design-based ensemble learning for individual prediction](#)

10:30-11:00 Refreshments

11:00-12:30 Session 18 Special invited session: Data analytics and AI  
ORGANIZER Johanna Laiho-Kauranne  
CHAIR Thomas Laitila

Johanna Laiho-Kauranne, DAIN Studios: [Empowering surveys with generative AI](#)

Jonne Pohjankukka, Luke Finland: [Enhancing natural resource monitoring with Luke NatureWatch](#)

R. Piela and H. Luomaranta-Helmivuo, Statistics Finland: [Unleashing the power of Machine Learning and Artificial Intelligence: Advancing the production of official statistics](#)

12:30-12:45 Closing