

# Curriculum Vitae

## Contact information

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## Professional Experience

### 2021.- Present

Full professor, Department of mathematics, University of Sarajevo, Bosnia and Herzegovina.

Advisor of three doctoral dissertations

Visiting researcher at UAE University from February 23rd. 2023 to June 22nd. 2023.

### 2015– 2021

Associate professor, Department of mathematics, University of Sarajevo, Bosnia and Herzegovina.

Advisor of one doctoral dissertation

### 2010 - 2015

Assistant professor , Department of mathematics, University of Sarajevo, Bosnia and Herzegovina.

Co-supervisor of one doctoral dissertation

Supervisor of three master theses.

### 2007-2010

Senior Lecturer, Department of mathematics, University of Sarajevo, Bosnia and Herzegovina.

## Education and qualifications

**2007-2010** Phd thesis in pure mathematics (Harmonic analysis)

Department of mathematics, University of Sarajevo, Bosnia and Herzegovina.

**2003-2006** Master thesis in pure mathematics (Harmonic analysis)

Department of mathematics, University of Sarajevo, Bosnia and Herzegovina.

**1993-1999** Diploma of higher studies in mathematics, option analysis, University of Sciences and Technology Houari Boumediene, Algeria

### Languages

Arabic, French, English and Bosnian

### Communications in conferences and seminars

1. Memić Nacima, Properties of the Dirichlet kernel and its applications on some ultra metric structures, Seminar on the Department of Mathematical Sciences at UAEU, October, 6th, 2022.
2. Memić Nacima, Topics on Norlund logarithmic means, Conference: 6th Workshop on Fourier Analysis and Related Fields, August 24-31, 2017, Hungary.
3. Nacima Memić, Integrability of the maximal function of Fejer kernel, Conference on Dyadic Analysis and Related Fields with Applications (DARFA14) , Nyiregyhaza, Hungary, June 1-6, 2014
4. Nacima Memić, Topics on some bounded operators, Dyadic Analysis and Applications, Nyíregyháza, Hungary, October 1st-2nd, 2013
5. Nacima Memić, Pointwise convergence of Fourier series, Theory of the Walsh system and related areas, Nyíregyháza, Hungary, October 4, 2013
6. Nacima Memić and Samra Pirić, On the V-conjugation operator on Hardy spaces, MASSEE INTERNATIONAL CONGRESS ON MATHEMATICS Micom 2012, Sarajevo, 19.09. - 23.09.2012.
7. M. Avdispahić and N. Memić, Fourier multipliers on totally disconnected groups, International Congress of Mathematicians ICM 2010, Hyderabad, August 19-27, 2010.
8. M. Avdispahić and N. Memić, Differentiation on local fields, International Congress of Mathematicians ICM 2010, Hyderabad, August 19-27, 2010.
9. Nacima Memić, Topics on unbounded Vilenkin groups, MASSEE INTERNATIONAL CONGRESS ON MATHEMATICS Micom 2009, Ohrid, 16.09. - 20.09.2009.
10. Nacima Memić, Multiplicative systems on ultra-metric spaces, MASSEE INTERNATIONAL CONGRESS ON MATHEMATICS Micom 2009, Ohrid, 16.09. - 20.09.2009.
11. Nacima Memić, On the characterization of p-adic Egorov type mnemofunctions by their point values, Fourth Croatian Mathematical Congress CroMC2008, Osijek, June 17-20, 2008.

### Publications

1. Memić Nacima, Mahler coefficients of a certain class of compatible functions on  $\mathbb{Z}_p$ , Bulletin of the Polish Academy of Sciences Mathematics, 2024.
2. Memić Nacima, On the  $L_1$ - norm of the logarithmic kernel of Walsh–Kaczmarz Fourier series. *J Anal* **31**, 1939–1950 (2023), <https://doi.org/10.1007/s41478-022-00545-4>
3. Memić Nacima, An Estimate of the Maximal Operator of the Nörlund Logarithmic Means

