

Bojana (Elizabetha) Milošević

Date of birth: February 15th 1989

Place of birth: Pančevo

Age: 36

Citizenship: Serbian

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Education

- 2012–2016 **Ph.D Degree**, *University of Belgrade – Faculty of Mathematics*, Mathematics.
GPA - 10.00/10.00 | Thesis title: *Asymptotic properties of non-parametric tests based on U-statistics and V-statistics with non-degenerate and weakly degenerate kernel* | Supervisor: Professor Pavle Mladenović
- 2011–2012 **Master's Degree**, *University of Belgrade – Faculty of Mathematics*, Statistic, Financial and Actuarial Mathematics.
GPA - 10.00/10.00 | Thesis title: *Levy processes and the problem of first reaching certain level*
- 2007–2011 **Bachelor's Degree**, *University of Belgrade – Faculty of Mathematics*, Statistic, Financial and Actuarial Mathematics.
GPA - 10.00/10.00
- 2003–2007 **High School Degree**, *Mathematical Grammar School - school for talented students*, .
GPA - 5.00/5.00, CERTIFICATE OF EXCELLENCE, "Vuk Karadžić" | Graduation thesis title: *Combinatorics and some applications*

Research interests

nonparametric statistics, model specification tests, asymptotic efficiency, reliability theory, statistical depth, missing data issues, local differential privacy

Publications

- **47 publications in SCI (45) and ESCI (2) indexed journals**
- **presented results in international or regional conferences: more than 80: 26 invited talks** at international conferences
- 2 University text books
- 1 R package
- 1 published book review

Selected publications

- [M22] D. Aleksić, B. Milošević, To impute or not? Testing multivariate normality on incomplete dataset: revisiting the BHEP test. *Journal of Applied Statistics* (2024): 1-18. **IF2023=1.2**
- [M21] D. Aleksić, M. Cuparić, B. Milošević Non-degenerate U-statistics for data missing completely at random with application to testing independence, *Stat* (2023), 12(1), e634, IF2021=1.7
- [M23] Ž. Lukić, B. Milošević, A novel two-sample test within the space of symmetric positive definite matrix distributions and its application in finance, *Annals of the Institute of Statistical Mathematics* (2024): doi: 10.1007/s10463-024-00902-z, IF2020=1.00
- [M22] M. Cuparić, B. Milošević To impute or to adapt? Model specification tests' perspective. *Statistical Papers* (2023), 1-19 doi:10.1007/s00362-023-01421-4 IF2021=1.523

- [M21a] M. Cuparić, B. Milošević, M. Obradović New consistent exponentiality tests based on V-empirical Laplace transforms with comparison of efficiencies, *Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas*; 116, 42 2022. IF2020= 2.169
- [M21] M. Cuparić, B. Milošević, New characterization based exponentiality tests for randomly censored data, *TEST*, 31(2): 461-487, 2022. doi:<https://doi.org/10.1007/s11749-021-00787-7> IF2020=2.345
- [M21] S.G. Meintanis, B. Milošević, and M. Obradović. Goodness-of-fit tests in conditional duration models. *Statistical Papers*, 61(1):123-140, 2020. IF2019=1.433
- [M21] B. Milošević and M. Obradović. Some characterizations of the exponential distribution based on order statistics. *Applicable Analysis and Discrete Mathematics*, 10(2):394-407, 2016. IF2014=0.860
- [M22] B. Milošević, Asymptotic Efficiency of New Exponentiality Tests Based on a Characterization, *Metrika* 79(2):221–236,2016.IF2017=0.948

