

# Zorica Milovanović Jeknić

Associate Professor

Faculty of Construction Management  
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## EDUCATION

- 2015. PhD in Mathematics, Numerical mathematics and optimisation,  
Faculty of Mathematics, University of Belgrade, Belgrade, Serbia
- 2008. MSc in Mathematics, Numerical mathematics and optimisation,  
Faculty of Mathematics, University of Belgrade, Belgrade, Serbia
- 2006. BSc in Mathematics, Numerical mathematics and optimisation,  
Faculty of Mathematics, University of Belgrade, Belgrade, Serbia

## EMPLOYMENT HISTORY

- |           |                            |   |
|-----------|----------------------------|---|
| 2022.     | <b>Associate Professor</b> | Union – Nikola Tesla University<br>Faculty of Construction Management<br>Belgrade, Serbia |
| 2016.     | <b>Assistant Professor</b> | Belgrade, Serbia  |
| 2017-2022 | <b>Research Associate</b>  | Mathematical Institute, Belgrade  |

## MEMBERSHIPS

- 2018 Endowment Andrejević

## RESEARCH PROJECTS

- 2006-2008 “Implementation of the European regulative for calculating the required and determining the permitted specific energy consumption for heating new and

	existing residential buildings”(# 283011), funded by the Ministry of Science and Environmental Protection.
2008-2011	“Increasing energy efficiency in the conceptual solution of the use of renewable resources in the function of sustainable development” (#18031), funded by the Ministry of Science.
2011-2014	“Development, design and implementation of modern strategies for integrated management of operational work and maintenance of vehicles and machinery in the systems of road transport, mining and energy” (#35030), funded by the Ministry of education, science and technological development of Republic of Serbia,
2012-2019	“Approximation of integral and differential operators and applications” (#174015), funded by the Ministry of education, science and technological development of Republic of Serbia

#### SELECTED PUBLICATIONS

Z. Milovanović Jeknić, A. Delić, S. Živanović, A two dimensional boundary value problem of elliptic type with nonlocal conjugation conditions, *IMA Journal of Numerical Analysis*, drad084, <https://doi.org/10.1093/imanum/drad084>, 2023

Zorica Milovanović Jeknić, Bratislav Sredojević, Dejan Bojović, On the numerical solution of an elliptic problem with nonlocal boundary conditions, *Electronic Transactions on Numerical Analysis*. Volume 59, pp. 179–201, 2023

Bratislav Sredojević, Zorica Milovanović Jeknić, Dejan Bojović, A finite difference scheme for the approximation of the third initial boundary value parabolic problem, *Electronic Transactions on Numerical Analysis*. Volume 59, pp. 342–355, 2023

A. Delić, S. Živanović, Z. Milovanović Jeknić, A finite-difference scheme for a linear multi-term fractional-in-time differential equation with concentrated capacities, *IJNAM*, Vol 18, Num 2, pp 265-286, 2021

Aleksandar Milajić, Dejan Beljaković, Z. Milovanović Jeknić, Milan Trivunić, Vlastimir Radonjanin, Methodology for choosing optimal wall insulation and window type and size in relation to construction costs and energy performance of the building, FTN, Novi Sad, 2021

Z. Milovanović Jeknić., Parabolic-Hyperbolic Transmission Problem in Disjoint Domains, *ACTA17-Special issue, Filomat, University of Nis, Fac Sci Math*, 32, 20, pp. 6911 –6920, 0354-5180, 10.2298/FIL1820911M, Dec 2018.

Z. Milovanović Jeknić, One class of non-standard contour problems, Zadužbina Andrejević co-publisher Mathematical Institute, ISBN 978-86-525-0325-4, Belgrade, 2018

Z. Milovanović Jeknić, Jovanović B. Convergence of a Factorized Finite Difference Scheme for a Parabolic Transmission Problem. In: Dimov I., Faragó I., Vulkov L. (eds) *Numerical Analysis*

and Its Applications. NAA 2016. Lecture Notes in Computer Science, vol 10187, pp. 375-382, Springer, Cham, DOI: 10.1007/978-3-319-57099-0\_41, 2017

S. Stevović, Z. Milovanović, M. Stamatović, Sustainable model of hydro power development Drina river case study, Renewable and Sustainable Energy Reviews, 50, pp 363-371, 2015

B.S. Jovanović, Z.D. Milovanović, Numerical approximation of 2D Parabolic Transmission Problem in Disjoint Domains, Applied Mathematics and Computation, 228, pp 508-519, 2014

Z.D. Milovanović, Elliptic Transmission Problem in Disjoint Domains, Matematički vesnik 66,4, pp 418-429, 2014

B.S. Jovanović, Z.D. Milovanović, Finite Difference Approximation of a Parabolic Problem with variable coefficients, Publ. Inst. Math., 95(109), 2014 pp 49-62.

