

Bojana (Elizabetha) Milošević

Date of birth: February 15th 1989
Place of birth: Pančevo
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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

- **37 publications in SCI (35) and ESCI indexed journals**
- **participation in international or regional conferences: 67, 14 invited talks** at international conferences
- 2 University text books
- 1 R package

Selected publications

- [M21] D. Aleksić, M. Cuparić, B. Milošević Non-degenerate U-statistics for data missing completely at random with application to testing independence, accepted for publication in *Stat* (2023), [M21], IF2021=1.7
- [M21] Ž. Lukić, B. Milošević, Characterization-based approach for construction of goodness-of-fit test for Lévy distribution. *Statistics* (2023), 1-30, doi: 10.1080/02331888.2023.2238236, IF2021=2.346
- [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
- [M22] B. Ivanović, B. Milošević, and M. Obradović. Comparison of symmetry tests against some skew-symmetric alternatives in iid and non-iid setting. *Computational Statistics & Data Analysis*: 106991, 2020. IF2018=1.323
- [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
- [M21] M. Jovanović, B. Milošević, Ya. Yu. Nikitin, M. Obradović, and K. Yu. Volkova. Tests of exponentiality based on Arnold-Villasenor characterization and their efficiencies. *Computational Statistics and Data Analysis*, 90:100-113, 2015. IF2014=1.400

Invited talks

- [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 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] B. Milošević, 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

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

June 2023 Karlsruhe Institute of Technology

June 2023 University of Rouen, Mathematics Laboratory

Invited seminars and courses

31 August – 2 September, 2023 The missing data problem(s) and solutions, [StatCon 2023 Workshop](#)

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 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

- 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

- 2014–2023 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...
- 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](#)

- 2017-2023 defended 37 theses
- ongoing 12 theses

Doctoral theses advisor

2017-2021 Marija Cuparić: GOODNESS-OF-FIT TESTS BASED ON L^2 AND L^∞ DISTANCES AND THEIR ASYMPTOTIC EFFICIENCY

PhD advisor

5 students

Member of Jury for doctoral thesis

June 2020 Zoran Vidović, University of Belgrade

July 2021 Marija Cuparić, University of Belgrade

June 2023 Andjela Mijanović, University of Montenegro, Montenegro

July 2023 Ana Merkle, University of Belgrade

October 2023 Adrian Fischer, Universite Libre Bruxelles, Belgium

Other academic activities

Organizing conferences

- 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
- 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 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

- 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

Membership

- 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

- 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
- 2013 "The statistics remain on the youth" (2nd cycle of lectures - Statistics all around us)

Other

- 2017-present member, (Vice-president until 2021) of the Faculty Council
- 2022-present organization of Seminar of the Department of Probability and Statistics

Skills and other facts

Programming skills: R, C++

Foreign languages: English, Russian

- 2019,2021,2022 Member of Jury of Republic competition of High School student's scientific work - mathematics
- 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