









BUCHAREST

NATIONAL **INSTITUTE OF STATISTICS**

STATISTIK CENTRAAL BUREAU AUSTRIA VOOR DE STATISTIEK **NETHERLANDS**

THE UNIVERSITY OF **BUCHAREST**

The 9th International Conference The Use of R in Official Statistics uRos2021

PROGRAMME

VIRTUAL CONFERENCE 24-26 November 2021



http://urosconf.org/

24-26 November 2021, VIRTUAL CONFERENCE

SCIENTIFIC BOARD

Tudorel ANDREI (President, National Institute of Statistics - Romania)

Matthias TEMPL (ZHAW school of engineering, Switzerland)

Adrian DUSA (University of Bucharest, Romania)

Elena DRUICA (University of Bucharest, Romania)

Kazumi WADA (Ministry of Internal Affairs and Communications, Japan)

Marcello D'ORAZIO (Italian National Institute of Statistics - Rome, Italy)

Valentin TODOROV (UNIDO, Vienna Austria)

Alina MATEI (University of Neuchatel, Switzerland)

Bernhard MEINDL (Statistics Austria, Austria)

Edwin de JONGE (Statistics Netherlands, The Netherlands)

Kamarul Ariffin MANSOR (MARA University of Technology, Malaysia)

Marius Nicolae JULA (University of Bucharest, Romania)

Matyas MESZAROS (Eurostat, Luxemburg)

Roxana ADAM (University of Bucharest, Romania)

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)
Nicoleta CARAGEA (Statistics Romania, Ecological University of Bucharest)

SECRETARIATE

Ana Maria CIUHU, Statistics Romania and Institute of National Economy, Romanian
Academy, Romania
Roxana GLAVAN, The Bucharest University of Economic Studies & National Institute of
Statistics, Romania
Ana ŢÎRU, National Institute of Statistics, Romania

CONTACT

Ana Maria CIUHU: anamaria.ciuhu [at] insse.ro

PROGRAMME - Central European Time (CET) (GMT+1)

November 24, Wednesday

November 24, wednesday	
09 ⁴⁵ – 10 ⁰⁰ (CET)	Welcome message Ana-Maria CIUHU, Statistics Romania and Institute of National Economy, Romanian Academy
10 ⁰⁰ – 11 ⁰⁰ (CET)	of Warwick, UK Presentation - Structured Effects with Generalized Nonlinear Models
11 ⁰⁰ – 12 ³⁰ (CET)	Scientific Session Data cleaning Chairman: Alexander KOWARIK, Statistics Austria
	Modified Stahel-Donoho estimator for outlier detection in official statistics Kazumi WADA, Statistical Research and Training Institute, MIC
	Identifying outliers in multivariate databases - distance and density-based methods in housing statistics Antal ERTL, Hungarian Central Statistical Office and Corvinus University of Budapest
	Selective Editing Using Contamination Model in R Ieva BURAKAUSKAITĖ, Statistics Lithuania Vilma NEKRAŠAITĖ-LIEGĖ, Vilnius Gediminas Technical University, Lithuania and Statistics Lithuania
(8)	R contribution to data quality: the E-invoice case Bruno LIMA, Statistics Portugal João POÇAS, Statistics Portugal Sofia RODRIGUES, Statistics Portugal João LOPES, Statistics Portugal Paula Cruz, Statistics Portugal António Portugal, Statistics Portugal
(9)	Lightning talk: Quality control with R on Simplified Business Information Bruno LIMA, Statistics Portugal João POÇAS, Statistics Portugal Sofia RODRIGUES, Statistics Portugal
12 ³⁰ – 13 ³⁰ (CET)	Lunch break
13 ³⁰ – 15 ⁰⁰ (CET)	Scientific Session Methods for official statistics Chairman: Ana Maria CIUHU, Statistics Romania and Institute of National Economy, Romanian Academy

	24-20 November 2021, VINTOAL CONFENCE	
	reclin: a package for probabilistic record linkage Jan VAN DER LAAN, Statistics Netherlands (CBS)	
	Official estimates of community Covid positivity: estimating rare occurred using multi-level regression with post-stratification in R Melissa RANDALL, Office for National Statistics	
光	Advanced Industrial Turnover Index using Statistical Learning Algorithms S. BARRAGÁN, Dept. Methodology and Development of Statistical Production, Statistics Spain L. BARREÑADA, Dept. Statistics and Operations Research, Complutense University of Madrid J.F. CALATRAVA, Dept. Methodology and Development of Statistical Production, Statistics Spain J.C. GÁLVEZ SÁENZ DE CUETO, Dept. Methodology and Development of Statistical Production, Statistics Spain J.M. MARTÍN DEL MORAL, S.G. for Industrial and Services Statistics, Statistics Spain E. ROSA-PÉREZ, S.G. for Industrial and Services Statistics, Statistics Spain; Dept. Statistics and Operations Research, Complutense University of Madrid D. SALGADO, Dept. Methodology and Development of Statistical Production, Statistics Spain; Dept. Statistics and Operations Research, Complutense University of Madrid	
11	Dealing with the change of administrative divisions over time Kim ANTUNEZ, Ecole nationale d'économie et statistique (ENSAE)	
15 ⁰⁰ – 15 ¹⁵ (CET)	Break	
15 ¹⁵ – 16 ¹⁵ (CET)	Scientific Session R in production: data analysis Chairman: Mark VAN DER LOO, Statistics Netherlands (CBS)	
	Flash reports with flexdashboard for the characterization and quality levels of available datasets Almiro MOREIRA, Statistics Portugal António PORTUGAL, Statistics Portugal Bruno LIMA, Statistics Portugal Cecilia SANTOS, Statistics Portugal João POÇAS, Statistics Portugal Jorge MAGALHÃES, Statistics Portugal Paula CRUZ, Statistics Portugal Paulo SARAIVA, Statistics Portugal Salvador GIL, Statistics Portugal Sofia RODRIGUES, Statistics Portugal	

24-26 November 2021, VIRTUAL CONFERENCE

C *	Determining the Business Cycle of Turkey Muhammed Fatih TÜZEN, Turkish Statistical Institute Fatma Aydan Kocacan NURAY, Turkish Statistical Institute Ilayda KURU, Turkish Statistical Institute
	Using R to determine the impact of an image on viewers Nicolae-Marius JULA, University of Bucharest, Faculty of Business and Administration
	<u>Lightning talk:</u> Determinants of house price in Europe Mihaela Cornelia SANDU, Faculty of Business and Administration, University of Bucharest Irina Virginia DRĂGULĂNESCU, Faculty of Business and Administration, University of Bucharest

November 25, Thursday

9 ⁰⁰ – 10 ⁰⁰ (CET)	Keynote: Edwin DE JONGE, Statistics Netherlands (CBS) Presentation - The unexpected value of R in official statistics Chairman: Alexander KOWARIK, Statistics Austria
10 ⁰⁰ – 11 ¹⁰ (CET)	, , , , , , , , , , , , , , , , , , ,
+	Synthetic data with xgboost and advanced calibration Johannes GUSSENBAUER, Statistics Austria Matthias TEMPL, Zurich University of Applied Sciences Siro FRITZMANN, Hotelplan Alexander KOWARIK, Statistics Austria
	Measuring Inequality in Sampling Surveys Sebastian WÓJCIK, Statistical Office in Rzeszów (Statistics Poland)
	Missing values treatment in R Adrian DUŞA, University of Bucharest
i Gi	Minimising MSE in the rolling windows implementation Virgilio PÉREZ, Universidad de Valencia José Manuel PAVÍA, Universidad de Valencia Cristina AYBAR, Universidad de Valencia

C	Lightning talk: Using the R Programming System in Sample Surveys Mubariz NURIYEV, The State Statistical Committee of the Republic of Azerbaijan, Center of Scientific Research and Statistical Innovation Saleh MOVLAMOV, The State Statistical Committee of the Republic of Azerbaijan, Center of Scientific Research and Statistical Innovation Zarifa NAGHIYEVA, The State Statistical Committee of the Republic of Azerbaijan, Center of Scientific Research and Statistical Innovation
11 ¹⁰ – 12 ⁰⁰ (CET)	Scientific Session Big data Chairman: Alexander KOWARIK, Statistics Austria
* * *	R for Big Data processing: Online Job Advertisements Matyas MESZAROS, Eurostat, European Commission Andrea ASCHERI, Eurostat, European Commission Fernando REIS, Eurostat, European Commission Gabriele MARCONI, Sogeti
	Network Visualization of Multi-data Sources using R Rui ALVES, Statistics Portugal – INE Shirley ORTEGA-AZURDUY, Statistics Netherlands – CBS Christina PIERRAKOU, Hellenic Statistical Authority – ELSTAT
	Efficient Computation of approximate Kantorovich-Wasserstein distance for large spatial maps Stefano GUALANDI, University of Pavia, Mathematics Department Federico BASSETTI, Politecnico di Milano, Mathematics Department Fabio RICCIATO, European Commission, DG Eurostat, Unit A5, Methodology; Innovation in Official Statistics
12 ⁰⁰ – 13 ⁰⁰ (CET)	Lunch Break
13 ⁰⁰ – 14 ¹⁵ (CET)	Scientific Session Dissemination and visualization Chairman: Edwin DE JONGE, Statistics Netherlands (CBS)
	Building a content delivery pipeline for a website in R Gregor DE CILLIA, Statistics Austria Bernhard MEINDL, Statistics Austria Alexander KOWARIK, Statistics Austria

_	2 1 20 November 2021, VIII O/LE COM ENEMEE
河原	simviz: a package to visualize simulated telecommunication mobile network event data B. OANCEA, Dept. Innovative Tools in Official Statistics, National Institute of Statistics (INS); Dept. Business Administration, University of Bucharest D. SALGADO, Dept. Methodology and Development of Statistical Production, Statistics Spain; Dept. Statistics and Operations Research, Complutense University of Madrid S. BARRAGÁN, Dept. Methodology and Development of Statistical Production, Statistics Spain M. NECULA, Dept. Innovative Tools in Official Statistics, National Institute of Statistics (INS), Romania
	Modern graphics for presenting the results of life-events surveys on satisfaction with public administration Sylvana Walprecht, Destatis Daniel Kühnhenrich, Destatis
C*	thestats: An R package for gathering and analyzing Turkish higher education statistics Olgun AYDIN, Gdansk University of Technology, Poland Mustafa CAVUS, Warsaw University of Technology, Poland and Eskisehir Technical University, Turkey
	<u>Lightning talk:</u> Spatial density estimation based on mobile network operator data within R: the MNO-simulator Marco RAMLJAK, Utrecht University
14 ¹⁵ – 15 ¹⁵ (CET)	Scientific Session R in production: automation Chairman: Mark VAN DER LOO, Statistics Netherlands (CBS)
	Autocoding based on Multi-Class Support Vector Machine by Fuzzy c-means Method Yukako Toko, National Statistics Center Mika Sato-Ilic, Faculty of Engineering, Information and Systems, University of Tsukuba
	Extending data validation with standardised metadata from SDMX registries Olav TEN BOSCH, Statistics Netherlands Mark VAN DER LOO, Statistics Netherlands
×	<u>Lightning talk:</u> Automating Open Data Publication in Public Health Scotland Csilla SCHARLE, Public Health Scotland
#	<u>Lightning talk:</u> <i>Using R in Jupyter for statistical production</i> Susie JENTOFT, Statistics Norway
	Peer-Reviewing Code in Statistical R Packages: Standards, Processes, and Tools Mark PADGHAM, rOpenSci Noam ROSS, rOpenSci

15 ¹⁵ – 15 ³⁰ (CET)	Break
15 ³⁰ – 16 ¹⁵ (CET)	Scientific Session Shiny applications Chairman: Ciprian ALEXANDRU, Ecological University of Bucharest, Romania
	Shiny demo: Mobility scan Josue ADUNA, Livemobility, Netherlands
C *	A Reporting And Comparing Application For Province Based Covid-19 Cases In Turkey With R Shiny Cenk İÇÖZ, Eskişehir Technical University, Statistics Department
神殿	<u>Lightning talk:</u> Automation forecasting of regional macroeconomic series Priscila ESPINOSA, Universidad de Valencia José Manuel PAVÍA, Universidad de Valencia
16 ¹⁵ – 17 ¹⁵ (CET)	EMOS coding labs presentation of preliminary results Chairman: Bogdan OANCEA, Statistics Romania, University of Bucharest I. Introduction of the EMOS coding labs Matyas Meszaros, Eurostat, European Commission
	 II. Presentations: 1. Greenness and Graph Analysis: A study on pollution produced by International Trade Students: Fabbrico Davide, Department of Statistics and Data Science, University of Florence Khateeb Ahmad Arsalan, Department of Informatics and Statistics, Prague University of Economics and Business Pagnoncelli Diego, Department of Economics Science, University of Bergamo Supervisors: Amato Francesco, National Institute of Statistics, Istat, Italy Bruno Mauro, National Institute of Statistics, Istat, Italy Causo Maria Serena, National Institute of Statistics, Istat, Italy De Fausti Fabrizio, National Institute of Statistics, Istat, Italy 2. A time series comparison study using ARIMA model for plastic products trade Students: Elena Viti, Trier University, Faculty of Applied Statistics Hakile Resulbegoviq, Faculty Of International Economics, Finance And Business - University of Donya Gorica Jelena Tijanic, Dept. EMOS, Faculty of international economics, finance and business, University of Donja Gorica, Montenegro Supervisors: Erika Cerasti, National Institute of Statistics, Istat, Italy Federico Brogi, National Institute of Statistics, Istat, Italy Maria Serena Causo, National Institute of Statistics, Istat, Italy Mauro Bruno, National Institute of Statistics, Istat, Italy

