

Conference in honour of Fred Smith and Chris Skinner

Online, 7-9 July 2021

Programme

All times are UK time

Wednesday 7 July

10.00 – 10.30 Opening (Chair Tim Holt)

Welcome from **Paul Smith** and **Nikos Tzavidis** University of Southampton

Reflections on the lives and careers of Fred Smith and Chris Skinner

10.30 – 11.00 Invited Session 1 (Chair Tim Holt)

Danny Pfeffermann University of Southampton, CBS Israel and Hebrew University of Jerusalem
Time series modeling of repeated survey data for estimation of finite population parameters

11.00 – 11.15 Break

11.15 - 12.35 Contributed Session 1 (Chair: Li-Chun Zhang)

Roger Sugden

IID case under Poisson sampling

Jan Pablo Burgard Trier University and **Stefan Zins** Institute for Employment Research (IAB)

Planning domain sizes in cluster sampling

Guillaume Chauvet ENSAI and **Audrey-Anne Vallée** Université Laval

Inference for two-stage sampling designs

Loveness Dzitiki University of Pretoria, **Marcel D.T. Vieira** Universidade Federal de Juiz de Fora and
Brendan Girdler-Brown University of Pretoria

Approaches for combining data collected from multiple simple random samples

12.35 – 13.05 Lunch Break

13.05 – 14.25 Contributed Session 2 (Chair: TBA)

James Jackson Lancaster University, **Robin Mitra** Cardiff University, **Brian Francis** Lancaster University and **Iain Dove** Office for National Statistics

Developing synthetic data methods for large, sparse administrative databases

Li-Chun Zhang University of Southampton and **Gustav Haraldsen** Statistics Norway

Secure data collection and processing: means and opportunities

Mark Bun Boston University, **Jörg Drechsler** Institute for Employment Research, **Marco Gaboardi** University of Maryland, **Audra McMillan** Apple and **Jayshree Sarathy** Harvard University

Controlling privacy loss in survey sampling

Shijie Guo Dartmouth College and **Jingchen (Monika) Hu** Vassar College

Data privacy protection and utility preservation through Bayesian data synthesis

14.25 – 14.40 Break

14.40 - 16.00 Invited Session 2 (Chair: Jörg Drechsler)

Natalie Shlomo University of Manchester and **Chris Skinner** London School of Economics and Political Science

Measuring risk of re-identification in microdata: state of the art and new directions

Jae Kwang Kim Iowa State University, **Jon Rao** Carleton University and **Yonghyun Kwon** Iowa State University

Analysis of clustered survey data based on two-stage informative sampling and associated two-level models

Thursday 8 July

10.00 – 11.20 Invited Session 3 (Chair: Peter Smith)

David Steel University of Wollongong and **Robert Clark** Australian National University
Sample design for analysis using high influence probability sampling

Ray Chambers, University of Wollongong, **Setareh Ranjbar** University of Lausanne, **Nicola Salvati**
and **Barbara Pacini** University of Pisa
Weighting, informativeness and causal inference, with an application to rainfall enhancement

11.20 – 11.35 Break

11.35 - 12.35 Student Prize Session (Chair: Fiona Steele)

(**Loveness Dzikiti** and **Caio Gonçalves** were also winners, but appear elsewhere on the programme)

Dehua Tao Australian National University
Linkage bias adjustment for integrated data sets

Estelle Medous Université Toulouse 1 Capitole and La Poste
Pros and cons of the double indirect sampling for “many to one” links

Fernanda Lang Schumacher University of Campinas
Canonical fundamental skew-t linear mixed models

Luiz Eduardo da Silva Gomes Federal University of Rio de Janeiro
A Bayesian network approach to food security modeling in Brazil

12.35– 13.05 Lunch Break

13.05 – 14.25 Contributed Session 3 (Chair: Chiara Bocci)