- with Respect to the Character System of the Group of 2-adic Integers on the Hardy Space  $H_1$ , *Bull. Iran. Math. Soc.* **48** (2022), 3381–3391.
4. Memić Nacima, Sead Peco, On Ergodic Transformations on the Sphere of 2-Adic Units, *Vietnam J. Math.* **52** (2024), no. 1, 159–174.  
<https://doi.org/10.1007/s10013-022-00581-4>
  5. Memić Nacima, Mahler Coefficients of Some 3-adic Ergodic Functions, *Acta Mathematica Vietnamica*, **47** (2022), 597–610.
  6. Memić Nacima, Sead Peco, Some properties of Mahler coefficients of the  $p$ -adic shift, *Bulletin Polish Acad. Sci. Math.*, **70** (2022), no. 1, 35–51.
  7. Memić Nacima, Sead Peco, Mahler coefficients of the 2-adic shift, *Acta Univ. Apulensis, Math. Inform.* **67** (2021), 61–67.
  8. Memić Nacima, Huremović Muminović Jasmina, On some classes of 1-Lipschitz measure-preserving ergodic functions on  $\mathbb{Z}_p$ , *Asian-Eur. J. Math.* **15** (2022), no. 9.
  9. Memić Nacima, Dynamics of some 2-adic isometric transformations, *Research in Number Theory* **7** (3) (2021), 1–16.
  10. Memić Nacima, Properties of some subsequences of the Walsh-Kaczmarz-Dirichlet kernels, *Math. Inequal. Appl.* **24** (2021), no. 1, 31–45.
  11. Memić Nacima, Amil Pečenković, On the  $L_1$  norm of the Dirichlet kernel on the group of 2-adic integers, *Acta Univ. Apulensis, Math. Inform.*, **63** (2020), 123–130.
  12. Memić Nacima, Amil Pečenković, Difference operator and derivative on the dyadic field, *Advances in Mathematics: Scientific Journal* **10** (2021), no. 10, 3327–3336.
  13. Memić Nacima, Sadiković Samra, Maximal operators and characterization of Hardy spaces, *Anal. Math.* **46** (2020), no. 1, 119–131.
  14. Memić Nacima, Huremović Muminović Jasmina, Ergodic uniformly differentiable functions modulo  $p$  on  $\mathbb{Z}_p$ , *p-Adic Numbers Ultrametric Anal. Appl.* **12** (2020), no. 1, 49–59.
  15. Memić Nacima, Mahler coefficients of 1-Lipschitz measure-preserving functions on  $\mathbb{Z}_p$ , *Int. J. Number Theory* **16** (2020), no. 6, 1247–1261.
  16. Memić Nacima, Mahler coefficients of uniformly differentiable functions modulo  $p$ , *Int. J. Number Theory* **16** (2020), no. 9, 2113–2127.
  17. Memić Nacima, Mahler coefficients of locally scaling transformations on  $\mathbb{Z}_p$ , *Colloq. Math.* **162** (2020), no. 1, 53–76.
  18. Memić Nacima, Notes on ergodic 2-adic transformations, *p-Adic Numbers Ultrametric Anal. Appl.* **12** (2020), no. 4, 297–309.
  19. Moazami Goodarzi Milad; Hormozi Mahdi; Memić Nacima, Embedding generalized Wiener classes into Lipschitz spaces. *Math. Inequal. Appl.* **22** (2019), no. 1, 291–296.
  20. Memić Nacima, On some compatible functions on the set of 3-adic integers. *Colloq. Math.* **155** (2019), no. 2, 197–214.
  21. Memić Nacima, Sets of minimality of  $(1-1)$ -rational functions. *p-Adic Numbers Ultrametric Anal. Appl.* **10** (2018), no. 3, 209–221.
  22. Memić Nacima, Šabanac Zenan, On Perturbed Monomials on 2-adic Spheres Around 1, *Filomat* **31** (2017), no. 15, 4905–4913.
  23. Memić Nacima, Ergodic polynomials on 2-adic spheres. *Bull. Pol. Acad. Sci. Math.* **65** (2017), no. 1, 35–44.
  24. Memić Nacima, Characterization of ergodic rational functions on the set of 2-adic units. *Int. J. Number Theory* **13** (2017), no. 5, 1119–1128.
  25. Memić Nacima, Almost everywhere convergence of some subsequences of Fejér means for integrable functions on some unbounded Vilenkin groups. *Math. Slovaca* **67** (2017), no.

