

## **Lista de lucrări**

Conf. univ. dr. **Teodora CĂTINAŞ**

### **a) Articole considerate cele mai relevante**

1. Gh. Coman, T. Cătinaş, *Interpolation operators on a triangle with one curved side*, BIT Numerical Mathematics, 50 (2010) no. 2, pp. 243-267.
2. P. Blaga, T. Cătinaş, Gh. Coman, *Bernstein-type operators on triangle with all curved sides*, Appl. Math. Comput., 218 (2011), pp. 3072-3082.
3. T. Cătinaş, D. Otrocol, *Iterates of multivariate Cheney-Sharma operators*, J. Comput. Anal. Appl., 15 (2013) no. 7, pp. 1240-1246.
4. T. Cătinaş, *The bivariate Shepard operator of Bernoulli type*, Calcolo, 44 (2007) no. 4, pp. 189-202.
5. Gh. Coman, T. Cătinaş, *Interpolation operators on a tetrahedron with three curved edges*, Calcolo, 47 (2010) no. 2, pp. 113-128.
6. P. Blaga, T. Cătinaş, Gh. Coman, *Bernstein-type operators on triangle with one curved side*, Meditarr. J. Math., 9 (2012) no. 4, pp. 843-855.
7. T. Cătinaş, P. Blaga, Gh. Coman, *Surfaces generation by blending interpolation on a triangle with one curved side*, Results in Mathematics, 64 (2013) nos. 3-4, pp. 343-355.
8. T. Cătinaş, *Bivariate quasi-interpolation operator of Bernoulli type*, Meditarr. J. Math., 11 (2014), no.4, pp. 1171-1183.
9. T. Cătinaş, *Iterates of Bernstein type operators on a triangle with all curved sides*, Abstract and Applied Analysis, 2014 (2014), Art. ID 820130.
10. T. Cătinaş, D. Otrocol, *Iterates of Bernstein type operators on a square with one curved side via contraction principle*, Fixed Point Theory, 14 (2013) no. 1, 97-106.

### **b) Articole publicate în reviste cotate ISI**

1. T. Cătinaş, *The bivariate Shepard operator of Bernoulli type*, Calcolo, 44 (2007) no. 4, pp. 189-202.
2. Gh. Coman, T. Cătinaş, *Interpolation operators on a tetrahedron with three curved edges*, Calcolo, 47 (2010) no. 2, pp. 113-128.

3. Gh. Coman, T. Cătinaş, *Interpolation operators on a triangle with one curved side*, BIT Numerical Mathematics, 50 (2010) no. 2, pp. 243-267.
4. P. Blaga, T. Cătinaş, Gh. Coman, *Bernstein-type operators on triangle with all curved sides*, Appl. Math. Comput., 218 (2011), pp. 3072--3082.
5. P. Blaga, T. Cătinaş, Gh. Coman, *Bernstein-type operators on triangle with one curved side*, Mediterr. J. Math., 9 (2012) no. 4, pp. 843-855.
6. T. Cătinaş, D. Otrocol, *Iterates of Bernstein type operators on a square with one curved side via contraction principle*, Fixed Point Theory, 14 (2013) no. 1, 97-106.
7. T. Cătinaş, P. Blaga, Gh. Coman, *Surfaces generation by blending interpolation on a triangle with one curved side*, Results in Mathematics, 64 (2013) nos. 3-4, pp. 343-355.
8. T. Cătinaş, D. Otrocol, *Iterates of multivariate Cheney-Sharma operators*, J. Comput. Anal. Appl., 15 (2013) no. 7, pp. 1240-1246.
9. T. Cătinaş, P. Blaga, Gh. Coman, *Interpolation operators on some triangles with curved sides*, Scientific Annals of "Al.I. Cuza" University of Iasi, 2013, DOI: 10.2478/aicu-2013-0028.
10. T. Cătinaş, *Bivariate quasi-interpolation operator of Bernoulli type*, Mediterr. J. Math., 11 (2014), no.4, pp. 1171-1183.
11. T. Cătinaş, *Iterates of Bernstein type operators on a triangle with all curved sides*, Abstract and Applied Analysis, 2014 (2014), Art. ID 820130.
12. T. Cătinaş, D. Otrocol, I. A. Rus, *The iterates of positive linear operators with the set of constant functions as the fixed point set*, Carpathian J. Math., 2015, accepted for publication.

**c) Articole publicate în ISI proceedings**

- T. Cătinaş, *A modified version of bivariate Shepard-Lidstone operator*, AIP Conf. Proc. -International Conference on Numerical Analysis and Applied Mathematics, 2007, vol. 936, (Ed. T. Simos, et al.), ISBN 978-0-7354-0447-2, pp. 109-112.

**d) Articole publicate în reviste recenzate în baze de date internaţionale (BDI):**

1. T. Cătinaş, *Trivariate approximation operators on cube by parametric extensions*, Acta Universitatis Apulensis, Mathematics-Informatics, no. 4 (2002), pp. 29-36.