Invited talks

- [M32] Homogeneity testing in the presence of missing data, GOFCP, August 29-31, 2025, Prague, Czechia (coauthor D. Aleksić)
- [M32] Energy-distance-based two-sample testing in the presence of incomplete data, HiTEc & CoDES, July 8-9, 2025, Limassol, Cyprus (coauthor D. Aleksić)
- [M32] Goodness-of-fit testing in incomplete data settings, International Applied Statistics Congress, May 14-16, 2025, Ankara, Turkeye
- [M32] From independence tests to variable selection problems: Moving beyond Euclidean settings, CMStatistics, December 14-16,2024 London, UK (coauthor J. Radojević)
- [M32] Independence testing and variable selection problems: nonEuclidean perspective, IDWSDS, October 8, 2024, Virtual Conference
Understanding Spherical and Hyperspherical Data: From Association Measurement to Variable Selection, Scientific Diaspora Days, October 18-19, Podgorica, Montenegro
- [M32] On the application of kernel-based independence tests to variable selection problems, COMPSTAT, August 27-30, 2024, Giessen, Germany (coauthor J. Radojević)
- [M32] Recent directions in statistical tests for randomly censored data, Bernoulli-ims 11th World Congress in Probability and Statistics, August 12-15,2024, Bochum, Germany (*i.t.in OCS*, coauthor M. Cuparić)
- [M32] On the goodness-of-fit tests for censored data with cure fraction, May 16-19, 2024, Kozani, Greece (coauthor M. Cuparić)
- [M32] Testing independence for spherical and hyperspherical data: Kernel-based approach, HiTEc & CoDES, March 23-24 2024 Limassol, Cyprus (coauthors M. Cuparić, B. Ebner)
- [M32] On the novel two-sample tests and their application for change point analysis, CMStatistics 2023, December 16-18 2023 Berlin, Germany(coauthor Ž. Lukić)
- [M32] On the nonparametric change-point detection for some complex data types, StatMod2023, September 29-30 2023 Bucharest, Romania
- [M32] Change point analysis – the empirical Hankel transform approach GOFCP August 25-29 2022, Kruger Park, South Africa (coauthor Ž. Lukić)
- [M32] Nonparametric tests in incomplete data settings, The conference of the Romanian Society for Probability and Statistics April 21-22 2023, Bucharest, Romania
- [M32] Testing for the equality of matrix distributions in the space of positive semi-definite random matrices, The Complex Data in Econometrics and Statistics Workshop, April 2-4 2023 Limassol, Cyprus (coauthor Ž. Lukić)

- [M32] Testing multivariate normality in the presence of missing data, CMStatistics 2022 , December 17-19 2022, London, England (coauthor D. Aleksić)
- [M32] Independence tests for randomly censored data: novel proposal and the review of recent developments, GOFCP September 2-4 2022, Rennes, France (coauthor M. Cuparić)
- [M32] On the IPCW approach for testing independence, ISNPS June 20-25 2022, Paphos, Cyprus (coauthor M. Cuparić)
- [M32] On testing independence of count data, CMStatistics 2021 (virtual), December 18-20 2021, London, England (coauthor D. Bucalo Jelić)
- [M32] Goodness-of-fit tests for censored data: a look at the past, present and future research, StatMod2021 (virtual), December 3-4 2021 Rouen, Rouen, France (coauthor M. Cuparić)
- [M32] On Bahadur efficiency in goodness of fit testing: A Review of recent results and challenges, International Workshop of Greek Statistical Institute, September 2021.
- [M32] New distribution-free goodness-of-fit tests for the Pareto distribution, CMStatistics 2020 (virtual), December 19-21 2020, London, England (coauthors J. Allison, M. Obradović L. Raubenheimer, M.Smuts)
- [M32] New consistent characterization based goodness-of-fit tests, European Meeting of Statisticians, July 22-26 2019, Palermo, Italy (coauthors M. Cuparić, M. Obradović,)
- [M32] New consistent goodness-of-fit tests based on V-empirical Laplace transforms, CMStatistics 2018 December 14-16 2018, Pisa, Italy (coauthors M. Cuparić, M. Obradović)
- [M31] Some recent characterization based goodness of fit tests, 20th European Young Statistician Meeting, August 14-18, 2017, Uppsala, Sweden
- [M32] Characterizations of symmetry via central order statistics and the applications to goodness-of-fit testing, CMStatistics 2016, December 9-11, Seville, Spain (2016), coauthor M. Obradović

University textbooks (in Serbian)

Fundamentals of Statistics, Faculty of Mathematics, 2021. ISBN 978-86-7589-149-9

Elements of Financial Mathematics. (coauthor prof. dr Slobodanka Janković) ISBN 978-86-7589-117-8 Faculty of Mathematics, 2017.

