









NATIONAL INSTITUTE OF STATISTICS ECOLOGICAL UNIVERSITY OF BUCHAREST STATISTIK AUSTRIA CENTRAAL BUREAU VOOR DE STATISTIEK NETHERLANDS THE UNIVERSITY OF BUCHAREST

# The 11th International Conference

# The Use of R in Official Statistics uRos2023

# **PROGRAMME**

On-site event
Hosted by Romanian National Institute of Statistics
Bucharest, Romania
12-14 December 2023



http://urosconf.org/

12-14 December 2023, Bucharest, Romania

#### SCIENTIFIC BOARD

#### **ORGANIZING COMMITTEE**

Ana Maria Ciuhu (Statistics Romania and Institute of National Economy, Romanian Academy)
Bogdan Oancea (Statistics Romania, University of Bucharest)
Ciprian Alexandru (Ecological University of Bucharest)
Alexander Kowarik (Statistics Austria)
Mark van der Loo (Statistics Netherlands)

#### **SECRETARIATE**

Ana Maria Ciuhu, National Institute of Statistics, Romania Roxana Petcu, The Bucharest University of Economic Studies & National Institute of Statistics, Romania

#### **CONTACT**

urosconf [at] gmail.com

### **PROGRAMME**

Blue Hall, National Institute of Statistics, Ground Floor

# December 12, Tuesday

10<sup>00</sup> – 10<sup>45</sup> Registration of participants

10<sup>45</sup> - 11<sup>00</sup> Welcome message

11<sup>00</sup> – 13<sup>00</sup> Tutorial session I

"data.table and Rcpp, two possibilities to speed up your R processing"

Alexander KOWARIK, Statistics Austria

**13**<sup>00</sup> – **14**<sup>00</sup> Lunch break

1400 - 1600 Tutorial session II

"Parallel computing in R"

Bogdan OANCEA, Romanian National Institute of Statistics & University of Bucharest

**16**<sup>00</sup> – **16**<sup>30</sup> Coffee break

16<sup>30</sup> – 17<sup>30</sup> Tutorial session III

"Elevating Data Documentation Proficiency: Harnessing the Power of DDI for Official Statistics"

Adrian DUSA, University of Bucharest

# **December 13, Wednesday**

900 - 915 Walk In

9<sup>15</sup> - 9<sup>30</sup> Welcome message

930 – 1030 Keynote Speaker 1: Mark VAN DER LOO, Statistics Netherlands (CBS)

Chairman: Alexander KOWARIK, Statistics Austria

Presentation - Modernizing Statistical Production Systems Using R

**10**<sup>30</sup> – **11**<sup>00</sup> Coffee break

11<sup>00</sup> – 12<sup>30</sup> Scientific Session Sampling and estimation

Chairman: Ciprian ALEXANDRU, Ecological University of Bucharest

Transitioning Sample Surveys to R: insights from Statistics Lithuania Donatas ŠLEVINSKAS, State Data Agency, Statistics Lithuania

Variance estimation with the R package gustave: the experience of STATEC

Claude LAMBORAY, Statistics Luxembourg (STATEC) Dmitri LEBRUN, Statistics Luxembourg (STATEC)

Guillaume OSIER, Statistics Luxembourg (STATEC)

#### 12-14 December 2023, Bucharest, Romania



Use of Extreme Gradient Boosting to predict census variables Lorenzo ASTI, Statistics Italy (ISTAT)

Loredana DI CONSIGLIO, Statistics Italy (ISTAT) Tiziana PICHIORRI, Statistics Italy (ISTAT)

Use of R at NIS Romania: Focus on Calibration in Household Surveys Ana-Maria CIUHU, Romanian National Institute of Statistics Monica-Ioana RAFU, Romanian National Institute of Statistics

# 12<sup>30</sup> – 14<sup>00</sup> Lunch Break & Group Photo

# 14<sup>00</sup>– 15<sup>00</sup> Scientific Session *Data cleaning*

Chairman: Bogdan OANCEA, Romanian National Institute of Statistics



Split-Apply-Combine with Dynamic Grouping
Mark Van Der Loo, Statistics Netherlands (CBS)

R Shiny apps for asymmetry analysis via selective editing Mauro BRUNO, Statistics Italy (ISTAT)

Maria Serena CAUSO, Statistics Italy (ISTAT)

Giulio MASSACCI, Statistics Italy (ISTAT)

Francesco ORTAME, Statistics Italy (ISTAT)

Giuseppina RUOCCO, Statistics Italy (ISTAT) Simona TOTI, Statistics Italy (ISTAT)

Accessing apharance between



Assessing coherence between estimated distributions in R Marcello D'ORAZIO, Statistics Italy (ISTAT)

#### 15<sup>00</sup> - 15<sup>30</sup> Coffee Break

# 15<sup>30</sup> - 16<sup>30</sup> Scientific Session *R in Organization*

Chairman: Ana-Maria CIUHU, Romanian National Institute of Statistics



Access to official statistics from R: an overview Olav TEN BOSCH, Statistics Netherlands (CBS) Edwin DE JONGE, Statistics Netherlands (CBS)



Managing our R infrastructure with 400+ users Bernhard MEINDL, Statistics Austria Alexander KOWARIK, Statistics Austria



From SAS to R: moving to open source solutions in Romanian NSI Bogdan OANCEA, Romanian National Institute of Statistics Marian NECULA, Romanian National Institute of Statistics