2. T. Cătinaş, *The combined Shepard-Abel-Goncharov univariate operator*, Rev. Anal. Numér. Théor. Approx., 32 (2003) no. 1, pp. 11-20.
3. T. Cătinaş, *Interpolating on some nodes of a given triangle*, Studia Univ. "Babeş-Bolyai", Mathematica, 48 (2003) no. 4, pp. 3-8.
4. T. Cătinaş, *Bounds for the remainder in the bivariate Shepard interpolation of Lidstone type*, Rev. Anal. Numér. Théor. Approx., 34 (2005) no. 1, 47-53.
5. T. Cătinaş, *Three ways of defining the bivariate Shepard operator of Lidstone type*, Studia Univ. "Babeş-Bolyai", Mathematica, 50 (2005) no. 3, pp. 57-63.
6. T. Cătinaş, *The combined Shepard-Lidstone bivariate operator*, Trends and Applications in Constructive Approximation, (Eds. M.G. de Bruin, D.H. Mache, J. Szabados), International Series of Numerical Mathematics, vol. 151, Springer Group-Birkhäuser Verlag, 2005, pp. 77-89.
7. T. Cătinaş, *The Lidstone interpolation on tetrahedron*, J. Appl. Funct. Anal., (2006) no. 4, pp. 425-439.
8. T. Cătinaş, Gh. Coman, *Optimal quadrature formula based on  $\varphi$ -function method*, Studia Univ. "Babeş-Bolyai", Mathematica, 52 (2006) no. 1, pp. 49-64.
9. T. Cătinaş, *A method of interpolation for scattered data based on triangulation*, Studia Univ. "Babeş-Bolyai", Mathematica, 51 (2006) no. 4, pp. 55-63.
10. T. Cătinaş, Gh. Coman, *Some interpolation operators on a simplex domain*, Studia Univ. "Babeş-Bolyai", Mathematica, 52 (2007) no. 3, pp. 25-34.
11. T. Cătinaş, Gh. Coman, *Elementary spline functions*, Rev. Anal. Numér. Théor. Approx., 38 (2008) no. 2, pp. 143-149.
12. P. Blaga, T. Cătinaş, Gh. Coman, *Bernstein-type operators on tetrahedrons*, Studia Univ. "Babeş-Bolyai", Mathematica, 54 (2009), no. 4, pp. 3-19.
13. P. Blaga, T. Cătinaş, Gh. Coman, *Bernstein-type operators on a square with one and two curved sides*, Studia Univ. "Babeş-Bolyai", Mathematica, 55 (2010) no. 3, pp. 51-67.

**e) Articole publicate în volume ale unor conferințe internaționale cu referenți**

1. T. Cătinaş, *On trivariate approximation*, Proceedings of the International Symposium on Numerical Analysis and Approximation Theory, Cluj-Napoca, 2002, pp. 207-230.
2. T. Cătinaş, *Bivariate interpolation by combined Shepard operators*, Proceedings of 17th IMACS World Congress, Scientific Computation, Applied Mathematics and Simulation, (Eds. P. Borne, M. Benrejeb, N. Dangoumau, L. Lorimier), 2005, ISBN 2-915913-02-1, pp. 1-7.

3. T. Cătinaş, *A cubature formula based on Bernoulli interpolation for rectangle*, Proceeding of Internat. Conf. on Engineering and Mathematics, 2007, ISBN 978-84-95809-29-2, pp. 31-36.

**f) Articole publicate în reviste naționale**

1. T. Cătinaş, *The combined Shepard-Lidstone univariate operator*, "Tiberiu Popoviciu" Itinerant Seminar of Functional Equations, Approximation and Convexity, Cluj-Napoca, May 21-25, 2003, pp. 3-15.
2. T. Cătinaş, *On the generalized Newton algorithm for some nodes given on tetrahedron*, Seminar on Numerical and Statistical Calculus, Cluj-Napoca, 2004, pp. 65-76.

**g) Teza de doctorat**

Titlu: *Operatori de aproximare multidimensionali. Aplicații*

Conducător științific: prof. dr. Gheorghe Coman

Susținută: 2005

**h) Cărți publicate în edituri naționale recunoscute CNCSIS**

1. Gh. Coman, T. Cătinaş, M. Birou, A. Oprişan, C. Oşan, I. Pop, I. Somogyi, I. Todea, *Interpolation operators*, Ed. "Casa Cărții de Știință", Cluj-Napoca, 2004.
2. Gh. Coman, I. Chiorean, T. Cătinaş, *Numerical Analysis. An Advanced Course*, Ed. Presa Universitară Clujeană, 2007.
3. T. Cătinaş, *Interpolation of scattered data*, Ed. "Casa Cărții de Știință", Cluj-Napoca, 2007.
4. I. Chiorean, T. Cătinaş, R. Trîmbițas, *Analiză Numerică*, Ed. Presa Universitară Clujeană, Cluj-Napoca, 2010.

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Semnătura: