



**The Bucharest University of Economic Studies
Department of Statistics and Econometrics
The Romanian Society of Statistics
The Applied Statistics and Econometrics Group
The Statisticians' Club
EMOS**



ICAS 2020

The 14th International Conference on Applied Statistics

**Wednesday, November 25th, 2020
Bucharest**



SOCIETATEA ROMÂNĂ DE STATISTICĂ





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Overview of the Conference Agenda

Wednesday, 25th of November

Opening Ceremony and Plenary Session

Opening Speeches

9:30 – 10:00 (EET) Welcome speeches
[click access ZOOM](#)

KeyNote Ph.D. [Associate Professor Lucian VIȘINESCU](#)

10:00 – 10:30 (EET) Texas State University
 Applied statistics a timeline snapshot



KeyNote Ph.D. [Professor Juan Manuel Rodriguez POO](#)

10:30 – 11:00 (EET) President of the National Statistical Institute of Spain (INE)
 High-Quality Statistics for a Datafied Society



Parallel sessions

11:00 – 13:00 [Session 1](#) [Session 2](#)

11:00 – 13:30 [Session 3](#)

11:30 – 13:30 [Session 4](#) [Session 5](#)

17:00 – 19:00 [Session 6](#)



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25th of November

11:00 – 13:00

Parallel session 1

Applied spatial data analysis

Chairs: Prof. Zizi GOSCHIN

Prof. Elena DRUICĂ

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[ZOOM](#)

Looking ahead - from fossil fuel to a circular bioeconomy in Europe. Evolution and behaviour

Gheorghe ZAMAN; Giani Ionel GRĂDINARU; Bogdan Florin MATEI

Spatial changes in entrepreneurship in relation to economic crisis and recovery. Insights from Romanian counties

Zizi GOSCHIN; Elena DRUICĂ

The impact of the entrepreneurship in regional disparities in Romania: A spatial analysis at NUTS3 level

Antonia MIHAL; Horia ȚIGĂU

Budgetary efficiency expressed as the interdependence of public expenditures and the Gross Domestic Product in the Republic of Moldova

Ion PARTACHI; Simion MIJA

Insights from the regional distribution of Romanian emigration

Florian MIHĂLCIOIU; Mihaela COVRIG; Adrian OȚOIU

Romania's tourism industry in free fall

Constantin ANGHELACHE; Ștefan Virgil IACOB; Gabriel DUMBRAVĂ

Study on the effect of crises on economic correlations and macrostability

Constantin ANGHELACHE; Mădălina-Gabriela ANGHEL; Dana Luiza GRIGORESCU



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25th of November

11:00 – 13:00

Parallel session 2

Quantitative analysis in the social and business environment

Chairs: Prof. Emilia Țițan

Prof. Carmen PINTILESCU

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Global Tendency of Silver Population Benefits

Mihaela CAZACU; Emilia ȚIȚAN

Assessing the entrepreneurial intention in Romania. An approach based on a binomial logistic regression

Denisa Elena BĂLĂ; Stelian STANCU; Dragoș BĂLĂ

Does the tax burden impact the performance of companies? A case study for Romania

Victor OGNERU; Stelian STANCU

Solutions for data management in the health sector

Crina-Dana IONESCU; Emilia ȚIȚAN; Mihaela MIHAI; Daniela-Ioana MANEA; Andra NECHIFOR

Job offer on the Romanian labor market in digital economy

Carmen-Elena BĂNESCU; Emilia ȚIȚAN

Digital innovation in education - quantitative approach

Mihaela MIHAI; Daniela-Ioana MANEA; Emilia ȚIȚAN; Andra NECHIFOR Andrada COTENESCU



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25th of November

11:00 – 13:30

Parallel session 3

Demography and Applied Statistics in Social Science

Chairs: Prof. Constanța Mihăescu & Prof. Laura Asandului

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[ZOOM](#)

Modelling the budget revenues on the basis of appropriate macroeconomic indicators. a case study for Romania

Alina Mirela BĂLȚĂȚEANU

Technical and scale efficiency in Romanian public hospitals: Estimating with Data Envelopment Analysis

Elena Raluca CAUNIC

Environmental performance in the EU countries from the perspective of its relation to human and economic wellbeing

Simona Roxana ULMAN; Cristina CĂUȚIȘANU

Multilevel logistic regression in social sciences

Laura ASANDULUI; Francesca PIERRI

The Evolution of Romania's Internal Migration. Findings from the 1977, 1992, 2002 and 2011 Censuses

Constanța MIHĂESCU; Adrian OȚOIU; Erika MARIN; Ileana NICULESCU-ARON

Labor force shortage analysis in Romania - size, impact and measures

Valentina VASILE; Cristina Rodica BOBOC; Simona Ioana GHIȚĂ; Irina BANCESCU; Andreea Simona SĂSEANU

Fertility and socio-economic uncertainty during post-communist transition in Central and Eastern Europe

Dănuț-Vasile JEMNA; Mihaela DAVID



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25th of November

11:30 – 13:30

Parallel session 4

Data Mining and Artificial Intelligence

Chairs: Prof. Adrian COSTEA & Prof. Dumitru Iulian NASTAC

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Supporting secondary research in early drug discovery process through a Natural Language Processing based system