Employment history

2022– **Associate professor**, *University of Belgrade – Faculty of Mathematics*, **Chair of Department of Probability and Statistics** (from October 2022), **Corporate Affairs Coordinator** (from October 2022).

2016–2022 **Assistant professor**, *University of Belgrade – Faculty of Mathematics*.

2014–2016 **Teaching assistant**, *University of Belgrade – Faculty of Mathematics*.

2011–2013 **Teaching associate**, *University of Belgrade – Faculty of Mathematics*.

2011-2018 **Teacher**, *Mathematical Grammar School - school for talented students*.

Projects

2023-2024 Bilateral scientific project between Serbia and Germany: *Modeling Complex Data - Selection and Specification* Role: principal investigator of the Serbian team (principal investigator of the German team is dr Bruno Ebner, KIT)

2022-present COST ACTION: *Text, functional and other high-dimensional data in econometrics: New models, methods, applications- HiTEc*[21163] Role: researcher, MC member

2021-2022 Project funded by Ministry of Education, Science and Technological Development: *Improvement of teaching in the field of statistical data analysis* Role: leader

2013-2019 Project funded by Ministry of Education, Science and Technological Development: *Geometry, education and visualization with applications* [174012] Role: researcher.

International collaboration and mobility

Research visits

- August 2024 Karlsruhe Institute of Technology
- December 2023 Karlsruhe Institute of Technology
- June 2023 Karlsruhe Institute of Technology
- June 2023 University of Rouen, Mathematics Laboratory

Invited seminars and courses

- June 2025 U-statistics in the presence of missing data with application to model specification testing, University of Wuhan
- June 2025 Missing data problems: a model specification testing perspective, University of Copenhagen
- April 2025 Model specification testing in incomplete data settings, University of Ioannina (ERASMUS+ teaching staff exchange)
- August 2024 Seminar in Computational Finance: Bond valuation, Petnica
- 31 August – 2 September, 2023 The missing data problem(s) and solutions, [StatCon 2023 Workshop, Cape Town, South Africa](#)
- July 2023 [The Big DATA Theory – Multiverse of Science](#): Introduction to Statistical Reasoning
- November 2022 Some characterization-based goodness-of-fit tests: journey through complete data and randomly censored data cases, University of Karlsruhe
- May 2022 University of Ioannina (ERASMUS+ teaching staff exchange)
- November 19-December 9 2021 Characterization based goodness of fit tests – construction and properties, [StatCon 2021 On-line Workshop](#)
- June 2021 Introduction to statistical inference, On-line course (as a part of ADA project)
- November 9-December 2 2020 Bahadur efficiencies of goodness-of-fit tests, [StatCon 2020 On-line Workshop](#)
- November 2019 Short course for graduate students (one week) "Characterization based goodness of fit tests and their asymptotic properties" University of Seville, Spain
- July 2019 Belgrade Summer School: [Introduction to R](#)
- April 2017 Invited talk "Characterizations of probability distributions, goodness of fit tests and Bahadur asymptotic efficiency" presented at Mathematical Colloquium, University of Osijek, Croatia

Summer/Winter schools

- 2018 CRoNoS Winter Course on Time Series, Pisa 2018
- 2013 Mathematical Models in Economics and Computer Implementation, Perm 2013
- 2012 International Summer Academy 2012 on Advanced Stochastic Methods to Model Risk, Ulm
- 2011 Summer School of Financial Mathematics, Ljubljana

