

IN MEMORIAM PROFESSOR DIMITRIE D. STANCU,
HONORARY MEMBER OF THE ROMANIAN ACADEMY

The Romanian Mathematical Sciences and in particular the mathematics community from Cluj-Napoca have suffered a great loss with the decease of professor Dimitrie D. Stancu, honorary member of the Romanian Academy.

By his own results and by the results of the collaborators he mentored, Dimitrie D. Stancu has outstandingly contributed to the development of the Numerical Analysis and Approximation Theory, the fundamental fields of Mathematics in Cluj-Napoca. The linear positive operators of Stancu type are well known in this domain, and their properties have been studied by hundreds of mathematicians around the world. Over two hundred articles published in reputed journals contain (according to MathSciNet and ZBL) in their title the name of Stancu, not to mention the citations.

D.D. Stancu was born on February 11, 1927, in Călăcea village, Timiș county (Romania). He lost his father at a small age. Since his mother had no financial possibilities to raise him, he went to the “Regina Maria” Orphanage from Arad for some time. There he started the primary school, which he finished in a nearby town, Sânnicolaul Mic. He graduated from the gymnasium school in Arad, and then from the “Moise Nicoară” Highschool in the same city. During these years, the mathematics was his favourite subject.

In 1947 he was admitted as student at the Faculty of Mathematics and Physics of the “Babeș-Bolyai” University in Cluj. The talent and the hard-working behaviour he showed as student, as well as the results he obtained in the first two years determined the leaders of the Faculty to appoint him as “preparator” (the position before teaching assistant) in his third year as student. After graduating the Faculty, he was appointed as teaching assistant at the Mathematical Analysis chair, led by the famous academician Tiberiu Popoviciu. He has obtained his PhD degree in 1956 (title of thesis: *A study of the polynomial interpolation of functions of several variables, with applications to the numerical differentiation and integration; methods for evaluating the remainders* (in Romanian), advisor: acad. T. Popoviciu), and then he gradually promoted until he became full professor in 1968.

He supervised in turn over 40 PhD students¹ and he contributed to the formation of many specialists in the field of Numerical Analysis and Approximation Theory. For several years he was the head of the Statistical and Numerical Calculus Chair, and he also served as vice-dean of the Faculty. During 1957–1961 he also worked at the Institute of Numerical Analysis founded by

¹The full list can be consulted at the Mathematics Genealogy Project <http://www.genealogy.ams.org/> or <http://genealogy.math.ndsu.nodak.edu/>

Tiberiu Popoviciu, and then, in the academic year 1961–1962, he benefitted from a fellowship at the University of Wisconsin at Madison, Department of Numerical Analysis (lead by the late prof. P.C. Hammer).

Between 1978–2013 he was a member of the Editorial Board of the journal *Calcolo* (edited since 1998 by Springer-Verlag) and between 2002–2014 he was the Editor-in-Chief of the journal *Revue d'Analyse Numérique et de Théorie de l'Approximation* (www.ictp.acad.ro/anta), edited at the “Tiberiu Popoviciu” Institute of Numerical Analysis under the auspices of the Romanian Academy. He was also member of the Editorial Board of the journals *Mathematica*, in 1976 (edited under the auspices of the Romanian Academy) and *Studia Universitatis Babeş-Bolyai, Serie Mathematica* (between 1977–1995 and 2005–2014).

He published over 120 scientific works in reputed journals in our country and abroad, and he attended important international conferences as invited speaker.

He taught courses in Numerical Analysis and Approximation Theory, Number Theory, Probability Theory and Statistics, Mathematical Analysis and others. He was a member of the *American Mathematical Society* (since 1961) and of *Gesellschaft für Angewandte Mathematik und Mechanik* (GAMM), and served as a referee for *Mathematical Reviews* and *Zentralblatt Math*.

Not only he was a man gifted with mathematical talent, but he was also sincere, modest and close to his collaborators and students. It is not surprising that so many students chose his field of interest and made further contributions. As a token of appreciation for his outstanding merits, he was elected in 1999 as honorary member of the Romanian Academy, while the “Lucian Blaga” University in Sibiu and the North University of Baia Mare awarded him the title of Doctor Honoris Causa.

As we have mentioned before, Didi (as his close friends used to call him) worked 4 years at our Institute, since its very foundation. He became and remained very attached to the people here. As a token of gratitude and respect for his personality, the Institute will set up and host a webpage for professor Stancu (<http://www.ictp.acad.ro/stancu>), digitizing and uploading all the papers that are allowed according to the copyright rules.

