

Lista de lucrări

1. Teza de doctorat

Titlul tezei: "FUZZY APPROXIMATION OPERATORS"

Instituția: Universitatea "Babeș-Bolyai" din Cluj Napoca

Domeniul: Matematică

Coordonator: Prof. dr. Petru Blaga

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2. Cărți de specialitate

1. A. I. Ban, **L. Coroianu**, P. Grzegorzewski, Fuzzy numbers: approximations, ranking and applications, Institute of Computer Science, Polish Academy of Science, 2015, ISBN: 978-83-63159-21-4, 208 pagini.
2. B. Bede, **L. Coroianu**, S. G. Gal, Approximation by Max-Product type operators, Springer, 2016, ISBN: 978-3-319-34189-7.
3. **L. Coroianu**, Interactive arithmetic and metrical structures on fuzzy numbers, Editura Universității din Oradea, 2015, ISBN: 978-606-10-1698-3, 90 pagini.

3. Cursuri

1. A. M. Bica, A. Cătaș, **L. Coroianu**, Curs de analiză matematică, Editura Universității din Oradea, 2019, ISBN: 978-606-10-2024-9, 182 pagini.

4. Materiale didactice

1. A. M. Bica, A. Cătaș, **L. Coroianu**, Analiză matematică, suport de seminar.
2. **L. Coroianu**, Statistică matematică, suport de curs, 6 fișiere pdf.
3. **L. Coroianu**, Standard and interactive operations on fuzzy numbers, suport de seminar, 12 pagini.

5. Citări

742 citări în Google Scholar (29 Ianuarie, 2019)

Google Scholar H-index: 16 (29 Ianuarie, 2019)

315 citări în Web of Science din care 215 sunt independente (29 Ianuarie, 2019)

Web of Science H-index: 11 (29 Ianuarie, 2019)

6. Selecție 10 articole relevante

1. **L. Coroianu**, S. G. Gal, Classes of functions with improved estimates in approximation by the max-product Bernstein operator, *Analysis and Applications*, 9 (2011) 249-274.
2. **L. Coroianu**, Lipschitz functions and fuzzy number approximations, *Fuzzy Sets and Systems*, 200 Issue 1 (2012), 116-135.
3. **L. Coroianu**, M. Gagolewski, P. Grzegorzewski, Nearest piecewise approximation of fuzzy numbers, *Fuzzy Sets and Systems*, 233 (2013) 26-51.
4. **L. Coroianu**, S. G. Gal, Localization results for the Bernstein max-product operator, *Applied Mathematics and Computation*, 231 (2014) 73-78.
5. A. I. Ban, **L. Coroianu**, Simplifying the search for effective ranking of fuzzy numbers, *IEEE Transactions on Fuzzy Systems*, 23 (2015) 327-339.
6. **L. Coroianu**, Necessary and sufficient conditions for the equality of the interactive and non-interactive sums of two fuzzy numbers, *Fuzzy Sets and Systems*, 283 (2016) 40-55.
7. **L. Coroianu**, Best Lipschitz constants of solutions of quadratic programs, *Journal of Optimization Theory and Applications*, 170 (2016) 853-875.
8. **L. Coroianu**, R. Fullér, On the constrained OWA aggregation problem with single constraint, *Fuzzy Sets and Systems*, 332 (2018) 37-43.
9. **L. Coroianu**, S. G. Gal, Approximation by truncated max-product operators of Kantorovich type based on generalized (ϕ, ψ) - kernels, *Mathematical Methods in the Applied Sciences*, 41 (2018) 7971-7984.
10. **L. Coroianu**, L. Stefanini, Properties of fuzzy transform obtained from L_p minimization and a connection with Zadeh's extension principle, *Information Sciences*, 478 (2019) 331-354.

7. Articole publicate în reviste indexate ISI

IF înseamnă ultimul factor de impact iar SRI înseamnă ultimul scor relativ de influență

1. G. Anatassiou, S. G. Gal, **L. Coroianu**, Approximation by a nonlinear Cardaliaguet-Euvrard neural network operator of max-product kind, *Journal of Computational Analysis and Applications*, 12 No. 2 (2010) 396-406. IF=0.609, SRI=0.
2. B. Bede, **L. Coroianu**, S. G. Gal, Approximation and shape preserving properties of the nonlinear Favard-Szasz-Mirakjan operator of max-product kind, *Filomat*, 24 Issue 3 (2010), No. 3, 55-72. IF=0.635, SRI=0.343.
3. B. Bede, **L. Coroianu**, S. G. Gal, Approximation and shape preserving properties of the nonlinear Meyer-Konig and Zeller operator of max-product kind, *Numerical Functional Analysis and Optimization*, 31 Issue 3 (2010), 232-253. IF=0.827, SRI=0.733.
4. **L. Coroianu** and S. G. Gal, Approximation by nonlinear Lagrange interpolation operators of max-product kind on Chebyshev knots of second kind, *Journal of Computational Analysis and Applications*, 13 Issue 2 (2011) 211-224. IF=0.609, SRI=0.

5. **L. Coroianu**, Best Lipschitz constant of the trapezoidal approximation operator preserving the expected interval, *Fuzzy Sets and Systems*, 165 Issue 1 (2011) 81-97. IF=2.675, SRI=1.231.
6. B. Bede, L. Coroianu, S. G. Gal, Approximation and shape preserving properties of the truncated Baskakov operator of max-product kind, *Revista De La Union Matematica Argentina*. 52 (2011) 89-107. IF=0.517, SRI=0.335.
7. A. I. Ban, A. Brandas, **L. Coroianu**, O. Nica. C. Negrutiu, Approximations of fuzzy numbers by trapezoidal fuzzy numbers preserving the ambiguity and value, *Computers and Mathematics with Applications*, 161 (2011) 1379-1401. IF=1.86, SRI=1.153.
8. A. I. Ban, **L. Coroianu**, Metric properties of the nearest extended parametric fuzzy number and applications, *International Journal of Approximate Reasoning*, 52 (2011) 488-500. IF=1.766, SRI=1.237.
9. **L. Coroianu**, S. G. Gal, Classes of functions with improved estimates in approximation by the max-product Bernstein operator, *Analysis and Applications* 9 (2011) 249-274. IF=1.787, SRI=1.619.
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11. M. Balaj, **L. Coroianu**, Matching theorems and simultaneous relation problems, *Bulletin of the Korean Mathematical Society*, 48 (2011) 939-949. IF=0.403, SRI=0.317.
12. A. I. Ban, **L. Coroianu**, Discontinuity of the trapezoidal fuzzy number-valued operators preserving core, *Computers and Mathematics with Applications*. 62 (2011) 3103-3110. IF=1.86, SRI=1.153.
13. **L. Coroianu**, Lipschitz functions and fuzzy number approximations, *Fuzzy Sets and Systems*, 200 (2012), 116-135. IF=2.675, SRI=1.165.
14. A. I. Ban, **L. Coroianu**, Nearest interval, triangular and trapezoidal approximation of fuzzy number preserving ambiguity, *International Journal of Approximate Reasoning*, 5 (2012), 805-836. IF=1.766, SRI=1.237.
15. M. Balaj, **L. Coroianu**, S. G. Gal, S. Muresan, Iterations and fixed points for Bernstein max-product operator, *Fixed Point Theory* 14 (2013) 39-52. IF=0.548, SRI=0.263.
16. **L. Coroianu**, S.G. Gal, Localization results for the Meyer-Konig and Zeller operator of max-product kind, *Numerical Functional Analysis and Optimization* 34, (2013) 713-727. IF=0.827, SRI=0.733.
17. **L. Coroianu**, M. Gagolewski, P. Grzegorzewski, Nearest piecewise approximation of fuzzy numbers, *Fuzzy Sets and Systems*, 233 (2013) 26-51. IF=2.675, SRI=1.231.
18. **L. Coroianu**, S. G. Gal, Localization results for the Bernstein max-product operator, *Applied Mathematics and Computation*, 231 (2014) 73-78. IF=2.3, SRI=0.970.
19. **L. Coroianu**, S. G. Gal, B. Bede, Approximations of fuzzy numbers by nonlinear Bernstein operators of max-product kind, *Fuzzy Sets and Systems* 257 (2014) 41-66. IF=2.675, SRI=1.231.

