

ISCCRO'18

The 2nd International Statistical Conference in Croatia, 10-11 May, 2018, Opatija, Croatia

Venue: Amadria Park Grand Hotel „4 opatijska cvijeta“,
Address: Viktora Cara Emina 6, HR-51410 Opatija, Croatia

ISCCRO'18 Conference Programme – Final Ver. May 06, 2018

Wednesday, May 9 2018
17:30 – 20:00 Registration at the conference desk (in front of the Room 0A)
20:00 – 22:00 Welcome Reception for the Early Comers – Cocktail with Finger Food Get-Together (FREE*) It will be served at the Holiday Platz (a terrace, with a beautiful view at the Adriatic Sea, located at the Venue Amadria Park Hotel “4 opatijska cvijeta”)
Thursday, May 10, 2018
8:00 – 8:50 Registration at the conference desk (in front of the Room 0A)
9:10 – 9:25 Opening Ceremony
9:30 – 9:50 Plenary Session – Keynote Speaker: Professor Wolfgang K. Härdle
9:50 – 10:10 Plenary Session – Keynote Speaker: Professor Amanda. L. Golbeck
10:10 – 10:30 Plenary Session – Keynote Speaker: Professor Lea Bregar
10:30 – 11:00 Coffee Break (FREE*)
11:00 – 11:20 Plenary Session – Keynote Speaker: Marko Krištof , Director General, Croatian Bureau of Statistics
11:30 – 11:40 Group Photo at the Venue Terrace
11:40 – 13:10 Special or Parallel Sessions (10 minutes per talk)
13:20 – 14:20 Light Lunch Offered for the Participants at the Venue (FREE*) It will be served in the restaurant Veranda (1 minute from the Conference Hall in the Amadria Park Hotel “4 opatijska cvijeta”, upstairs, at the First Level of the Hotel complex)
14:20 – 15:30 Special or Parallel Sessions (10 minutes per talk)
15:30 – 16:00 Coffee Break (FREE*)
16:00 – 17:00 Special or Parallel Sessions (10 minutes per talk)
<i>Free time</i>
20:00 – 23:00 Conference Gala Dinner at the Venue (FREE*) It will be served at the traditional restaurant Antica Osteria da Ugo (located 2 minutes from the Venue Conference Hall, upstairs, at the street level)
Friday, May 11, 2018
8:30 – 9:00 Registration
9:00 – 9:50 Special or Parallel Sessions (10 minutes per talk)
9:50 – 10:40 Special or Parallel Sessions (10 minutes per talk)
10:40 – 11:10 Coffee Break (FREE*)
11:10 – 12:30 Special or Parallel Sessions (10 minutes per talk)
12:30 – 13:40 Special or Parallel Sessions (10 minutes per talk)
13:40 – 14:10 Closing Ceremony
14:10 – 15:00 Light Lunch in the Box: Brunch Take-Away (FREE*) It will be served in front of the Conference Reception Desk and the Room 0A

Note: FREE means “FREE for all the ISCCRO'18 registered and invited participants: Presenters, Invited, Accompanying, Listeners, VIP Invited Professors, Students plus CSA members, Students - volunteering at the ISCCRO'18 Venue”

The ISCCRO'18 - Conference Programme

Wednesday, May 9 2018

17:30 – 20:00 Registration at the conference desk

**20:00 – 22:00 Welcome Reception for the Early Comers –
Cocktail with Finger Food Get-Together at the Terrace**

(FREE*) It will be served at the **Holiday Platz** (a terrace, with a beautiful view at the Adriatic Se, located at the Venue Amadria Park Hotel “4 opatijska cvijeta”)

Thursday, May 10, 2018

8:00 – 8:50 Registration at the conference desk

9:10 – 9:25 Opening Ceremony, (Room: 0A)

Opening Programme Coordinator: dr. sc. Anita Čeh Časni

The ISCCRO'18 Program Chair: **prof.dr.sc. Ksenija Dumičić** – President, Croatian Statistical Association, Univ. of Zagreb, Fac. of Economics and Business

The ISCCRO'18 General Chair: **Mr Marko Krištof** - Director General, Croatian Bureau of Statistics

Addressing of the patron, national statistical associations representatives, sponsors and supporters.