Caio Gonçalves National School of Statistical Sciences - ENCE/IBGE, **Luna Hidalgo** Brazilian Institute
of Geography and Statistics, **Denise Britz do Nascimento Silva** National School of Statistical Sciences
- ENCE/IBGE and **Jan van den Brakel** Statistics Netherlands and Maastricht University
Model-based unemployment rate estimates for the Brazilian Labour Force Survey

Jan van den Brakel Statistics Netherlands and Maastricht University, **Martijn Souren** and **Sabine
Krieg** Statistics Netherlands
Estimating monthly labour force figures during the COVID-19 pandemic in the Netherlands

Andres Gutierrez United Nations Economic Commission for Latin America and the Caribbean,
Hanwen Zhang Universidad Autónoma de Chile, **Pedro Luis do Nascimento Silva** Escola Nacional de
Ciências Estatísticas and **Leonardo Trujillo** Universidad Nacional de Colombia
*Estimation of gross labour-force flows for some non-response models: a case study during the
coronavirus outbreak*

Guilherme Jacob and **Pedro Luis do Nascimento Silva** Escola Nacional de Ciências Estatísticas
*Gross labour flows estimation with non-response using the Brazilian National Household Sample
Surveys*

14.25 – 14.40 Break

14.40 - 16.00 Invited Session 4 (Chair: Pedro Luis do Nascimento Silva)

Graham Kalton University of Maryland
Probability vs. nonprobability sampling: from the birth of survey sampling to the present day

Wayne Fuller Iowa State University
Post strata based on sample quantiles

Friday 9 July

10.00 – 11.00 Panel Session (Chair: Nikos Tzavidis)

Dennis Trewin

An integrated statistical approach to managing pandemics

Panelists: **Len Cook**, **Pedro Luis do Nascimento Silva** Escola Nacional de Ciências Estatísticas, **David Steel** University of Wollongong

11.00 – 11.15 Break

11.15 - 12.35 Contributed Session 4 (Chair: Jon Forster)

Mihaela-Catalina Anastasiade-Guinand Swiss Federal Statistical Office, **Alina Matei** and **Yves Tillé** Université de Neuchatel

Estimating a counterfactual wage heavy-tailed distribution using survey data

Nora Würz Freie Universität Berlin, **Timo Schmid** Universität Bamberg and **Nikos Tzavidis** University of Southampton

Estimating regional income indicators with access to limited auxiliary information

Antônio Teixeira Senac – Departamento Nacional and **Pedro Luis do Nascimento Silva** Escola Nacional de Ciências Estatísticas

Cross-classified sampling and regression estimation for price index estimation

Elizabeth Belo Hypolito and **Denise Britz do Nascimento Silva** National School of Statistical Sciences - ENCE/IBGE

Impacts of proxy response in the Brazilian labor force survey

12.35 – 13.05 Lunch Break

13.05 – 14.25 Contributed Session 5 (Chair: Natalie Shlomo)

Phillip S. Kott RTI International

The role of weights in regression modeling and Imputation

Ton de Waal Statistics Netherlands

Calibrated imputation for multivariate numerical data

Mehdi Dagdoug and **Camelia Goga** Université de Bourgogne-Franche-Comté and **David Haziza** University of Ottawa

Model-assisted estimation through random forests in finite population sampling

Savano Pereira, **Luiz P. Calôba** and **Pedro Luis do Nascimento Silva** Escola Nacional de Ciências Estatísticas

Artificial neural networks with complex survey data

14.25 – 14.40 Break

14.40 - 16.00 Invited Session 5 (Chair: Paul Smith)

Denise Britz do Nascimento Silva Escola Nacional de Ciências Estatísticas, **Eduardo Santiago Rosseti** FGV Projetos and **Antônio Etevaldo Teixeira Júnior** Senac - Departamento Nacional

Compositional time series analysis of labour force status in the Brazilian National Household Survey

Pedro Luis do Nascimento Silva Escola Nacional de Ciências Estatísticas and **Fernando Moura** Universidade Federal do Rio de Janeiro

Fitting multivariate multilevel models under informative sampling

16.00 – 16.05 Closing remarks