Chosen Awards

- 2025 Best presentation award at HiTEc&CoDES

- 2025 ISI Elected member
- 2022 Veselin Lučić award for the best scientific achievement in 2021
- 2021 Participation in Heidelberg Laureate Forum 2021
- 2008,2009, 2010, 2011 Awards for the best students of the Faculty of Mathematics, University of Belgrade
- 2012 **The best student of the Faculty of Mathematics Award** given by the University
- 2010-2012 "Dositeja" scholarship of Fund for Young Talents Award
- 2007 Best graduation thesis in Mathematics at Mathematical Highschool
- 2015 **Best poster award:** B. Milošević, M. Obradović, Characterization based symmetry tests and their asymptotic efficiencies, Analytical Methods in Statistics, November 10th-13th. 2015, Prague, Czechia

Reviewing activity in scientific journals

- 2014–2025 Reviewed papers in the following journals: Statistics; Journal of Statistical Computation and Simulation; Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas; Computational Statistics & Data Analysis; Annals of the Institute of Statistical Mathematics; Iranian Journal of Science and Technology, Transactions A: Science, Mathematical Communications; Filomat; Journal of Statistical Theory and Applications; Open Journal of Mathematical Sciences; Journal of Statistics Applications & Probability; Mathematical Communications; Statistics and Probability letters; Teaching of Mathematics; Mathematica Slovaca; Hacettepe Journal of Mathematics and Statistics; Mathematics; TEST; Symmetry; Journal of Multivariate Statistics; Journal of Computational Mathematics and Data Science, CMES-Computer Modeling in Engineering & Sciences, Journal of Probability and Statistics, Methods in Ecology and Evolution...
- 2016– Writing reviews for Mathematical Reviews

Researcher databases

ORCID:[0000-0001-8243-9794](#) | ScopusID: ID: 56162427700 | Google scholar: [Bojana Milošević](#)

Supervision of final theses and doctoral advising:

Master theses

List of defended theses is available at [LINK](#)

- 2017-2025 defended 43 theses
- ongoing 6 theses

Doctoral theses advisor

- 2020-2025 Žikica Lukić: STATISTICAL TESTS BASED ON LAPLACE AND HANKEL TRANSFORMS, AND THEIR APPLICATION IN CHANGE POINT DETECTION
- 2017-2021 Marija Cuparić: GOODNESS-OF-FIT TESTS BASED ON L^2 AND L^∞ DISTANCES AND THEIR ASYMPTOTIC EFFICIENCY

PhD advisor

7 students

Member of Jury for doctoral thesis

- September 2024 Bojana Todić, University of Belgrade

January 2024 Lazar Čolić, University of Belgrade
 October 2023 Adrian Fischer, Université Libre Bruxelles, Belgium
 November 2023 Thomas Gkelsinis, University of Rouen - Normandy, France
 June 2023 Andjela Mijanović, University of Montenegro, Montenegro
 July 2023 Ana Merkle, University of Belgrade
 June 2020 Zoran Vidović, University of Belgrade
 July 2021 Marija Cuparić, University of Belgrade

Other academic activities

Organizing scientific conferences

- 2025 Member of the organizing committee of 3rd Meeting of Mathematicians of Serbia and Montenegro, Petrovac, Montenegro
- 2024 Chair of scientific and organizing committees, StatMod 2024, Belgrade
- 2024 Member of scientific programme committee Serbian Mathematical Congress 2024
- 2024 Member of scientific programme Committee of HiTEc & CoDES 2024
- 2023 Member of organizing committee of 13th Symposium "Mathematics and Applications" (organized by Faculty of Mathematics, University of Belgrade)
- 2023 Member of the organizing committee of StatMod 2023, Bucharest, September 2023, Romania
- 2023 Member of the organizing committee of 2nd Meeting of Mathematicians of Serbia and Montenegro, Belgrade, January 2023, Serbia
- 2023 Member of scientific committee Workshop on Complex Data in Econometrics and Statistics, Cyprus
- 2022 Member of organizing committee of 12th Symposium "Mathematics and Applications" (organized by Faculty of Mathematics, University of Belgrade)
- 2022 Member of scientific program committee organizer of CMStatistics 2022
- 2021 Member of scientific program committee of 11th Symposium "Mathematics and Applications" (organized by Faculty of Mathematics, University of Belgrade)
- 2021 Session *Model specification tests* organizer at CMStatistics 2021
- 2021 The member of the scientific committee of the 22nd European Young Statisticians Meeting, Athens, Greece
- 2021 The member of the scientific committee of Symposium the 11th Symposium "Mathematics and Applications"
- 2020 Session *Model specification tests* organizer at CMStatistics 2020
- 2019 **Chair** of the organizing and the member of the scientific committee of the 21st European Young Statisticians Meeting, Belgrade, Serbia
- 2019 Member of the organizing committee of 1st Meeting of Mathematicians of Serbia and Montenegro, Budva, October 2019, Montenegro