The mathematicians from Cluj-Napoca, as well as all his collaborators across the world deeply regret the sudden death of professor Stancu, who represented and will continue to represent an important name among the Romanian mathematicians.

I. Păvăloiu and E. Căţinaş
“Tiberiu Popoviciu” Institute of Numerical Analysis

PROFESSOR DIMITRIE D. STANCU – SCIENTIFIC ACTIVITY

I. BOOKS

- (3) D.D. Stancu, Gh. Coman, P. Blaga, *Analiză numerică și teoria aproximării [Numerical Analysis and Approximation Theory]*, Vol. II. Presa Universitară Clujeană, Cluj-Napoca, 2002, xii+433 pp. (in Romanian) ISBN 973-610-099-5 (vol. II), ISBN 073-610-100-2.
- (2) D.D. Stancu, Gh. Coman, O. Agratini, R. Trîmbițaș, *Analiză numerică și teoria aproximării [Numerical Analysis and Approximation Theory]*, Vol. I. Presa Universitară Clujeană, Cluj-Napoca, 2001, 414 pp. (in Romanian), ISBN 973-610-043-X.
- (1) D.D. Stancu, *Course (with problems) in Numerical Analysis*, Univ. “Babeș-Bolyai”, Cluj-Napoca, 1977, 330 pp. (in Romanian).

D.D. Stancu has also coordinated (with Gh. Coman) the third volume in the series (2)–(3) above.

II. SCIENTIFIC ARTICLES PUBLISHED IN JOURNALS AND PROCEEDINGS

- (111) D.D. Stancu, E.I. Stoica, *On the use of Abel-Jensen type combinatorial formulas for construction and investigation of some algebraic polynomial operators of approximation*, *Studia Univ. Babeș-Bolyai Math.*, **54** (2009) no. 4, 167–182.
- (110) D.D. Stancu, I. Tașcu, *On some bivariate interpolation procedures*, *Rev. Anal. Numér. Théor. Approx.*, **33** (2004) no. 1, 97–106.
- (109) D.D. Stancu, I. Tașcu, A. Beian-Putura, *On a class of generalized Gauss-Christoffel quadrature formulae*, *Studia Univ. Babeș-Bolyai Math.*, **49** (2004) no. 1, 93–99.
- (108) D.D. Stancu, I. Tașcu, A. Beian-Putura, *Weighted quadrature formulae of Gauss-Christoffel-Stancu type*, *Rev. Anal. Numér. Théor. Approx.*, **32** (2003) no. 2, 223–234.
- (107) D.D. Stancu, *Use of an identity of A. Hurwitz for construction of a linear positive operator of approximation*, *Rev. Anal. Numér. Théor. Approx.*, **31** (2002) no. 1, 115–118.
- (106) D.D. Stancu, *On approximation of functions by means of compound poweroid operators*, *Mathematical Analysis and Approximation Theory, Proceedings of RoGer-2002*, (Eds. A. Lupaș, H.H. Gonska, L. Lupaș), Sibiu, 2002, 259–271.
- (105) D.D. Stancu, *Methods for construction of linear positive operators of approximation*, *Proceedings of the International Symposium on Numerical Analysis and Approximation Theory*, R. Trîmbițaș (Ed.), (2002), 23–45, Cluj Univ. Press, Cluj-Napoca, ISBN 973-610-166-5.
- (104) D.D. Stancu, L.A. Cabulea, D. Pop, *Approximation of bivariate functions by means of the operators $S_{m,n}^{\alpha,\beta;a,b}$* , *Studia Univ. Babeș-Bolyai Math.*, **47** (2002) no. 4, 105–113.
- (103) D.D. Stancu, A.C. Simoncelli, *Compound poweroid operators of approximation*, *Proceedings of the Fourth International Conference on Functional Analysis and Approximation Theory, Vol. II (Potenza, 2000)*. *Rend. Circ. Mat. Palermo* (2) Suppl., (2002) no. 68, part II, 845–854.
- (102) D.D. Stancu, *On the approximation of functions by means of the operators of binomial type of Tiberiu Popoviciu*, *Rev. Anal. Numér. Théor. Approx.*, **30** (2001) no. 1, 95–105.
- (101) D.D. Stancu, J.W. Drane, *Approximation of functions by means of the poweroid operators $S_{m,r,s}^{\alpha}$* , *Trends in approximation theory (Nashville, TN, 2000)*, 401–405, *Innov. Appl. Math.*, Vanderbilt Univ. Press, Nashville, TN, 2001.