24-26 November 2021, VIRTUAL CONFERENCE

3. Delauney Triangulation for Voronoi Partition: n-neighbour assessment of closest antenna fallacy

Students:

Vivin Vinod, Dept. Economics and Management, University of Pisa *Supervisors:*

Bogdan Oancea, Dept. Innovative Tools in Official Statistics, INS Romania Sandra Barragan Andres, Dept. Methodology and Development of Official Statistics, INE, Spain

David Salgado Fernandez, Dept. Methodology and Development of Ocial Statistics, INE, Spain

Marian Necula, Dept. Innovative Tools in Official Statistics, INS Romania

4. Methodological development of human movement patterns analysis using simulated mobile network data

Students:

Ivana Vujović, Dept. EMOS, Faculty of international economics, finance and business, University of Donja Gorica

Supervisors:

Marian Necula, Dept. Innovative Tools in Official Statistics, INS Romania Sandra Barragán, Dept. Methodology and Development of Official Statistics, INE, Spain

Bogdan Oancea, Dept. Innovative Tools in Official Statistics, INS Romania David Salgado, Dept. Methodology and Development of Official Statistics, INE, Spain

5. Investigating Syrian asylum flows into Europe with R Students:

Armen Abagyan, KU Leuven, Belgium Jana Kopecka, Mendel University in Brno Federico Pavesi, Università degli studi di Bergamo Supervisors:

Jules Zaccardi, Eurostat F2 – Population and Migrations

uRos2021

24-26 November 2021, VIRTUAL CONFERENCE

November 26, Friday

09 ³⁰ - 11 ³⁰	Tutorial: Selecting auxiliary variables in R Marcello D'ORAZIO, Italian national Institute of Statistics (Istat)
11 ³⁰ – 12 ³⁰	Lunch break
12 ³⁰ – 14 ³⁰	Tutorial: Probabilistic record linkage using reclin Jan VAN DER LAAN, Statistics Netherlands
14 ³⁰ – 15 ⁰⁰	Break
15 ⁰⁰ – 16 ⁰⁰ (CET)	Panel discussion: Computing in the Statistical Office Coordinator: Alexander KOWARIK, Statistics Austria Discussants: Heather TURNER, R Foundation; Statistics Department at the University of Warwick, UK Mark VAN DER LOO, Statistics Netherlands (CBS) Matyas Meszaros, Eurostat, European Commission Michael Wild, World Bank Chairman: TBA
16 ⁰⁰ – 16 ³⁰ (CET)	Good bye and invitation to uRos2022

Contact

Address of National Institute of Statistics: No.16 Libertatii Bvd., District 5, Bucharest, Romania

Telephone center: +4021 3181824; +4021 3181842

e-mail: anamaria.ciuhu [at] insse.ro

uRos2021

24-26 November 2021, VIRTUAL CONFERENCE

BRIEF AGENDA Central European Time (CET) (GMT+1)

November 24, Wednesday

09:45 - 10:00	Welcome message
10:00 - 11:00	Keynote Heather Turner
11:00 - 12:30	Scientific Session Data cleaning
12:30 - 13:30	Lunch break
13:30 - 15:00	Scientific Session Methods for official statistics
15:00 - 15:15	Break
15:15 - 16:15	Scientific Session R in production: data analysis

November 25, Thursday

09:00 - 10:00	Keynote Edwin de Jonge
10:00 - 11:10	Scientific Session Sampling and estimation
11:10 - 12:00	Scientific Session <i>Big data</i>
12:00 - 13:00	Lunch break
13:00 - 14:15	Scientific Session Dissemination and
	visualization
14:15 – 15:15	Scientific Session R in production: automation
15:15 – 15:30	Break
15:30 – 16:15	Scientific Session Shiny applications
16:15 – 17:15	EMOS coding labs presentation of preliminary
	results

November 26, Friday

9:30 – 11:30	Tutorial: Selecting auxiliary variables in R
11:30 - 12:30	Lunch Break
12:30 - 14:30	Tutorial: Probabilistic record linkage using reclin
14:30 - 15:00	Break
15:00 – 16:00	Panel talk: Computing in the Statistical Office
16:00 – 16:30	Good bye and invitation to uRos2022