9:30 – 9:50 Plenary Session:

Keynote Speaker: Professor Wolfgang K. Härdle, PhD

Humboldt University of Berlin, School of Business and Economics, Berlin, Germany

PLENARY SPEECH: “DS2: Data Science & Digital Society”

(Room: 0A)

9:50 – 10:10 Plenary Session:

Keynote Speaker: Professor Amanda L. Golbeck, PhD

Univ. of Arkansas for Medical Sciences, Fay W. Boozman College of Public Health, Little Rock, Arkansas, USA

PLENARY SPEECH: “Ingram Olkin: A Vocal Advocate for Women in Statistics”

(Room: 0A)

10:10 – 10:30 Plenary Session:

Keynote Speaker: Professor Lea Bregar, PhD

University of Ljubljana, Faculty of Economics, Ljubljana, Slovenia

PLENARY SPEECH: “Modernization of Official Statistics: Implications for Users”

(Room: 0A)

10:30 – 11:00 Coffee Break

Offered at the Venue, For all the conference participants

11:00 – 11:20 Plenary Session:

Keynote speaker: Marko Krištof

Director General, Croatian Bureau of Statistics, Zagreb, Croatia

PLENARY SPEECH: “How European Union legislation changed official statistics? – development of statistical legislation and its influence on statistical systems”

(Room: 0A)

11:30 – 11:40 Group Photo at the Venue Terrace

11:40 – 13:10 Thursday - Parallel Sessions:

Room: 0A

Session 1: Special Session Topic: Economic and Social Effects of Demographic Trends

Organizers: Ana Štambuk

Chairs: Ana Štambuk, Vesna Čančer

Ana Pavković, Nikolina Pejović, Petra Palić:

"A revisit to the determinants of immigration in the European Union: evidence from count panel data models"

Ana Štambuk, Goran Karanović, Alen Host:

"Business and economics graduate competencies: employers' perceptions on importance and performance"

Dušan Mundar

"Sensitivity analysis of population structure dynamics: the case of Croatia"

Samo Drobne, Urška Drešček:

"Analyses of the impact of internal migration on population redistribution in Slovenia"

Maja Rožman, Sonja Treven, Vesna Čančer:

"The impact of stress of older employees on their work engagement"

Martina Pezer:

"Maternity support policies: a cluster analysis of 22 European Union countries"

Ivan Čipin, Mario Brnić:

"Demographic and socio-economic profile of the oldest-old in Croatia"

Šime Smolić, Lucia Ukalović:

"Patterns of health across age groups of the population 50+ in Croatia"

Damir Plesac, Lidija Gligorova, Dubravka Rogić-Hadžalić:

"Census quality control: performance, lessons learned and directions for the next Post Enumeration Survey in Croatia"

Adela Delalić, Rabija Somun Kapetanović, Emina Resić:

"Analysis of poverty determinants in Bosnia and Herzegovina"

Room: 0B

Session 2: Special Session Topic: Quantitative Analysis for Faster Development of the South East European Countries

Organizers: Blagica Novkowska

Chairs: Blagica Novkowska, Zagorka Lozanov-Crvenković

Andrea Andrejević Panić, Zagorka Lozanov-Crvenković:

"Analysis of interrelation between financial and performance indicators in higher education in Central East Europe"

Anita Čeh Časni:

"The housing wealth effect before and after the 2008 financial crisis: PVAR approach"

Biljana Tashevska, Marija Trpkova-Nestorovska, Borce Trenovski:

"Estimating a fiscal reaction function for the South East European countries"

Éva Laczka:

"Role of economic statistics in the 21st century"

Fahir Kanlić, Ademir Abdić:

"The short-term turnover estimates in Bosnia and Herzegovina based on the Value Added Tax data"

Hrvoje Jošić, Berislav Žmuk, Ksenija Dumičić:

"Measuring of export market concentration for largest European regional economic integrations: various concentration measures performance"

Martin Noveski:

"Economic effects of the budget deficit in the Republic of Macedonia: analysis from the view point of its European Union membership aspirations"

Sasho Kjosev, Blagica Novkowska:

"Developing Social Accounting Matrix methodology for regional analysis of the SEE countries"

13:20 – 14:20 Light Lunch offered at the Venue for all the registered ISCCRO'18 Participants

(FREE*) It will be served in the restaurant [Veranda](#)

(1 minute from the Conference Hall in the Amadria Park Hotel "4 opatijska cvijeta", upstairs, at the First Level of the Hotel complex)

14:20 – 15:30 Thursday - Parallel Sessions:

<p>Room: 0A Session 3: <u>Special Session Topic:</u> Young Statisticians in Action Organizers: Anamarija Jazbec, Mirta Benšić Chairs: Anamarija Jazbec, Mirta Benšić</p>	<p>Room: 0B Session 4: Regular Topic - Social, teaching and communicating statistics Chairs: Jasminka Dobša, Nataša Kurnoga, Péter Kovács</p>
<p>Ana Bilandžić: <i>"Modelling growth of small and medium sized enterprises in Croatia using panel analysis"</i></p> <p>Diana Ivett Fűrész: <i>"Network of transfers in European football"</i></p> <p>Doris Schadler, Ernst Stadlober: <i>"Model based methods for fault diagnostics at engine test beds"</i></p> <p>Ivan Papić: <i>"Simulation study of parameter estimators for Fisher-Snedecor diffusion"</i></p> <p>Marijana Zunic, Krunoslav Teslak: <i>"Private forest owners conceptualisation of forest management: a Multiple Indicators and Multiple Causes (MIMIC) model"</i></p> <p>Marta Cota, Ante Šterc: <i>"Multivariate Gaussian data clustering and its application in macroeconomics"</i></p> <p>Una Radojičić: <i>"Application of Adaptive Annealing method to generalized incremental algorithm"</i></p> <p>Milica Maricic, Milica Bulajic, Zoran Radojicic, Veljko Jeremic: <i>"Clustering approach to the Composite I-distance indicator methodology: the case of the Doing Business Index"</i></p>	<p>Aleš Toman: <i>"Improving statistical and financial literacy through a high school competition – experience from Slovenia"</i></p> <p>Craig A. Molgaard: <i>"Factors in the diffusion of Islamic mathematics in the Mediterranean"</i></p> <p>Jasminka Dobša, Henk A. L. Kiers: <i>"Classification of textual documents represented in lower dimensional space by supervised Reduced k-means method"</i></p> <p>Mirko Savić, Zorana Lužanin, Milena Kresoja: <i>"Higher educational policy based on statistical analysis"</i></p> <p>Péter Kovács, Eva Kuruczleki, Klara Kazar: <i>"Let the real world in statistics classes"</i></p> <p>Daria Maltseva: <i>"Network researchers in Russia: collaboration and scientific citation"</i></p>

15:30 – 16:00 Coffee Break

Offered at the Venue, For all the conference participants

16:00 – 17:00 Thursday - Parallel Sessions:

<p>Room: 0A Session 5: <u>Special Session Topic</u>: Econometric Modelling for Fiscal Policy Making in European Union Countries Organizer: Irena Palić Chairs: Irena Palić, Sabina Hodžić</p> <p>Tea Poklepović, Josip Arnerić, Zdravka Aljinović: <i>“Non-structural approach to implied moments extraction”</i></p> <p>Andrej Srakar: <i>“Symbolic input-output analysis: an application to the Eurostat data”</i></p> <p>Antonija Buljan, Hrvoje Šimović, Milan Deskar-Škrbić: <i>“Public expenditure efficiency in CESEE region”</i></p> <p>Irena Palić, Sabina Hodžić, Ksenija Dumičić: <i>“The impact of selected labour market indicators on personal income taxation in Federation of Bosnia and Herzegovina: evidence from error correction model”</i></p> <p>Marko Seneković, Jani Bekő, Alenka Kavkler: <i>“Determinants of the size of fiscal multipliers: new empirical evidence for EU countries”</i></p> <p>Nataša Kurnoga, Nika Šimurina, Jurica Šimurina: <i>“Income inequalities in the European Union: a cluster analysis”</i></p>	<p>Room: 0B Session 6: Regular Topic - Survey sampling research Chairs: Renata Benda-Prokeinova, Berislav Žmuk</p> <p>Berislav Žmuk: <i>“Impact of the number of shown questions on response rates in business web surveys”</i></p> <p>Marija Karašičević, Jelena Suzić: <i>“Sample coordination of statistical business surveys in Serbia”</i></p> <p>Melinda Tokai: <i>“Sampling frames construction using the Hidiroglou algorithm”</i></p> <p>Renata Benda-Prokeinova, Martina Hanova, Johana Paluchova: <i>“Using the discreet choice model in the questionnaire”</i></p> <p>Rudi Seljak, Lea Bregar, Sanda Colić, Maja Dozet: <i>“Probabilistic sampling strategy as a means for improving quality of price indexes”</i></p> <p>Anamarija Jazbec, Svjetlana Kolić-Vehovec, Tamara Sladoljev-Agejev: <i>“Analyzing different regression methods: the case of predicting text comprehension”</i></p>
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20:00-22:30 Conference ISCCRO'18 Gala Dinner
(FREE*)

Gala Dinner It will be served at the traditional restaurant [*Antica Osteria da Ugo*](#)
(located 2 minutes from the Venue Conference Hall, to the left upstairs, at the street level)

-For the conference participants (invited, presenters and accompanying persons) and for the Conference guests with an Invitation sent by the Organizer-