- (100) D.D. Stancu, *Numerical integration of functions by Gauss-Turán-Ionescu type quadratures*. *Mathematical contributions of D. V. Ionescu*, 59-68, Babeş-Bolyai Univ. Dept. Appl. Math., Cluj-Napoca, 2001.
- (99) D.D. Stancu, P. Giurgescu, *On the evaluation of remainders in some linear approximation formulas*, RoGer 2000 Brasov, 141-147, Schreihe Fachbereichs Math. Gerhard Mercator Univ., 485, Gerhard-Mercator-Univ., Duisburg, 2000.
- (98) D.D. Stancu, A. Vernescu, *On some remarkable positive polynomial operators of approximation*, *Rev. Anal. Numér. Théor. Approx.*, **28** (1999) no. 1, 85-95.
- (97) D.D. Stancu, A.D. Vernescu, *Approximation of bivariate functions by means of a class of operators of Tiberiu Popoviciu type*, *Math. Rep.*, **1(51)** (1999) no. 3, 411-419.
- (96) D.D. Stancu, *On the use of divided differences in the investigation of interpolatory positive linear operators*, *Studia Sci. Math. Hungar.*, **35** (1999) nos. 1-2, 65-80.
- (95) D.D. Stancu, *The evaluation of the remainders in approximation formulas by linear positive operators of interpolatory type*, *Gen. Math.*, **6** (1998), 85-88.
- (94) D.D. Stancu, M.R. Occorsio, *On approximation by binomial operators of Tiberiu Popoviciu type*, *Rev. Anal. Numér. Théor. Approx.*, **27** (1998) no. 1, 167-181.
- (93) L. Gori, D.D. Stancu, *Mean-value formulae for integrals involving generalized orthogonal polynomials*, *Rev. Anal. Numér. Théor. Approx.*, **27** (1998) no. 1, 107-115.
- (92) D.D. Stancu, *The remainder in the approximation by a generalized Bernstein operator: a representation by a convex combination of second-order divided differences*, *Calcolo*, **35** (1998) no. 1, 53-62.
- (91) D.D. Stancu, *Representation of remainders in approximation formulae by some discrete type linear positive operators*, *Proceedings of the Third International Conference on Functional Analysis and Approximation Theory*, vol. II (Acquafredda di Maratea, 1996). *Rend. Circ. Mat. Palermo* (2) Suppl., vol. II (1998), no. 52, 781-791.
- (90) D.D. Stancu, C. Cismaşiu, *On an approximating linear positive operator of Cheney-Sharma*, *Rev. Anal. Numér. Théor. Approx.*, **26** (1997) nos. 1-2, 221-227.
- (89) D.D. Stancu, *Approximation properties of a class of multiparameter positive linear operators*, *Proceedings of the International Conference on Approximation and Optimization (Romania) - ICAOR*, Cluj-Napoca, July 29 - August 1, 1996, D.D. Stancu, Gh. Coman, W. Breckner, P. Blaga (Eds.), Vol. I, Transilvania Press, Cluj-Napoca, 1997, 107-120, ISBN 973-98180-7-2.
- (88) D.D. Stancu, *A note on the remainder in a polynomial approximation formula*, *Studia Univ. Babeş-Bolyai Math.*, **41** (1996) no. 2, 95-101.
- (87) D.D. Stancu, *On the beta approximating operators of second kind*, *Rev. Anal. Numér. Théor. Approx.*, **24** (1995) nos. 1-2, 231-239.
- (86) D.D. Stancu, L. Gori, *On the monotonicity properties of a sequence of operators of Meyer-König and Zeller type*, *Studia Univ. Babeş-Bolyai Math.*, **39** (1994) no. 2, 97-106.
- (85) D.D. Stancu, *On the integral representation of the remainders in approximation formulae by means of interpolatory linear positive operators*, Univ. Babeş-Bolyai, Faculty of Mathematics and Informatics, Research Seminars, Seminar on Numerical and Statistical Calculus, Preprint nr. 1 (1994), 69-80.
- (84) D.D. Stancu, R.M. Occorsio, *Mean-value formulae for integrals obtained by using Gaussian-type quadratures*, *Rendiconti del Circolo Matematico di Palermo*, Ser. II, (1993) no. 33, 463-478 (Proceedings of the Second International Conference in Functional Analysis and Approximation Theory, Acquafredda di Maratea, Italy, 1992).

- (83) D.D. Stancu, F. Stancu, *Quadrature rules obtained by means of interpolatory linear positive operators*, Rev. Anal. Numér. Théor. Approx., **21** (1992) no. 1, 75–81.
- (82) D.D. Stancu, *On some spline-type operators of approximation*, Studia Univ. Babeş-Bolyai, Cluj-Napoca, Ser. Math., **32** (1987) no. 4, 47–54.
- (81) D.D. Stancu, *On a class of multivariate linear positive approximating operators*, Studia Univ. Babeş-Bolyai, Ser. Math., **31** (1986) no. 4, 56–64.
- (80) D.D. Stancu, *On the representation by divided differences of the remainder in Bernstein's approximating formula*, Univ. Babeş-Bolyai, Cluj-Napoca, Research Seminars: Seminar on Numerical and Statistical Calculus, Preprint no. 4, 1985, 103–110.
- (79) D.D. Stancu, *Probabilistic approach to a class of generalized Bernstein approximating operators*, Anal. Numér. Théor. Approx., **14** (1985) no. 1, 83–89.
- (78) D.D. Stancu, *Bivariate approximation by some Bernstein-type operators*, Proc. Colloquium on Approximation and Optimization, Univ. Babeş-Bolyai, Cluj-Napoca, 1984, 25–34.
- (77) D.D. Stancu, *A note on a multiparameter Bernstein-type approximating operator*, Mathematica (Cluj), **26(49)** (1984) no. 2, 153–157.
- (76) D.D. Stancu, *Generalized Bernstein approximating operators*, Itinerant Seminar on functional equations, approximation and convexity, Univ. Babeş-Bolyai, Cluj-Napoca, 1984, 185–192.
- (75) D.D. Stancu, *On the representation by divided and finite differences of some linear positive operators constructed by means of probabilistic methods*, Itinerant Seminar on functional equations, approximation and convexity, Univ. Babeş-Bolyai, Cluj-Napoca, 1983, 159–166.
- (74) D.D. Stancu, *Approximation of functions by means of a new generalized Bernstein operator*, Calcolo, **20** (1983) no. 2, 211–229.
- (73) D.D. Stancu, *Procedures of numerical integration of functions obtained by means of some linear positive operators*, Itinerant Seminar on functional equations, approximation and convexity, Univ. Babeş-Bolyai, Cluj-Napoca, 1982, 333–337.
- (72) D.D. Stancu, *Quadrature formulas constructed by using certain linear positive operators*, Numerical Integration (Proc. Conf. Mth. Res. Inst. Oberwolfach, 1981; ed. G. Hämmerlin; ISNM 57), Birkhäuser, Basel, 1982, 241–251.
- (71) D.D. Stancu, *A generalization of the Schoenberg approximating spline operator*, Studia Univ. Babeş-Bolyai, Ser. Math.-Mech., **26** (1981) no. 2, 37–42.
- (70) D.D. Stancu, *On a generalization of the Tiberiu Popoviciu quadrature formula of maximum degree of exactness*, Itinerant Seminar on functional equations, approximation and convexity, Univ. Babeş-Bolyai, Cluj-Napoca, 1981, 383–394 (in Romanian).
- (69) D.D. Stancu, *A study of the remainder in an approximation formula using a Favard-Szász type operator*, Studia Univ. Babeş-Bolyai, Cluj-Napoca, Ser. Math.-Mech., **25** (1980) no. 4, 70–76.
- (68) D.D. Stancu, *Representations of the remainder in some linear approximation formulas*, Itinerant Seminar on functional equations, approximation and convexity, Univ. Babeş-Bolyai, Cluj-Napoca, 1980, 127–129 (in Romanian).
- (67) D.D. Stancu, *Representations of the remainder in an approximation formula of Favard-type*, Itinerant seminar on functional equations, approximation and convexity, Univ. Babeş-Bolyai, Cluj-Napoca, 1979, 185–190 (in Romanian).
- (66) D.D. Stancu, *Application of divided differences to the study of monotonicity of the derivatives of the sequence of Bernstein polynomials*, Calcolo, **16** (1979), 431–445.
- (65) D.D. Stancu, *An extremal problem in the theory of numerical quadratures with multiple nodes*, Proc. Third Colloquium on Operations Research (Cluj-Napoca, 1978), Univ. Babeş-Bolyai, 1979, 257–262.

- (64) D.D. Stancu, *On the precision of approximation of differentiable functions by means of linear positive operators*, Itinerant Seminar on functional equations, approximation and convexity, Univ. Babeş-Bolyai, Cluj-Napoca, 1978, 74–75 (in Romanian).
- (63) D.D. Stancu, *Approximation of bivariate functions by means of some Bernstein-type operators*, Multivariate Approximation (Proc. Sympos. Durham, 1977; ed. D.C. Handscomb), 189–208, Academic Press, London, 1978.
- (62) D.D. Stancu, *Folosirea interpolării liniare pentru construirea unei clase de polinoame Bernstein*, [Use of linear interpolation for constructing a class of Bernstein polynomials] Studii și Cercet. Matematică, **28** (1976) no. 3, 369–379 (in Romanian).
- (61) D.D. Stancu, *Use of Biermann's interpolation formula for constructing a class of positive linear operators for approximating multivariate functions*, Constructive Theory of Functions of Several Variables (Proc. Conf. Math. Res. Inst. Oberwolfach, 1976; eds. W. Schempp, K. Zeller), Lecture Notes in Mathematics, vol. 571, 1977, 267–276, Springer, Berlin.
- (60) D.D. Stancu, *Evaluation of the remainders in certain approximation procedures by Meyer-König and Zeller-type operators*, Numerische Methoden der Approximationstheorie, Bd. II (Proc. Conf. Math. Res. Inst. Oberwolfach, 1973; eds. L. Collatz.-G. Meinardus; ISNM 26), Basel-Stuttgart, 1975, 139–150.
- (59) D.D. Stancu, *A new generalization of the Meyer-König and Zeller operators*, Analele Univ. Timișoara, Ser. St. Mathem., **10** (1972) no. 2, 207–214.
- (58) D.D. Stancu, *Approximation of functions by means of some new classes of positive linear operators*, Numerische Methoden der Approximationstheorie, Bd. I (Proc. Conf. Math. Res. Inst. Oberwolfach, 1971; eds. L. Collatz, G. Meinardus), 187–203, Birkhäuser, Basel, 1972.
- (57) D.D. Stancu, *On the remainder of approximation of functions by means of a parameter-dependent linear polynomial operator*, Studia Univ. Babeş-Bolyai, Cluj, Ser. Math.-Mech., **16** (1971) no. 2, 59–66.
- (56) D.D. Stancu, *On the approximation of functions of two variables by means of a class of linear operators*, Constructive Theory of Functions (Proc. Int. Conf. Varna, May 19–25, 1971; eds. B. Penko, D. Vascof), Izdat. Bolgar. Akad. Nauk, 327–336, 1972, Sofia.
- (55) D.D. Stancu, *Approximation properties of a class of linear positive operators*, Studia Univ. Babeş-Bolyai, Cluj, Ser. Math.-Mech., **15** (1970) no. 2, 33–38.
- (54) D.D. Stancu, *Two classes of positive linear operators*, Analele Univ. Timișoara, ser. St. Matematică, **8** (1970), 213–220.
- (53) D.D. Stancu, *Probabilistic methods in the theory of approximation of functions of several variables by linear positive operators*, “Approximation Theory” (Proc. Sympos. Lancaster, 1969; ed. A. Talbot), 329–342. Academic Press, London-New York, 1970.
- (52) D.D. Stancu, *A new class of uniform approximating polynomial operators in two and several variables*, Proc. Conf. Constructive Theory of Functions, Budapest, 1969 (eds. G. Alexits, S. B. Steckin), 443–455, Budapest Akademiai Kiadó, 1972.
- (51) D.D. Stancu, *Relații de recurență pentru momentele centrate ale unor legi discrete de probabilități*, Studia Univ. Babeş-Bolyai, Ser. Math.-Mech., **15** (1970) no. 1, 55–62 (in Romanian).
- (50) D.D. Stancu, *Asupra funcțiilor de repartiție pentru legile probabilistice ale lui Bernoulli și Poisson multidimensionale*, Studii și Cercet. Matem., **22** (1970) no. 4, 675–681 (in Romanian).

- (49) D.D. Stancu, *Aproximarea funcțiilor de două și mai multe variabile printr-o clasă de polinoame de tip Bernstein*, Studii și Cercet. Matem., **22** (1970) no. 2, 335–345 (in Romanian).
- (48) D.D. Stancu, *Asupra unei generalizări a polinoamelor lui Bernstein*, Studia Univ. Babeș-Bolyai, Cluj, Ser. Math-Phys., **14** (1969) no. 2, 31–45 (in Romanian).
- (47) D.D. Stancu, *Use of probabilistic methods in the theory of uniform approximation of continuous functions*, Revue Roumaine Math. Pures Appl., **14** (1969) no. 5, 673–691.
- (46) D.D. Stancu, *On a new positive linear polynomial operator*, Proc. Japan Acad., **44** (1968), 221–224.
- (45) D.D. Stancu, *On the Markov probability distribution*, Bull. Math. Soc. Sci. Math. R.S. Roumaine, **12** (1968) no. 4, 203–208.
- (44) D.D. Stancu, *Approximation of functions by a new class of linear polynomial operators*, Revue Roumaine Math. Pures Appl., **13** (1968) no. 8, 1173–1194.
- (43) D.D. Stancu, *On the moments of negative order in the positive Bernoulli and Poisson variables*, Studia Univ. Babeș-Bolyai, Cluj, **13** (1968) no. 1, 27–31.
- (42) D.D. Stancu, *On the moments of the Polya distribution*, Acad. R.P. Române, Institutul de Calcul, Proc. Colloquium on Approximation Theory, Cluj, 1967, p. 216.
- (41) D.D. Stancu, *On the monotonicity of the sequence formed by the first order derivatives of the Bernstein polynomials*, Mathem. Zeitschr., **98** (1967), 46–51.
- (40) D.D. Stancu, *A method for computing the moments of the multinomial and multiple Poisson distributions*, Studia Univ. Babeș-Bolyai, Cluj, **12** (1967) no. 1, 49–54.
- (39) D.D. Stancu, *On Hermite's osculatory interpolation formula and on some generalizations of it*, Mathematica (Cluj), **8(31)** (1966) no. 2, 373–391.
- (38) A.H. Stroud, D.D. Stancu, *Quadrature formulas with multiple Gaussian nodes*, J. SIAM Numer. Analysis, **2** (1965), 129–143.
- (37) D.D. Stancu, *A general interpolation formula*, Acad. R.P. Române, Fil. Cluj, Institutul de Calcul, Proc. Colloquium on convex functions, with applications to numerical calculus, Cluj, 1965, 92–93.
- (36) D.D. Stancu, *The remainder of certain linear approximation formulas in two variables*, J. SIAM Numer. Analysis, Ser. B., **1** (1964), 137–163.
- (35) D.D. Stancu, *Asupra momentelor unor variabile aleatoare discrete*, Studia Univ. Babeș-Bolyai, Ser. Math.-Physica, **9** (1964) no. 2, 35–48 (in Romanian).
- (34) D.D. Stancu, A.H. Stroud, *Quadrature formulas with simple Gaussian nodes and multiple fixed nodes*, Mathematics of Computation, **17** (1963) no. 84, 384–394.
- (33) D.D. Stancu, *Generalizations of an inequality of G.G. Lorentz*, Analele Științifice Univ. "Al. I. Cuza" Iași, **9** (1963) no. 1, 49–58.
- (32) D.D. Stancu, *Evaluation of the remainder term in approximation formula by Bernstein polynomials*, Mathematics of Computation, **17** (1963) no. 83, 270–278.
- (31) D.D. Stancu, *A method for obtaining polynomials of Bernstein type of two variables*, Amer. Math. Monthly, **70** (1963) no. 3, 260–264.
- (30) D.D. Stancu, *The remainder of certain linear approximation formulas for two variables*, Amer. Math. Society Notices, **9** (1962) no. 2, p. 207.
- (29) D.D. Stancu, *Asupra reprezentării integrale a restului din formula lui Taylor de două variabile*, Acad. R.P. Române, Fil. Cluj, Studii și Cercet. Matem., **13** (1962) no. 1, 175–182.
- (28) D.D. Stancu, *On the remainder in the approximation formulas by Bernstein's polynomials*, Amer. Math. Society Notices, **9** (1962) no. 1, p. 26.
- (27) D.D. Stancu, *A generalization of a G.G. Lorentz inequality*, Amer. Math. Society Notices, **8** (1961) no. 7, p. 563.

- (26) D.D. Stancu, *Expresia restului în unele formule de derivare parțială numerică*, Acad. R.P. Române, Fil. Cluj, Studii și Cercet. Matem., **11** (1960) no. 2, 371–380 (in Romanian).
- (25) D.D. Stancu, *Généralisations de certaines inégalités des T. Popoviciu et G.G. Lorentz*, Deuxième Congrès Mathématique Hongrois, Budapest 24-31 August 1960, Akademiai Kiadó, Budapest, 1961, vol. I, Sect. 3a, 55–56.
- (24) D.D. Stancu, *Asupra calculului coeficienților unei formule generale de cuadratură*, Studia Univ. Babeș-Bolyai, Cluj, Ser. Math.-Phys, **5** (1960) no. 1, 187–192 (in Romanian).
- (23) D.D. Stancu, *Sur l'approximation des dérivées des fonctions par les dérivées correspondantes de certains polynomes du type Bernstein*, Mathematica (Cluj), **2(25)** (1960) no. 2, 335–348.
- (22) D.D. Stancu, *Some Bernstein polynomials in two variables and their applications*, Soviet Math. D., **1** (1961), 1025–1028.
- (21) D.D. Stancu, *Asupra unor polinoame de tip Bernstein*, Acad. R.P. Române, Fil. Iași, Studii și Cercet. Matematică, **11** (1960) no. 2, 221–233 (in Romanian).
- (20) D.D. Stancu, *Expresia integrală a restului într-o formulă de tip Taylor pentru funcțiile de două variabile*, Acad. R.P. Române, Fil. Cluj, Studii și Cercet. Matem., **11** (1960) no. 1, 177–183 (in Romanian).
- (19) D.D. Stancu, *Asupra aproximării funcțiilor de două variabile prin polinoame de tip Bernstein. Câteva evaluări asimptotice*, Acad. R.P. Române, Fil. Cluj, Studii și Cercet. Matem., **11** (1960) no. 1, 171–176 (in Romanian).
- (18) D.D. Stancu, *O nekotorâh mnogocilenah dvuh peremennâh tipa Bernsteina i nekotorâh ih primeniah*, Dokl. Akad. Nauk, 555R **134** (1960) no. 1, 48–51 (in Russian); translated in English as: *Some Bernstein polynomials in two variables and their applications*, in: Soviet Math. D., **1** (1961), 1025–1028 (see above).
- (17) D.D. Stancu, *Asupra unei demonstrații a teoremei lui Weierstrass*, Buletinul Inst. Politehnic Iași (N.S.) **5(9)** (1959) nos. 1–2, 47–50 (in Romanian).
- (16) D.D. Stancu, *Sur quelques formules générales de quadrature du type Gauss-Christoffel*, Mathematica (Cluj), **1(24)** (1959) no. 1, 167–182.
- (15) D.D. Stancu, *Asupra aproximării prin polinoame de tip Bernstein a funcțiilor de două variabile*, Comunic. Acad. R.P. Române, **9** (1959) no. 8, 773–777 (in Romanian).
- (14) D.D. Stancu, *O nekotorâh razlojeniah Teilora dlia funkții neskolkih peremennâh*, [Some Taylor developments for functions of several variables], Revue Math. Pures Appl., Acad. R.P. Române, **4** (1959) no. 2, 249–265 (in Russian).
- (13) D.D. Stancu, *Asupra integrării numerice a funcțiilor de două variabile*, Acad. R.P. Române, Fil. Iași, Studii și Cercet. St. Matem., **9** (1958) nos. 1–4, 5–21 (in Romanian).
- (12) D.D. Stancu, *O metodă pentru construirea de formule de cubatură pentru funcțiile de două variabile*, Acad. R.P. Române, Fil. Cluj, Studii și Cercet. Matem., **9** (1958), 351–369 (in Romanian).
- (11) D.D. Stancu, *Asupra formulelor de cuadratură de tip Gauss*, Studia Univ. V. Babeș și Bolyai, Cluj, **1** (1958), 71–84 (in Romanian).
- (10) D.D. Stancu, *Asupra unor formule generale de integrare numerică*, Acad. R.P. Române, Studii și Cercet. Matem., **9** (1958) no. 1, 209–216 (in Romanian).
- (9) D.D. Stancu, *O metodă pentru construirea de formule de cuadratură de grad înalt de exactitate*, Comunic. Acad. R.P. Rom., **8** (1958) no. 4, 349–358 (in Romanian).
- (8) D.D. Stancu, *Generalizarea formulei de cuadratură a lui Gauss-Christoffel*, Acad. R.P. Române, Fil. Iași, Studii și Cercet. Matem., **8** (1957) no. 1, 1–18 (in Romanian).

