

August 2024 Newsletter: International Association of Survey Statisticians

IASS 2024 General Assembly

The IASS General Assembly took place online on Wednesday, 17 July 2024 at 14:00 hr./ 2pm CEST. There were about 25 people attending the AGM. The members ratified the 2023 IASS Annual Report and budget <http://isi-iass.org/home/wp-content/uploads/IASS-AnnualReport-2023.pdf> as well as the 2024-2025 Strategic Document.

<http://isi-iass.org/home/wp-content/uploads/IASS-Strategy2024-2025.pdf>

The presentation from the AGM is available here:

<http://isi-iass.org/home/wp-content/uploads/IASS-AGM-2024-17072024-final.pdf>

Hukum Chandra Memorial Prize 2024 Winner

The 2024 Hukum Chandra Memorial Prize selection committee members were: **Eric Rancourt** (Chair, Statistics Canada) and **Sharon Lohr, Siu-Ming Tam** and **Nancy McBeth**. The committee received 3 high quality submissions. All submissions were received within the deadline as specified by the call for expressions of interest and all applicants met the call's eligibility criteria.

The committee unanimously agreed to award the 2024 Hukum Chandra Memorial Prize award to **Dr. Nicola Salvati, University of Pisa**, for his paper: 'A nested error regression model with high-dimensional parameter for small area estimation' (with **Partha Lahiri**) <https://doi.org/10.1093/jrsssb/gkac010>

The committee was impressed by the quality and scientific rigour of the paper and the quality of Nicola Salvati's CV. The winner of the prize receives 500 euros and will present his work at the IASS October 2024 Webinar.

IASS Sponsored Sessions at International Conferences and Workshops

The is happy to continue partnerships with local organizers of workshops and conferences around the world and to sponsor sessions focusing on cutting-edge applications of survey statistics. If you would like to collaborate on organizing a session, please get in touch with **Natalie Shlomo** natalie.shlomo@manchester.ac.uk.

We are delighted to announce the upcoming IASS sponsored sessions:

Invited Session at the Statistics Canada International Methodology Symposium 2024, Ottawa, Ontario, Canada, from **October 29 to November 1, 2024**. The title of the session is: **Small Area Estimation: Extensions, Applications and New Developments sponsored by the International Association of Survey Statisticians (IASS)**. Invited speakers are: **Francois Verret**, Statistics Canada; **Emily Berg**, University of Iowa and **Andreea Erciulescu**, Westat and the session is chaired by **Natalie Shlomo**, President of the IASS.

Invited Session at the 2024 Third Workshop on Methodologies for Official Statistics, ISTAT, Rome, Italy, from **December 4 to 5, 2024**. The title of the session is **New Data Sources for Small Area Estimation**. The session will be chaired by **Natalie Shlomo**, President of the IASS, and the 'master class' will be delivered by **Jan Van Den Brakel**. Other speakers are **Francesco Schirripa Spagnolo** and **Michele D'Alò**.

IASS Websites:

The Survey Statistician issues are available at <http://isi-iass.org/home/services/the-survey-statistician/>

IASS Newsletters are available at <http://isi-iass.org/home/services/newsletters/>

The calendar of events is available at <http://isi-iass.org/home/events/>

Follow IASS activities and updates on LinkedIn!

<https://www.linkedin.com/company/international-association-of-survey-statisticians-iass>

Follow the IASS X account https://twitter.com/iass_isi and the IASS Facebook page

<https://www.facebook.com/iass.isi>

65th World Statistics Congress, October 5 to 9, 2025

There are 11 **Invited Paper Sessions (IPS)** sponsored by the IASS. These are:

Proposer	Country	Proposal Title
Dr Johanna Laiho-Kauranne	Finland	How Societies Are Portrayed via Their Digital Resources, Activities and Economies and Does This Convene With the Traditional Statistical Profiles
Tiziana Tuoto	Italy	Integrating Mobile Network Operator Data with Official Statistics
Prof. Peter J. Lynn	United Kingdom	The Future of Social Surveys: Adapting to a Changing World
Prof. Anne Ruiz-Gazen	France	Bridging Academia and Official Statistics: Examples of European Experience
Mr Barry Schouten	Netherlands	Smart Survey Methodology
Dr Wendy Martinez	United States	Assessment and Improvement of Data Quality Through Use of Auxiliary Information and Record Linkage
Anders Holmberg	Australia	Advances in the Reduction of Bias Through Adaptive Design and Nonresponse Adjustments
Dr John Lamont Eltinge	United States	Enhancing Public Confidence in Analytic Quality and Privacy Protection for Public-Use Statistics
Drs Eric Schulte Nordholt	Netherlands	Improving Access to Microdata for Researchers
Dr Danute Krapavickaite	Lithuania	Non-probability and Probability Sample Integrated Estimators for the Population Parameters
Prof. Natalie Shlomo	United Kingdom	Data Integration for Producing Official Statistics: Where are We Headed?