Editorial activities

- 2025- Associate Editor of *Mathematical Communications*
- 2024- Associate Editor of *Statistics & Probability letters*
- 2024- Associate Editor of *Journal of Applied Statistics*
- 2024- Associate Editor of *Tokova osiguranja: INSURANCE TRENDS JOURNAL*

- 2024- Co-editor with Vlas Stefan Barbu *Statistical Methods and Applications (STATMOD)- Book of Abstracts*, Faculty of Mathematics, Belgrade, ISBN: 978-86-7589-194-9
- 2023- Editor of The Bernoulli News
- 2021-2023 Editor of The Bernoulli Society Bulletin e-Briefs
- 2019 Co-editor with M. Obradović *21st European Young Statisticians Meeting– Proceedings*, Faculty of Mathematics, Belgrade, ISBN: 978-86-7589-137-6
- 2019 Co-editor with M. Obradović *21st European Young Statisticians Meeting- Book of Abstracts*, Faculty of Mathematics, Belgrade, ISBN: 978-86-7589-135-2

Project reviewing

- 2023 Natural Sciences and Engineering Research Council of Canada

Membership

- 2025- International Statistical Institute-elected member
- 2022-present International Association for Statistical Computing (**member of Board of Directors**)
- 2022-present Serbian Mathematical Society)
- 2021- AlumNode: Alumna of Heidelberg Laureate Forum
- 2020-present CMStatistics working group
- 2019-present American Mathematical Society
- 2018-present Bernoulli Society
- 2018-present European Women in Mathematics
- 2018- WORLD.MINDS community

Popular talks

- November 2023 Artificial Intelligence in Insurance Industry, 7th Days of Serbian Insurers
- October 2022 *From idea to scientific paper*, Student conference AFTERMATH
- October 2021 *On missing data issues*, Student conference AFTERMATH
- 2021 TV series (RTS,in Serbian) "[New Serbian minds](#)" dedicated to missing data issues, with presentation of my research group
- 2013 "The statistics remain on the youth" (2nd cycle of lectures - Statistics all around us)

Other academic services

- 2025 member of the undergraduate admission committee
- 2025 reviewer for the textbook "Introduction to the mathematics of insurance" (by Jelena Jocković and Marija Cuparić, in Serbian, published by Faculty of Mathematics)
- 2024 member of the supervisory committee of the student conference MATFusion
- 2024-present member of the Academic Council of Sciences and Mathematics of University of Belgrade
- 2023-present member of the Council of Multidisciplinary Studies of University of Belgrade
- 2022-present organization of Seminar of the Department of Probability and Statistics
- 2022-present member of the entrance exam committee at Faculty of Mathematics, University of Belgrade
- 2017-2025 member, (Vice-president until 2021) of the Faculty Council

Skills and other facts

Programming skills: R, C++

Foreign languages: English, Russian

2023 English as a Medium of Instruction (EMI) certificate
2019,2021, Member of Jury of Republic competition of High School student's scientific work - mathematics
2022
2019 Academic coordinator of ERASMUS exchange with University of Ioannina
2014,2015 Team leader at Kamma Challenge-International high school competition, Perm
2004-2006 Petnica Science Center: Physics
Primary Music School: Piano