Z.D. Milovanović, Finite Difference Scheme for a Parabolic Transmission Problem in Disjoint Domains, Numerical Analysis and Its Applications 2012, Lecture Notes in Computer Science, Vol. 8236, Springer, 2013, pp. 403-410.

Z.D. Milovanović, Convergence of a Finite Difference Scheme for a Parabolic Transmission Problem in Disjoint Domains, Proceedings in Applied Mathematics and Mechanics, 2013, pp 433-434.

A.M. Delić, B.S. Jovanović, Z.D. Milovanović, On the transmission eigenvalue problem in disjoint domains, Comput. Methods Appl. Math., vol. 11, No. 4 , 2011, pp. 407-417.

Stevovic S., Milovanovic Z., Milajic A: New Methodological Approach in Techno-Economic and Environmental Optimization of Sustainable Energy Production, Thermal Science, 2010, Vol.14, No.3, pp 809-819

Z.D. Milovanovic, B.S. Jovanovic, About some spectral problems containing Dirac distribution, Proc. of XVIII Conference on Applied Mathematics (PRIM 2009) held in Subotica (Serbia) 2009, University of Novi Sad, Faculty of Sciences, DMI, Novi Sad 2010, pp. 31-38.

## CONFERENCE

XVIII Applied Mathematics Seminar, with exposure: "About Some Spectral Problems Containing Dirac Distribution", Subotica, 2009.

Pannonian Mathematical Modeling International Conference (PAMM 2011), with exposure: "About Transmission Eigenvalue Problem in Disjoint Domains", Novi Sad, Serbia, April 29-30, 2011

NAA'12: Fifth International Conference on Numerical Analysis and Applications, with exposure: "Finite Difference Scheme for a Parabolic Transmission Problem in Disjoint Domains", Lozenetz, Bulgaria, June 15-20, 2012.

GAMM 2013: 84<sup>th</sup> Annual Meeting of the International Association of Applied Mathematics and Mechanics, with exposure: "Convergence of a Finite Difference Scheme for a Parabolic Transmission Problem in Disjoint Domains", Novi Sad, Serbia, March 18-22, 2013

XIII Serbian Mathematical Congress, with exposure: "Numerical approximation of 2D elliptic transmission problem in disjoint domains", Vrnjačka Banja, Serbia, May 22-25, 2014

Sixth Conference on Finite Difference Method: Theory and Applications, with exposure: "The transmission problem for elliptic second order equations in disjoint domains", Lozenetz, Bulgaria, June 18-23, 2014.

Sixth Conference on Numerical Analysis and Applications with exposure: Convergence of a Factorized Finite Difference Scheme for a Parabolic Transmission Problem, Lozenetz, Bulgaria, June 15-22, 2016.

Approximation and Computation, Theory and Application with exposure: Parabolic-Hyperbolic Transmission Problem in Disjoint Domains, November 30-December 2, 2017, Belgrade, Serbia

XIV Serbian Mathematical Congress with exposure: Numerical solution of parabolic-hyperbolic transmission problem, May 16-19, 2018, Kragujevac, Serbia

Seventh Conference on Finite Difference Method: Theory and Applications, with exposure: One class of contour problems with nonlocal integral conjugation conditions, Lozenetz, Bulgaria, June 11-16, 2018.

Congress of Young Mathematicians with exposure: Nonlocal boundary value problem, October 3-5, Novi Sad, Serbia, 2021

XI Symposium "Mathematics and Applications" with exposure: Finite difference method for linear multi-term subdiffusion equation, Faculty of Mathematics, December 3-4, Belgrade, 2021

Mathematics, Numerics and Applications ,The international conference, with exposure Convergence of a finite difference scheme for mixed parabolic-hyperbolic transmission problem, Budva, Montenegro on June 1-3, 2022

Numerical Methods for Large Scale Problems, with exposure On the Numerical Solution of a Elliptic Problem with Nonlocal Boundary Condition, Belgrade, June 6-10, 2022

Congress of Young Mathematicians with exposure: About some elliptic transmission problems, September 29-October 1, Novi Sad, Serbia, 2022

XII Symposium "Mathematics and Applications" with exposure: Approximation of some elliptic transmission problems, Faculty of Mathematics, December 2-3, Belgrade, 2022

Analysis, Approximation, Applications, The international conference with exposure, Numerical Analysis of Hyperbolic Transmission Problem on Disjoint Intervals, Jun 21-24, Vrnjačka Banja, Srbija, 2023