- 1,179–190.
26. Memić, Nacima Ergodicity conditions on the group of 3-adic integers. *Colloq. Math.* **147** (2017), no. 1, 67–75.
  27. Moazami Goodarzi, Milad; Hormozi, Mahdi; Memić Nacima, Relations between Schramm spaces and generalized Wiener classes. *J. Math. Anal. Appl.* **450** (2017), no. 1, 829–838.
  28. Memić Nacima; Šabanac, Zenan, On some subsequences of Fejér means for integrable functions on unbounded Vilenkin groups. *Adv. Math., Sci. J.* **5** (2016), No. 2, 143-152.
  29. Memić Nacima.; Persson, L. E.; Tephnadze, G. A note on the maximal operators of Vilenkin-Nörlund means with non-increasing coefficients. *Studia Sci. Math. Hungar.* **53** (2016), no. 4, 545–556.
  30. Memić Nacima, Ergodic products and powers on compact subsets of the p-adic field. *Bull. Pol. Acad. Sci. Math.* **64** (2016), no. 1, 47–53.
  31. Memić Nacima, Ergodic polynomials on subsets of p-adic integers. *p-Adic Numbers Ultrametric Anal. Appl.* **8** (2016), no. 2, 149–159
  32. Memić Nacima; Simon, Ilona; Tephnadze, George Strong convergence of two-dimensional Vilenkin-Fourier series. *Math. Nachr.* **289** (2016), no. 4, 485–500.
  33. Memić Nacima, Almost everywhere convergence of some subsequences of the Nörlund logarithmic means of Walsh-Fourier series. *Anal. Math.* **41** (2015), no. 1-2, 45–54.
  34. Memić Nacima, Almost everywhere convergence of Fejér means of some subsequences of Fourier series for integrable functions with respect to the Kaczmarz system. (English) *Zbl 1346.42037 Adv. Math., Sci. J.* **4** (2015), No. 1, 65-77.
  35. Memić Nacima, On the divergence of Norlund logarithmic means with respect to the L1 norm on some unbounded Vilenkin groups, *Facta Univ. Ser. Math. Inform.* **29** (2014), no. 3, 271–279.
  36. Memić Nacima, On almost everywhere convergence of some subsequences of Fejer means for integrable functions on unbounded Vilenkin groups, *Acta Math. Acad. Paedagog. Nyházi. (N.S.)* **30** (2014), 91–101.
  37. Memić Nacima, A note on multipliers of weak type on the dyadic group. *Facta Univ. Ser. Math. Inform.* **28** (2013), no. 1, 67–74.
  38. Memić Nacima, Estimates for the integral of maximal functions of Fejér kernel. *Acta Math. Acad. Paedagog. Nyházi. (N.S.)* **28** (2012), no. 2, 177–187.
  39. Memić Nacima, On the boundedness of the V-conjugation operator on Hardy spaces. *New Zealand J. Math.* **42** (2012), 121–129.
  40. Memić Nacima; Pirić Samra, Inverse character formula for Vilenkin systems. *Facta Univ. Ser. Math. Inform.* **27** (2012), no. 2, 199–211.
  41. Avdispahić, M.; Memić, N.; Weisz, F. Maximal functions, Hardyspaces and Fourier multiplier theorems on unbounded Vilenkin groups. *J. Math. Anal. Appl.* **390** (2012), no. 1, 68–73.
  42. Memić Nacima, Multiplicative systems on ultra-metric spaces. *Math. Balkanica (N.S.)* **24** (2010), no. 3-4, 275–284.
  43. Avdispahić, M.; Memić, N. On the Lebesgue test for convergence of Fourier series on unbounded Vilenkin groups. *Acta Math. Hungar.* **129** (2010), no. 4, 381–392.
  44. Avdispahić, M.; Memić, N. A derivative on the field of p-adic numbers. *p-Adic Numbers Ultrametric Anal. Appl.* **2** (2010), no. 4, 278–284.
  45. Avdispahić, M.; Memić, N. Fourier multiplier theorem for atomic Hardy spaces on unbounded Vilenkin groups. *J. Math. Anal. Appl.* **363** (2010), no. 2, 588–595.