- (7) D.D. Stancu, *Asupra unei clase de polinoame ortogonale și unor formule generale de cuadratură cu număr minim de termeni* [Sur une classe de polynômes orthogonaux et sur des formules générales de quadrature à nombre minimum de termes], Buletin Mat. Soc. St. Mat. Fiz., R.P.R., **1(49)** (1957) no. 4, 479–498 (in Romanian).
- (6) D.D. Stancu, *Generalizarea unor polinoame de interpolare pentru funcțiile de mai multe variabile*, Buletinul Inst. Politehnic Iași (N.5), **3(7)** (1957) nos. 1–2, 31–38 (in Romanian).
- (5) D.D. Stancu, *Asupra formulei de interpolare a lui Hermite și a unor aplicații ale acesteia*, Acad. R.P. Române, Fil. Cluj, Studii și Cercet. Matem., **8** (1957) nos. 3–4, 339–355 (in Romanian).
- (4) D.D. Stancu, *Contribuții la integrarea numerică a funcțiilor de mai multe variabile*, Acad. R.P. Române, Fil. Cluj, Studii și Cercet. Matem., **8** (1957) nos. 1–2, 75–101 (in Romanian).
- (3) D.D. Stancu, *Considerații asupra interpolării polinomiale a funcțiilor de mai multe variabile*, Buletinul Univ. “V. Babeș și Bolyai”, Ser. St. Naturii, **1** (1957), 43–82 (in Romanian).
- (2) D.D. Stancu, *Generalizarea unor formule de interpolare pentru funcțiile de mai multe variabile și unele considerații asupra formulei de integrare numerică a lui Gauss*, Acad. R.P. Române, Buletin Științific Sect. Sti. Mat. Fiz., **9** (1957) no. 2, 287–313 (in Romanian).
- (1) D.D. Stancu, *Contribuții la derivarea parțială numerică a funcțiilor de două și mai multe variabile*, Acad. R.P. Române, Buletin Științific, Sect. Sti. Mat. Fiz., **8** (1956) no. 4, 733–763 (in Romanian).

III. EDITED VOLUMES.

- (5) Proceedings of the International Conference on Approximation and Optimization (Romania) - ICAOR, Cluj-Napoca, July 29 - August 1, 1996, D.D. Stancu, Gh. Coman, W. Breckner, P. Blaga (Eds.), Vol. II, Transilvania Press, Cluj-Napoca, 1997, viii + 252 pp., ISBN 973-98180-7-2.
- (4) Proceedings of the International Conference on Approximation and Optimization (Romania) - ICAOR, Cluj-Napoca, July 29 - August 1, 1996, D.D. Stancu, Gh. Coman, W. Breckner, P. Blaga (Eds.), Vol. I, Transilvania Press, Cluj-Napoca, 1997, xiv + 374 pp., ISBN 973-98180-7-2.
- (3) Seminar on Numerical and Statistical Calculus, Research Seminars, Nr.9, 1987.
- (2) Seminar on Numerical and Statistical Calculus, Research Seminars, Nr.4, 1985.
- (1) The ALGOL60 Language, Project for Romanian terminology, containing also terms in English, French, German and Russian (in collaboration with G. Moldovan).

IV. OTHER WORKS.

- (7) D.D. Stancu, *Professor Gheorghe Coman at his 60th anniversary*, Studia Univ. Babeș-Bolyai Math., **41** (1996), no. 2, 1–8.
- (6) D.D. Stancu, *On quadratures generated by linear positive operators*, Colloquium on Applications of Mathematics, on the occasion of the 80th birthday of Lothar Collatz. Abstract of lectures, Hamburg, July 1990, p. 94.
- (5) D.D. Stancu, *Linear interpolation, with applications to numerical approximation*, Gaz. Mat., **84** (1979) no. 11, 401–404 (in Romanian).
- (4) D.D. Stancu, *Despre limbajul algoritmic ALGOL-60*, Gaz. Matem., Ser. A, **70** (1965), no. 11, 401–408, 475–481 (in Romanian).
- (3) D.D. Stancu, *Despre limbajul algoritmic internațional ALGOL-60*, Gaz. Matem. Ser. A, **70** (1965) no. 10, 361–368 (in Romanian).

- (2) D.D. Stancu, *Despre programarea automată la calculatoarele electronice cifrice*, *Gazeta Matematică*, Ser. A, **70** (1965), 170–173 (in Romanian).
- (1) D.D. Stancu, *Studiul interpolării polinomiale a funcțiilor de mai multe variabile, cu aplicații la diferențierea și integrarea numerică; Studiul restului [A study of the polynomial interpolation of functions of several variables, with applications to the numerical differentiation and integration; methods for evaluating the remainders*, PhD Thesis, Universitatea din Cluj, 1956, 192 pp. (in Romanian), advisor: acad. Tiberiu Popoviciu.

V. RESEARCH CONTRACT REPORTS.

During 1977–1989, D.D. Stancu has elaborated (as director of a research project with the Ministry of National Education) 12 volumes (each containing at least 100 pages) with the results of the research team in Numerical Analysis, Approximation Theory, Statistical Analysis of experimental data.