

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. **L. Coroianu**, Interactive arithmetic and metrical structures on fuzzy numbers, Editura Universității din Oradea, 2015, ISBN: 978-606-10-1698-3, 90 pagini.
2. 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.
3. B. Bede, **L. Coroianu**, S. G. Gal, Approximation by Max-Product type operators, trimisă spre publicare.

3. Materiale didactice

1. **L. Coroianu**, Calcul diferential, suport de seminar, 29 pagini.
2. **L. Coroianu**, Standard and interactive operations on fuzzy numbers, 12 pagini.

4. 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. 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.
3. M. Balaj, **L. Coroianu**, Matching theorems and simultaneous relation problems, Bulletin of the Korean Mathematical Society, 48 (2011) 939-949.
4. **L. Coroianu**, Lipschitz functions and fuzzy number approximations, Fuzzy Sets and Systems, 200 Issue 1 (2012), 116-135.
5. **L. Coroianu**, M. Gagolewski, P. Grzegorzewski, Nearest piecewise approximation of fuzzy numbers, Fuzzy Sets and Systems, 233 (2013) 26-51.

6. **L. Coroianu**, S. G. Gal, Localization results for the Bernstein max-product operator, Applied Mathematics and Computation, 231 (2014) 73-78.
7. **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.
8. A. I. Ban, **L. Coroianu**, Simplifying the search for effective ranking of fuzzy numbers, IEEE Transactions on Fuzzy Systems, 23 (2015) 327-339.
9. **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.
10. **L. Coroianu**, L. Stefanini, General approximation of fuzzy numbers by F-transform, Fuzzy Sets and Systems, in press.

5. 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=0.481, SRI=0.160.
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=0.638, SRI=0.391.
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=0.591, SRI=0.651.
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=0.481, SRI=0.160.
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=1.986, SRI=1.165.
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=0.184, SRI=0.391.
7. A. I. Ban, A. Brandas, **L. Coroianu**, O. Nica. C. Negruțiu, Approximations of fuzzy numbers by trapezoidal fuzzy numbers preserving the ambiguity and value, Computers and Mathematics with Applications, 161 (2011) 1379-1401. IF=1.697, SRI=0.970.
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=2.451, SRI=1.252.

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=0.796, SRI=1.421.
10. A. I. Ban, **L. Coroianu**, P. Grzegorzewski, Trapezoidal approximation and aggregation, *Fuzzy Sets and Systems*, 177 (2011) 45-59. IF=1.986, SRI=1.165.
11. M. Balaj, **L. Coroianu**, Matching theorems and simultaneous relation problems, *Bulletin of the Korean Mathematical Society*, 48 (2011) 939-949. IF=0.228, SRI=0.276.
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=1.697, SRI=0.970.
13. **L. Coroianu**, Lipschitz functions and fuzzy number approximations, *Fuzzy Sets and Systems*, 200 (2012), 116-135. IF=1.986, 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=2.451, SRI=1.252.
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=1.000, SRI=0.342.
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=0.591, SRI=0.651.
17. **L. Coroianu**, M. Gagolewski, P. Grzegorzewski, Nearest piecewise approximation of fuzzy numbers, *Fuzzy Sets and Systems*, 233 (2013) 26-51. IF=1.986, SRI=1.165.
18. **L. Coroianu**, S. G. Gal, Localization results for the Bernstein max-product operator, *Applied Mathematics and Computation*, 231 (2014) 73-78. IF=1.551, SRI=0.694.
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=1.986, SRI=1.165.
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=1.986, SRI=1.165.
21. **L. Coroianu**, S. G. Gal, Saturation and inverse results for the Bernstein max-product operator, *Periodica Mathematica Hungarica*, 69 (2014) 126-133. IF=0.479, SRI=0.557.
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=8.746, 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=2.451, SRI=1.252.
24. **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. IF=1.986, SRI=1.165.

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=1.986, SRI=1.165.
26. A. I. Ban, **L. Coroianu**, Symmetric triangular approximations of fuzzy numbers under a general condition, *Soft Computing*, in press. IF=1.271, SRI=0.757.
27. **L. Coroianu**, L. Stefanini, General approximation of fuzzy numbers by F-transform, *Fuzzy Sets and Systems*, in press. IF=1.986, SRI=1.165.

6. Lucrări indexate BDI care nu sunt indexate ISI

1. B. Bede, L. Coroianu and S. G. Gal, Approximation and shape preserving properties of the Bernstein operator of max-product kind, *Intern. J. Math. Math. Sci.*, vol 2009, Article ID 590589, 26 pages, 2009. doi:10.1155/2009/590589.
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.
10. L. Coroianu, S. G. Gal, Approximation by max-product sampling operators based on sinc-type kernels, *Sampling Theory in Signal and Image Processing*, 10 No 3 (2011) 211-230.
11. L. Coroianu, S. G. Gal, Global smoothness preservation by some nonlinear max-product operators, *Matematicki Vesnik*, 64 No 4 (2012), 303-315.

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.
14. L. Coroianu and S. G. Gal, Localization Results For The Lagrange Max-Product Interpolation Operator Based On Equidistant Knots, *Revue d'Analyse Numerique et de Theory de l'Approximation*, 42 No 2 (2013), 121-131.
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 în volumul 49 (1) din 2016.

7. Lucrări publicate în volume și 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-20313), 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. Houlari, 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.

8. Citări

În baza de date Google Academic am 282 citări. Dintre acestea cel puțin 92 sunt independente iar dintre acestea cel puțin 65 (nu am contorizat citările unde nu e clar dacă e vorba de articol sau carte) sunt de de la autori cu care nu am niciun articol comun. Indicele meu Hirsch în Google Academic este 10.

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