20. A. I. Ban, L. **Coroianu**, Existence, uniqueness and continuity of trapezoidal approximation under a general condition, *Fuzzy Sets and Systems* 257 (2014) 3-22. IF=2.675, SRI=1.231.
21. L. **Coroianu**, S. G. Gal, Saturation and inverse results for the Bernstein max-product operator, *Periodica Mathematica Hungarica*, 69 (2014) 126-133. IF=0.61, SRI=0.546.
22. A. I. Ban, L. **Coroianu**, Simplifying the search for effective ranking of fuzzy numbers, *IEEE Transactions on Fuzzy Systems*, 23 (2015) 327-339. IF=8.415, SRI=4.074.
23. A. I. Ban, L. **Coroianu**, Existence, uniqueness, calculus and properties of triangular approximation under a general condition, *International Journal of Approximate Reasoning*, 62 (2015) 1-26. IF=1.766, SRI=1.237.
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25. A. I. Ban, L. **Coroianu**, A. Khastan, Conditioned weighted L-R approximations of fuzzy numbers, *Fuzzy Sets and Systems*, 283 (2016) 40-55. IF=2.675, SRI=1.231.
26. A. I. Ban, L. **Coroianu**, Symmetric triangular approximations of fuzzy numbers under a general condition, *Soft Computing*, 20 (2016) 1249-1261. IF=2.367, SRI=0.938.
27. L. **Coroianu**, L. Stefanini, General approximation of fuzzy numbers by F-transform, *Fuzzy Sets and Systems*, 288 (2016) 46-74. IF=2.675, SRI=1.231.
28. L. **Coroianu**, Best Lipschitz constants of solutions of quadratic programs, *Journal of Optimization Theory and Applications*, 170 (2016) 853-875. IF=1.234, SRI=1.209.
29. L. **Coroianu**, S. G. Gal, B. D. Opris, S. Trifa, Feller's Scheme in Approximation by Nonlinear Possibilistic Integral Operators, *Numerical Functional Analysis and Optimization*, 38 (2017) 327-343. IF=0.827, SRI=0.733
30. L. **Coroianu**, S. G. Gal, L^p approximation by truncated max-product sampling operators of Kantorovich-type based on Fejer kernel, *Journal of Integral Equations and Applications*, 29 (2017) 349-364 . IF=0.489, SRI=0.961.
31. L. **Coroianu**, R. Fullér, On the constrained OWA aggregation problem with single constraint, *Fuzzy Sets and Systems*, 332 (2018) 37-43. IF=2.675, SRI=1.231.
32. L. **Coroianu**, R. Fullér, Necessary and sufficient conditions for the equality of interactive and non-interactive extensions of continuous functions, *Fuzzy Sets and Systems*, 331 (2018) 116-130. IF=2.675, SRI=1.231.
33. L. **Coroianu**, R. Fullér, Nguyen type theorem for extension principle based on a joint possibility distribution, *International Journal of Approximate Reasoning*, 95 (2018) 22-35. IF=1.766, SRI=1.237
34. A. I. Ban, L. **Coroianu**, Explicit analytical formulae of ranking indices without the requirement of multiplicative compatibility, *International Journal of Approximate Reasoning*, 97 (2018) 17-37. IF=1.766, SRI=1.237

35. L. Coroianu, S. G. Gal, Approximation by truncated max-product operators of Kantorovich type based on generalized (ϕ, ψ) - kernels, Mathematical Methods in the Applied Sciences, 41 (2018) 7971-7984. IF=1.18, SRI=0.745.
36. L. Coroianu, L. Stefanini, Properties of fuzzy transform obtained from L_p minimization and a connection with Zadeh's extension principle, Information Sciences, 478 (2019) 331-354. IF=4.305, SRI=2.107.

8. Lucrări indexate BDI care nu sunt indexate ISI

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2. Adrian I. Ban and L. Coroianu, A method to obtain trapezoidal approximations of intuitionistic fuzzy numbers from trapezoidal approximations of fuzzy numbers, Notes on Intuitionistic Fuzzy Sets, 15 (2009), 13-25.
3. L. Coroianu, S. G. Gal, Approximation by nonlinear generalized sampling operators of max-product kind, Sampling Theory in Signal and Image Processing, 9 No 1-3 (2010) 59-75.
4. L. Coroianu, S. G. Gal, Approximation by nonlinear Hermite-Fejer interpolation operators of max-product kind on Chebyshev nodes, Revue D'Analyse Numerique et de theorie de l'approximation, 39 No. 1 (2010) 21-31.
5. S. G. Gal, B. Bede and L. Coroianu, Approximation and shape preserving properties of the nonlinear Bleimann-Butzer-Hahn operator of max-product kind, Comm. Math. Univ. Carol., 51, 3 (2010) 397-415.
6. B. Bede, L. Coroianu and S. G. Gal, Approximation and shape preserving properties of the nonlinear Baskakov operator of max-product kind, Studia Univ. Babes-Bolyai, Mathematica LV No 4 (2010) 193-218.
7. B. Bede, L. Coroianu and S. G. Gal, Approximation by truncated Favars-Szasz-Mirakjan operator of max-product kind, Demonstratio Mathematica, XLIV No 1 (2011) 105-122.
8. L. Coroianu, S. G. Gal, Approximation by max-product Langrage interpolation operators, Studia Univ. Babes-Bolyai, Mathematica 56 No 2 (2011) 315-325.
9. A. I. Ban, L. Coroianu, Approximate solutions preserving parameters of intuitionistic fuzzy linear systems, Notes on Intuitionistic Fuzzy Sets, 17 No 1 (2011) 58-70.
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12. L. Coroianu and S. G. Gal, Saturation Results For The Lagrange Max-Product Interpolation Operator Based On Equidistant Knots, *Revue d'Analyse Numerique et de Theory de l'Approximation*, 41 No 1 (2012), 27-41.
13. L. Coroianu and S. G. Gal, Saturation Results for the Truncated Max-Product Sampling Operators Based Sinc and Fejer-Type Kernels, *Sampling Theory in Signal and Image Processing*, 11 No 1 (2012), 113-132.
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15. L. Coroianu and S. G. Gal, On copositive approximation by bivariate polynomials on rectangular grids, *Journal of Applied Functional Analysis*, vol 9 No 3-4 (2014) 272-276.
16. L. Coroianu, S. G. Gal, Localization results for the non-truncated max-product sampling operators based on Fejer and Sinc-type kernels, *Demonstratio Mathematica*, se va publica in volumul 49 (2016), 38-49.