Alina POPA

Consumer recommendation dynamics in online retail business under logistic regression and naïve Bayes analyses

Irina GEORGESCU; Jani KINNUNEN

Kinetic energies in random vectors

Alexandru DAIA; Stelian STANCU; Om SUCHAK

Combining Regression and Clustering for Financial Analysis

Andreea Ioana CHIRIAC

Churn prepaid customers classified by HyperOpt techniques

Andreea DUMITRACHE; Denisa MELIAN; Delia BĂLĂCIAN; Alexandra NASTU; Stelian STANCU

Cluster Analysis in Data Mining

Canavea Ionuț

Use of Social Networks in Determining StockMarket Evolution

Dan FLAVIU; Monica MAER; Stelian STANCU



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25th of November

11:30 – 13:30

Parallel session 5

Econophysics and Complex Systems

Chairs: Prof. Claudiu HERȚELIU

Prof. Roy CERQUETI

Prof. Tudorel ANDREI

[click access](#)

[ZOOM](#)

Benford's laws tests on S&P500 daily closing values and the corresponding daily log-returns both point to huge non-conformity

Muhammad SHAKEEL; Marcel AUSLOOS; Valerio FICCADENTI; Gurjeet DHESI

Monitoring tail dependence in pension funds investments

Claudiu HERȚELIU; Susanna LEVANTESI; Giulia ROTUNDO

Testing the validity of the Feldstein-Horioka puzzle in Algeria: Maki co-integration and hidden causality analysis

Ayad HICHAM; Mostefa BELMOKADDEM

The impact of COVID-19 pandemic on the numerical data from news A Benford Laws approach

Marcel AUSLOOS; Claudiu HERȚELIU; Adrian PANA

Proselytism Performance Indicators of the Church of England Dioceses during the Decade of Evangelism

Marcel AUSLOOS; Claudiu HERȚELIU

A stochastic model for evaluating the peaks of the commodity prices

Roy CERQUETI; Marcel AUSLOOS



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25th of November

17:00 – 19:00

Parallel session 6

[click access](#)

Young Statisticians Europe:

[ZOOM](#)

Theoretical and Applied Quantitative Methods

Chairs: Prof. Constantin MITRUȚ

Assistant Prof. Raluca CĂPLESCU

Ph.D. Fatemeh GHADERINEZHAD

The role of Tax Multiplier as an emergence factor for the Moroccan economy

El Aoufir MOUNIR

Sustainability literacy in the Romanian universities

Elena PRADA; Simona-Andreea APOSTU; Emilia GOGU

Combinatorial regression model in abstract simplicial complexes

Andrej SRAKAR

On the meaningfulness of means: the work of Andrey Kolmogorov's on generalized f-means revisited

Manuela Simona COJOCEA

Using Cluster Analysis to study the discrimination issue of refugees and migrants from MENA Region in European Countries

Amira KOBEISSI; Ali Sadig Mohammed BAGER; Mohammad HIBA

Measuring the level of financial development of UE member countries

Alexandra Nastu; Stelian STANCU; Andreea DUMITRACHE

Socio-economic interdependencies: a network analysis approach

Raluca CĂPLESCU; Emilia ȚIȚAN

Silver population segmentation in EU countries

Raluca CĂPLESCU; Emilia ȚIȚAN



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9:00 – 11:00 [Opening Ceremony and Plenary Session](#)

11:00 – 13:00	Parallel session 1 (click for access ZOOM) Applied spatial data analysis Chairs: Prof. Zizi GOSCHIN; Prof. Elena DRUICĂ	ID: 840 6785 3029 Passcode: 004101
11:00 – 13:00	Parallel session 2 (click for access ZOOM) Quantitative analysis in the social and business environment Chairs: Prof. Emilia Țițan; Prof. Carmen PINTILESCU	ID: 685 485 4381 Passcode: NUaP61
11:00 – 13:30	Parallel session 3 (click for access ZOOM) Demography and Applied Statistics in Social Science Chairs: Prof. Constanța Mihăescu; Prof. Laura Asandului	ID: 825 4406 2077 Passcode: 403011
11:30 – 13:30	Parallel session 4 (click for access ZOOM) Data Mining and Artificial Intelligence Chairs: Prof. Adrian COSTEA; Prof. Dumitru Iulian NASTAC	ID: 873 3011 0078 Passcode: 132018
11:30 – 13:30	Parallel session 5 (click for access ZOOM) Econophysics and Complex Systems Chairs: Prof. Claudiu HERȚELIU; Prof. Roy CERQUETI; Prof. Tudorel ANDREI	ID: 856 7245 7540 Passcode: nov2020
17:00 – 19:00	Parallel session 6 (click for access ZOOM) Young Statisticians Europe: Theoretical and Applied Quantitative Methods Chairs: Prof. Constantin MITRUȚ; Assistant Prof. Raluca CĂPLESCU; Ph.D. Fatemeh GHADERINEZHA	ID: 868 9198 4686 Passcode: 289094



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