Friday, May 11, 2018

8:30 – 9:00 Registration at the conference desk	
9:00 – 9:50 Friday - Parallel Sessions:	
<p>Room: 0A Session 7: Special Session Topic: Recent Advances in Robust Statistics for High-dimensional Settings and Techniques for Handling Large Spatial Data Organizer: Taps Maiti and Asuman S. Turkmen Chairs: Anita Lee-Post, Igor Britchenko</p> <p>Anita Lee-Post: <i>"Clustering of high dimensional and unbalanced data"</i></p> <p>David Bolin: <i>"The SPDE approach for Gaussian random fields with general smoothness"</i></p> <p>Igor Britchenko, Maksym Bezpartochnyi: <i>"Optimization of commodity stocks the enterprise by means of statistical methods"</i></p> <p>Gary Sharp, Carmen Stindt, Michelle Mey, Willem Daniel Schutte: <i>"Goodness-of-fit compilation in structural equation modelling"</i></p>	<p>Room: 0B Session 8: Regular Topic – New advances in health, medical and sport statistics Chairs: Janez Stare, Anita Čeh Časni</p> <p>Dániel Kehl, Gallusz Abaliget, András Gyimesi: <i>"Automated data collection of sports data with R"</i></p> <p>Gàbor Rappai, Diána Ivett Fűrész: <i>"Special demand curves in the sports economy"</i></p> <p>Gloria Gheno: <i>"A new link function for the prediction of binary variables"</i></p> <p>Janez Stare: <i>"On generalizing the c index for survival data"</i></p> <p>Matija Klarić: <i>"Diffusion processes for modeling brain parameters"</i></p>
9:50 – 10:40 Friday - Parallel Sessions:	
<p>Room: 0A Session 9: Special Session Topic: Spreading out Official Statistics in the Digital World Organizer: Maja Pekeč Chairs: Maja Pekeč</p> <p>Alen Mrgud, Ivona Bulić: <i>"Dissemination of statistical data via website as the main channel of online communication"</i></p> <p>Darko Šiško, Vesna Polančec, Sanja Jerković: <i>"Challenges in organization of city statistics – case study Zagreb"</i></p> <p>Mojca Bavdaž, Irena Bolko: <i>"Messages in official statistics visualizations"</i></p> <p>Maja Pekeč, Tihana Sabolek: <i>"Can National Statistical Institutes solely initiate the change in the area of statistical literacy?"</i></p>	<p>Room: 0B Session 10: Regular Topic - Data science and computing I Chairs: Marijana Zekić-Sušac, Želimir Kurtanjek</p> <p>Želimir Kurtanjek: <i>"Big data analytics and synergism"</i></p> <p>Marijana Zekić-Sušac, Rudolf Scitovski, Adela Has: <i>"Cluster analysis and artificial neural networks in predicting energy efficiency of public buildings as a cost-saving approach"</i></p> <p>Markus Loecher: <i>"Parallelized boosting machine"</i></p> <p>Niels Wesselhöfft, Wolfgang K. Härdle: <i>"Estimating low-frequency risk measures by high-frequency data"</i></p> <p>Mirjana Pejić Bach, Jovana Zoroja, Vanja Šimičević: <i>"Digital readiness for new industrial development: European leaders and followers"</i></p>
10:40 – 11:10 Coffee Break <i>Offered at the Venue, For all the conference participants</i>	

11:10 – 12:30 Friday - Parallel Sessions:

Room: 0A Session 11: Regular Topic - Econometrics and economics applications I Chairs: Davor Zoričić, Snježana Pivac	Room: 0B Session 12: Special Session Topic: Modernizing Official Statistics Chairs: Davor Galinec, Irena Žaucer
<p>Darja Boršič, Jani Bekő: <i>"A note about the validity of purchasing power parity in selected Asian economies"</i></p> <p>Marija Vukovic, Snjezana Pivac, Duje Kundid: <i>"Application of the technology acceptance model in the field of Internet banking acceptance in the City of Split"</i></p> <p>Denis Dolinar, Tihana Škrinjarić, Davor Zoričić: <i>"Application of Luenberger shortage function on the Zagreb Stock Exchange: analysis of efficient market portfolio"</i></p> <p>Denis Dolinar, Ena Pecina, Saša Jakšić: <i>"Applied panel data analysis in the field of corporate finance – Analysis of stock returns and capital structure of Croatian companies"</i></p> <p>Ewa Anna Witkowska: <i>"Detecting earnings management with discretionary accruals"</i></p> <p>Gloria Gheno: <i>"A new statistical method to choose the best innovative initiatives"</i></p> <p>Vesna Bucevska, Goran Mojanoski: <i>"Identifying the determinants that cause the value movements of currencies Denar, Kuna and Dinar"</i></p> <p>Ksenija Dumičić, Ivana Đundek Kokotec, Jelena Gusić: <i>"Business performance and ownership types: evidence from Croatia"</i></p>	<p>Davor Galinec, Jadranka Vuglar, Dario Cvrtila: <i>"Residential property price index in Croatia: from experimental to official statistics"</i></p> <p>Irena Žaucer, Helena Puc: <i>"Impact of land tenure on the participation in factor income in agriculture of Slovenia"</i></p> <p>Predrag Bejaković, Slavko Bezeredi: <i>"Determinants of tax morale in Croatia: an ordered logit model"</i></p> <p>Marija Gojević: <i>"Importance of the non-financial sector accounts in the macroeconomic statistics"</i></p> <p>Milenka Crnogorac: <i>"Deficiencies of the concept of the gross domestic product calculation"</i></p> <p>Ivana Levačić: <i>"A new approach for dealing with multivariate stratification in agricultural surveys in Croatian Bureau of Statistics"</i></p> <p>Mario Gavrić: <i>"Experimental statistics on income inequality and poverty indicators"</i></p>

12:30 – 13:40 Friday - Parallel Sessions:

<p>Room: 0A Session 13: Regular Topic - Econometrics and economics applications II Chairs: Tea Baldigara, Emilija Nikolić-Đorić, Nataša Kurnoga</p>	<p>Room: 0B Session 14: Regular Topic - Data science and computing II Chairs: Mirta Benšić, Ivana Štajner-Papuga</p>
<p>Zagorka Lozanov-Crvenković , Emilija Nikolić-Đorić : <i>“Measures of complexity of stock returns”</i></p> <p>Tihana Škrinjarić, Boško Šego: <i>“Exploring herding investment behaviour on Zagreb Stock Exchange”</i></p> <p>Denis Dolinar, Davor Zoričić, Zrinka Lovretin Golubić: <i>“Application of semi-deviation as a proxy for the expected return estimation in the Croatian equity market”</i></p> <p>Enes Đozović: <i>“Industry level real effective exchange rates: evidence from Croatia and other European Union countries”</i></p> <p>Almira Arnaut-Berilo, Tea Baldigara: <i>“Applying linear programming in optimizing food consumption: a comparative analysis of Bosnia & Herzegovina and Croatia”</i></p> <p>Ivan Sever, Miroslav Verbić, Zrinka Marušić: <i>“Modelling heterogeneity in trail users’ perception of crowding in a peri-urban nature park”</i></p> <p>Ana Andabaka, Martina Basarac Sertić, Martina Harc: <i>“Eco-innovation and economic growth in the European Union: a panel data analysis”</i></p> <p>Ivana Vidaković Peruško, Katarina Kovač, Miroslav Jošić: <i>“Integration in global value chains: case of Croatia”</i></p> <p>Zrinka Marušić, Ivan Sever: <i>“A contingent valuation of public goods in tourism: estimating the preservation value of bottlenose dolphins in the Cres-Lošinj archipelago”</i></p>	<p>Ana Slavec, Barbara Rovere, Uwe Kies, Andreas Kleinschmit: <i>“Exploring connections between researchers and ideas in the European Hardwoods Innovation Alliance using two-mode network analysis”</i></p> <p>Janez Žerovnik, Darja Rupnik Poklukar: <i>“On computation of quartiles – the differences among methods do matter!”</i></p> <p>Maja Mamula, Kristina Duvnjak: <i>“Artificial neural networks implementation potentials – a literature review”</i></p> <p>Mirta Benšić, Kristian Sabo, Safet Hamedović: <i>“The width of a uniform distribution: estimation in additive error models”</i></p> <p>Stanislav Moiseev, Daria Maltseva: <i>“Reconstruction of the research field development: complementarity of the traditional and network approaches”</i></p> <p>Zagorka Lozanov-Crvenković, Gabrijela Grujić, Ivana Štajner-Papuga: <i>“A note on some statistical notions with fuzzy integration”</i></p>

13:40 – 14:10 Closing Ceremony

14:10 – 15:00 Light Lunch in the Box

(FREE*) Lunch will be served” in front of the Conference Hall for all the conference participants previously registered and participants of the Closing Ceremony.

**The presentations should last no more than 10-12 minutes in total.
All the chairs are kindly asked to follow this instruction!**

The ISCCRO’18 Organizing Committee