9. Lucrări publicate în volume ale unor conferințe pe baza unui proces de referare

1. A. I. Ban, **L. Coroianu**, Continuity and Additivity of the Trapezoidal Approximation Preserving the Expected Interval Operator, *International Fuzzy Systems Association World Congress*, Lisbon 20-24 July, 2009, 798-802.
2. A.I. Ban and **L. Coroianu**, Triangular, trapezoidal and parametric approximations of intuitionistic fuzzy numbers and applications, *Ninth International workshop on Intuitionistic Fuzzy Sets and Generalized Nets*, Warsaw, October 8, 2010.
3. **L. Coroianu**, S. G. Gal, B. Bede, Approximations of fuzzy numbers by nonlinear Bernstein operators of max-product kind, *EUSFLAT-LFA Conference*, France, Aix-Les-Bains. 18-23 July 2011, pp 734-741.
4. A. I. Ban, **L. Coroianu**, Translation invariance and scale invariance of approximations of fuzzy numbers, *EUSFLAT-LFA Conference*, France, Aix-Les-Bains, 18-23 July 2011, pp 742-748.
5. A. I. Ban, A. M. Bica, **L. Coroianu**, Metric Properties of the Extended Weighted Semi-trapezoidal Approximations of Fuzzy Numbers and Their applications. *Advances in Computational Intelligence, Communications in Computer and Information Science*, 299 (2012) 29-38.
6. A. I. Ban, **L. Coroianu**, Weighted Semi-trapezoidal Approximation of a Fuzzy Number Preserving the Weighted Ambiguity, *Advances in Computational Intelligence, Communications in Computer and Information Science*, 299 (2012) 49-58.

7. A. I. Ban, **L. Coroianu**, P. Grzegorzewski, A fixed-shape fuzzy median of a fuzzy sample. Proceedings of the 8th conference of the European Society for Fuzzy Logic and Technology (EUSFLAT-2013), Milano, Italy, September 10-12, 2013, pp. 215-222.
8. **L. Coroianu**, R. Fullér, On Multiplication of Interactive fuzzy numbers, Eleventh IEEE International Symposium on Intelligent Systems and Informatics, (SISY 2013), September 26-28, Subotica, Serbia, pp. 181-185.
9. **L. Coroianu**, R. Fullér, On Additivity of the Weighted Possibilistic Mean Operator, Fourteenth IEEE International Symposium on Computational Intelligence and Informatics, November 19-21, 2013, Budapest, Hungary, pp. 303-308.
10. **L. Coroianu**, M. Gagolewski, P. Grzegorzewski, M. Adabitar Firozja, T. Houliari, Piecewise linear approximation of fuzzy numbers preserving the support and core, Communications in Computer and Information Science, 443 (2014) 244-253.
11. A. I. Ban, **L. Coroianu**, Characterization of ranking indices on triangular fuzzy numbers, Communications in Computer and Information Science, 443 (2014) 254-263.
12. **L. Coroianu**, L. Stefanini, A note on Fuzzy-Transform approximation of fuzzy numbers, Annual Conference of the North American Fuzzy Information Processing Society (NAFIPS) 2015, Redmond, USA.
13. A. I. Ban, **L. Coroianu**, Ranking of L-R fuzzy numbers, Annual Conference of the North American Fuzzy Information Processing Society NAFIPS (2015), Redmond, USA.
14. **L. Coroianu**, On the convergence of max-product typeoperators, 16th IEEE International Symposium on Computational Intelligence and Informatics, November 19-21, 2015, Budapest, Hungary.
15. **L. Coroianu**, R. Fullér, Characterization of the level sets for interactive additions, 17-th International Symposium on Computational Intelligence and Informatics (CINTI 2016). November 17-19, Budapest, Hungary, pp. 35-40.
16. **L. Coroianu**, R. Fuller, Minimum of constrained OWA aggregation problem with a single constraint, WILF 2018 conference, Genova, Italy, 2018 (to be published).

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