Other relevant sessions are:

Proposer	Country	Proposal Title
Dr Andres Gutierrez	Colombia	Data Integration for Official Statisticians
Dr Matthew Plummer	United Kingdom	Use of Geospatial Methods for Small Area Population Estimation
Dr Janice Lent	United States	Small Area Estimation for Official United States Household Statistics: Employment, Inflation and Energy Use
Dr Hanna Strzelecka	Poland	Improvement of the Labour Force Survey by Using Administrative Data Sources

IASS Satellite Conferences to the 65th WSC, July 2025

There will be two satellite conferences to the 65th World Statistics Congress (WSC) that will be held in The Hague October 5 – 9, 2025. The satellite conferences will both be held in July 2025:

1. 9th Italian Conference on Survey Methodology and International Association of Survey Statisticians (**ITACOSM2025 - IASS**) Satellite Conference, June 30-July 4, 2025, Bologna Italy
2. Small Area Estimation Conference (**SAE 2025**), July 8-12, 2025, Turin, Italy.

Watch this space for more details as we start planning the satellite conferences.

IASS Webinar Series

The IASS Webinar Series continues to be a **very successful** initiative. The current timetable is available on the calendar of events page of the IASS website: <http://isi-iass.org/home/events/> for upcoming IASS webinars. Note that CET is Central European Time. Links to register for the webinars are also provided in the advertisement. A list of previous IASS webinars with the presented slides can be found at: <http://isi-iass.org/home/webinars/> while recordings for past webinars can be found at: <https://www.isi-web.org/courses-webinars-workshops>. If you would like to contribute with suggestions for future speakers, please contact **Andrés Gutierrez Rojas** at andres.gutierrez@cepal.org.

IASS Webinar 44: Random forests and mixed effects random forests for small area estimation of general parameters

Speaker: Nikos Tzavidis, University of Southampton

Date and Time: 25 September 2024, 2:00 – 3:30 pm (CET).

The registration link:

https://us06web.zoom.us/webinar/register/7317199206804/WN_GzIC3u7WSTacE2VyH7nE9w#/registration

IASS Webinar 45: A nested error regression model with high-dimensional parameter for small area estimation

Speaker: Nicola Salvati, The University of Pisa (Hukum Chandra Memorial Prize Winner)

Date and Time: 30 October 2024 at 2pm – 3:30pm (CET)

The registration link:

https://us06web.zoom.us/webinar/register/9317199219179/WN_9dppQxuoQM4i8mh6r8pGQ#/registration

Please note the following confirmed upcoming webinars and the speakers:

IASS Webinar 47: 18 December 2024, 2:00 – 3:30 pm (CET) Isabel Molina

IASS Webinar 48: 29 January 2025, 2:00 – 3:30 pm (CET) Danny Pfeffermann

The Survey Statistician

The **July 2024** issue of **The Survey Statistician** is out now! It is available on the website at: <http://isi-iass.org/home/services/the-survey-statistician/> and for the complete issue: http://isi-iass.org/home/wp-content/uploads/Survey_Statistician_2024_July_N90.pdf.

This issue features an article for the **New and Emerging Methods Section** titled: **From Traditional to Modern Machine Learning Estimation Methods for Survey Sampling**, by **Camelia Goga**. We are also very happy to feature an article in our newly formed Early Career Survey Statistician Section titled: **The Use of New Data Sources in Small Area Estimation of Attitudes Towards Climate Change**, by **Camilla Salvatore** and **Angelo Moretti**. The book titled: **Sampling and Estimation from Finite Populations**, by **Yves Tillé** was reviewed by **Angelo Moretti**. The software on **Inference with Non-probability Surveys** was introduced by **Beatriz Cobo**, **Ramon Ferri-Garcia**, **Jorge L. Rueda-Sanchez** and **Maria del Mar Rueda**.

As we are continuing to celebrate our 50 year jubilee, the issue includes an article titled: **Early Scandinavian Contributions to Survey Sampling**, by **Thomas Laitila**. We also pay tribute to past IASS Presidents that have sadly passed away: **Barbara A. Bailar** (IASS President 1989-1991) and **Nanjamma Chinnappa** (IASS President 1997 to 1999).

We are very grateful to all of the Editorial Team, and particularly to **Danuté Krapavickaite** and **Alina Matei**, for their dedication in producing this excellent resource serving the entire survey statistics community.