# 16<sup>30</sup> - 17<sup>30</sup> Scientific Session *R in Production: Automation*

Chairman: Mark VAN DER LOO, Statistics Netherlands (CBS)



An automated machine-learning pipeline for statistical matching Theresa KÜNTZLER, Federal Statistical Office Germany (Destatis)

#### 12-14 December 2023, Bucharest, Romania

Integrating a System for Automatic Classification of Economic Activities into Statistical Production: Challenges and Solutions



Athanassia CHALIMOURDA, Swiss Federal Statistical Office (SFSO), Data Science, Al and Statistical Methods, Statistical Methods

Lorenz HELBLING, Swiss Federal Statistical Office (SFSO), Interoperability and Registers, Business Registers Data



R & Jenkins - Open Source for Open Government
Philipp Bosch, Statistical Office of the Canton of Zurich, Switzerland



Official statistics and report automation and replication using R
Athanassios STAVRAKOUDIS, Applied Informatics and Computational Economics Lab,
Department of Economics, University of Ioannina, Greece

19<sup>00</sup> Official DinneR

# **December 14, Thursday**

 $9^{00} - 9^{30}$  Walk In

**Keynote Speaker 2:** Isabella GOLLINI, UCD School of Mathematics and Statistics, Ireland



Chairman: Ciprian ALEXANDRU, Ecological University of Bucharest
Presentation - Programming and collaborations: roles and tools when using R

 $10^{30} - 11^{00}$  Coffee break

11<sup>00</sup> – 12<sup>00</sup> Scientific Session *Disclosure control, dissemination and visualization*Chairman: Marian NECULA, Romanian National Institute of Statistics

The bbkplot package: Deutsche Bundesbank Corporate Design in R – Motivation, Challenges, Benefits

Hendrik DOLL, Deutsche Bundesbank, Research Data and Service Centre Daniel OLLECH, Deutsche Bundesbank, Research Data and Service Centre



At the coRe of UNIDO's revamped statistical publications Martin Haitzmann, UNIDO, Austria



Improvements on sdcSpatial: privacy protected maps Edwin DE JONGE, Statistics Netherlands

12<sup>00</sup> – 13<sup>00</sup> Scientific Session *Using R in new data sources & R in production: data analysis* 

Chairman: Bogdan OANCEA, Romanian National Institute of Statistics, University of Bucharest



New data sources and official statistics: An exemplary research workflow in R using different API wrapper packages

Yannik BUHL, Federal Statistical Office Germany (Destatis)

### 12-14 December 2023, Bucharest, Romania



Difference on Evaluation Scores Considering Image Descriptions
Yukako TOKO, National Statistics Center, Japan
Mika SATO-ILIC, Institute of Systems and Information Engineering, Japan



Survey Monitoring with Paradata: Leveraging the Survey Solutions Paradata Viewer Application in R



Michael WILD, World Bank, Austria Ciprian ALEXANDRU, Ecological University of Bucharest, Romania



Renewable energy and GHG emissions in European Union countries

Nicolae-Marius JULA, Faculty of Business and Administration, University of Bucharest

Dorin JULA, Institute of Economic Forecasting, Romanian Academy and Faculty of

Financial Management, Ecological University of Bucharest

#### 13<sup>00</sup> Closing Remarks

#### Contact:

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e-mail: urosconf [at] gmail.com

12-14 December 2023, Bucharest, Romania

### **BRIEF AGENDA**

### Tuesday, 12 December 2023

10:00 - 10:45 Registration

10:45 - 11:00 Welcome message

11:00 - 13:00 Tutorial session I "data.table and Rcpp, two possibilities to speed up your R processing" by Alexander Kowarik

13:00 - 14:00 Lunch break

14:00 - 16:00 Tutorial session II "Parallel computing in R" by Bogdan Oancea

16:00-16:30 Coffee break

16:30-17:30 Tutorial session III "Elevating Data Documentation Proficiency: Harnessing the Power of DDI for Official Statistics" by Adrian Dusa

#### Wednesday, 13 December 2023

09:00 - 09:15 Walk in

09:15 - 09:30 Welcome message

09:30 - 10:30 Keynote speaker 1 "Modernizing Statistical Production Systems Using R"

by Mark van der Loo

10:30-11:00 Coffee break

11:00 - 12:30 Scientific session I Sampling and estimation

12:30 - 14:00 Lunch break and Group photo

14:00 - 15:00 Scientific session II Data cleaning

15:00-15:30 Coffee break

15:30-16:30 Scientific session III R in Organization

16:30-17:30 Scientific session IV R in production: automation

19:00 Official dinner

#### Thursday, 14 December 2023

09:00 - 09:30 Walk in

09:30 - 10:30 Keynote speaker 2 "Programming and collaborations: roles and tools when

using R" by Isabella Gollini

10:30-11:00 Coffee break

11:00 - 12:00 Scientific session I Disclosure control, dissemination and visualization

12:00 - 13:00 Scientific session II Using R in new data sources & R in production: data

analysis

13:00 Closing remarks

# **CONFERENCE VENUE**

National Institute of Statistics, Bucharest, Romania Address of National Institute of Statistics:

No.16 Libertatii Bvd., District 5, Bucharest, Romania



GPS: 44°25'47.5"N 26°05'37.0"E