

CURRICULUM VITAE

Name	Manuela Muzika Dizdarevic
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Education	University: Department of Mathematical and Computer Sciences, Faculty of Science, University of Sarajevo Graduate studies: Faculty of Mathematics, University of Belgrade Ph.D. studies: Faculty of Mathematics, University of Belgrade
Degrees	M.A., Faculty of Mathematics, University of Belgrade, September 2010, supervisor: Professor Aleksandar Lipkovski Ph.D., Faculty of Mathematics, University of Belgrade, July 2017, supervisor: Professor Rade Zivaljevic
Theses	M.A.: "Divisors on Toric Varieties", 2010 Ph.D.: "Application of the Groebner Bases Theory to Tiling Problems", 2017
Position	Associate Professor, Department of Mathematics, Faculty of Science, University of Sarajevo, 2022-present
Teaching	Associate Professor at the Department of Mathematical and Computer Sciences, Faculty of Science for the following undergraduate courses: • Linear Algebra 2, 1st year • Algebra 1, 3rd year • Algebra 2, 3rd year • Geometry 2, 3rd year • Selected Topics of Geometry, 3rd year Associate Professor at the Department of Mathematical and Computer Sciences, Faculty of Science for the following graduate courses: • Commutative algebra, 1st year • Projective Geometry, 1st year • Algebraic Curves, 2nd year

Conferences/Schools

- 27th Autumn School in Algebraic Geometry “Algebraic geometry and derived categories” Lukecin, Poland, 2004
- 32nd Autumn School in Algebraic Geometry “Algebraic torus actions” Lukecin, Poland, 2009
- Workshop on Symplectic Topology, Belgrade, Serbia, 2018
- A mini-course Tensors in applied algebraic geometry by Prof. Bernd Sturmfels, Mathematical Institute, SANU, Belgrade, December 2018
- Conference *Research in mathematics education*, DMS and European Organization of Researchers in Mathematical Education, ERME, Belgrade, May 2019
- Workshop *Women in Numbers Europe 3*, 26-30 August 2019, Rennes, France
- Workshop *Women in Numbers Europe 5*, 18-22 August 2025, Split, Croatia

Talks

- “Standard Bases in Local Rings”, Mathematical Institute, SANU, Belgrade, 2011
- “Groebner Bases and Polytopes”, Seminar CGTA, Faculty of Mathematics, Belgrade, 2011
- “Symmetric Polyomino Tilings and Groebner Bases”, 5th Symposium Mathematics and Application, Faculty of Mathematics, University of Belgrade, 2014
- “Symmetric Tilings in the Square Lattice”, Bosnian Mathematical Conference, Faculty of Science, University of Sarajevo, 2017
- “Geometry understanding assessment based on Van Hiele theory using Comparative Judgment”, 11th Symposium Mathematics and Application, Faculty of Mathematics, University of Belgrade, 2021
- "Understanding basic algebraic concepts after high school graduation", 12th Symposium Mathematics and Application, Faculty of Mathematics, University of Belgrade, 2022

Papers

- M. Muzika Dizdarević, M. Timotijević, R.T. Živaljević. *Signed Polyomino Tilings by n -in-line Polyominoes and Groebner bases*, Publications de l’Institut Mathématique, 99 (113), 2016, 31–42. <http://elib.mi.sanu.ac.rs/files/journals/publ/118/publn118p1-23.pdf>
- M. Muzika Dizdarević, R.T. Živaljević. *Symmetric Polyomino Tilings, Tribones, Ideals and Groebner bases*, Publications de l’Institut Mathématique, 98 (112), 2015, 1–23. DOI: 10.2298/PIM1512001M

- M. Muzika Dizdarević. *Symmetric Tilings in the Square Lattice*, Matematički Vesnik, 69, (4), 2017, 281-285. <http://www.vesnik.math.rs/vol/mv17406.pdf>
- M. Bigdeli, E. De Negri, M. Muzika Dizdarevic, E. Gorla, R. Minko, S. Tsakou, *Semi-Regular Sequences and Other Random Systems of Equations*, Women in Numbers Europe III, 2021, 75-114.
- M. Muzika Dizdarević, R.T. Živaljević. *Hamiltonian surfaces in the 4-cube, 4-bit Gray codes and Venn diagrams*, Publications de l'Institut Mathématique, 111 (125), 2022, 17–40. DOI: [10.2298/PIM2225017M](https://doi.org/10.2298/PIM2225017M)
- A. Balašev-Samarski, M. Muzika Dizdarević, S. Zeković. *Geometry understanding assessment based on Van Hiele theory using Comparative Judgment*, The Teaching of Mathematics, 2022, Vol. XXV, 1, pp. 1–12
- M. Čvorak, M. Muzika Dizdarević. *Napoleon's Theorem from the view point of Groebner bases*, Matematički Vesnik, 74, 4 (2022), pp. 289–300
- A. Lipkovski, M. Muzika Dizdarević, A. Odzak, *Measuring conceptual knowledge of basic algebraic concepts*, The Teaching of Mathematics, 2024, Vol. XXVII, No. 1, pp. 33–51 DOI: [10.57016/TM-NYKZ1813](https://doi.org/10.57016/TM-NYKZ1813)
- M. Muzika Dizdarević, M. Timotijević, R.T. Živaljević. *Non-planar signed tiling by k-in-line polyominoes and Groebner bases*, Kragujevac Journal of Mathematics, Vol. 49(3)(2025), 443-464, DOI: [10.46793/KgJMat2503.443D](https://doi.org/10.46793/KgJMat2503.443D)