Conferences on survey statistics and related areas

2024 International Total Survey Error Workshop (ITSEW2024) will be held on **September 18 to September 20, 2024** at George Washington University, Washington DC, United States. The goal of ITSEW is to promote discussion of questions of research, methodology and practice relating to Total Survey Error (TSE) and Total Survey Quality, and Blended Data. More information: <https://www.niss.org/events/international-total-survey-error-workshop-itsew> and register here at this link.

Statistics Canada International Methodology Symposium 2024 – Ottawa, Ontario, Canada, will be held on **October 29 to November 1, 2024**. The theme of the conference is: 'Shaping the future of official statistics'. The call for papers is out with a deadline of **May 3rd, 2024**. For all accepted proposals, the presentation (in English or French) is due by **September 6, 2024**. Conference proceedings will be published online. A final paper must be

submitted by **January 10, 2025** for inclusion in the proceedings. Visit the website:
<http://www.statcan.gc.ca/eng/conferences/symposium2024/index>.

13th edition of the International Francophone Conference on Sample Surveys - Esch-Belval, Luxembourg will be held from November **5 to 8, 2024**. Call for abstracts is open until **April 30th**. View the website here: <https://sondages2024.sciencesconf.org/>

9th Conference on Survey Sampling in Economic and Social Research sponsored by the Department of Statistics, Econometrics, and Mathematics at the University of Economics in Katowice, along with the Polish Statistical Association – Katowice branch, will be held on **December 3rd-4th, 2024** in **Katowice, Poland**. This conference aims to continue the tradition of fostering collaboration and knowledge exchange among experts in the field of survey methodology. The conference website is: <https://web.ue.katowice.pl/metoda>

New Techniques and Technologies in Statistics (NTTS) 2025 is an international biennial scientific conference series, organized by Eurostat, on new techniques and methods for official statistics, and the impact of new technologies on statistical collection, production and dissemination systems. The meeting will be hosted in Brussels in the Charlemagne Building from **March 11, 2025 to March 13, 2025**. The conference website is <https://cros.ec.europa.eu/dashboard/ntts2025>

65th ISI World Statistics Congress 2025 will be held on October 5-9, 2025 at the Hague. More information: <https://www.isi-next.org/conferences/isi-wsc2025/>

Reading of the Month (prepared by Andres Gutierrez)

This month's reading-of-the-month is the **2023 Morris Hansen Lecture** paper published in the **Journal of Survey Statistics and Methodology (JSSAM)** titled: **Model Selection and Its Crucial Roles in Surveys**, authored by **Jiming Jiang**. JSSAM has graciously opened the access to the paper for 30 days, so please read and download the paper now at the following link: <https://doi.org/10.1093/jssam/smae034>

This paper offers an engaging discussion on model selection, with the concept of borrowing strength emphasized throughout. Although an academic work, the paper is thought-provoking and easy to read, written in a narrative style with a strong emphasis on incorporating common sense and practical considerations into the model selection process.

The paper begins with a fundamental proposition: there is no perfect model. Rather than pursuing a correct but ultimately useless model, the statistician should choose a model that, while imperfect, is useful. The author notes that some models prioritize prediction over interpretability, acknowledging that interpretation may be secondary in certain contexts. The paper identifies three key areas where models are particularly valuable for sampling statisticians: small area estimation, variance estimation, and handling missing data. Additionally, the paper argues that a purely design-based approach to survey data analysis is insufficient.

The author then discusses the limitations of standard model-selection criteria, arguing that model selection is not merely a statistical problem. Instead, practical considerations specific to

the real-world context must be taken into account. For instance, in sample surveys, the effective sample size should be considered, given that independent and identically distributed (iid) variables cannot be assumed; rather, correlations imply that the effective sample size often differs from the nominal survey sample size. Additionally, the dimension of the model (nonlinear models tend to involve more parameters) and the distribution of the data are also important considerations.

The paper presents "fence methods," a class of model selection approaches that allow for the inclusion of these practical considerations. Fence methods are described in three steps: constructing a statistical fence that satisfies model-fitting criteria, incorporating additional considerations (such as economic, scientific, legal, or political factors), and letting the data guide the final decision. The paper also provides an example focused on obtaining small area estimates using remote sensing covariates, illustrating the power of borrowing strength.

In my view, this paper is a pleasure to read. The author offers profound insights, challenging conventional model selection approaches. Overall, the paper provides a fresh, nuanced perspective on model selection, making it essential reading for practitioners seeking to enhance their understanding and practice. I strongly recommend it.