Curriculum vitae Vilmos Totik

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Education:

Doctor of Mathematical Sciences: Hungarian Academy of Sciences, 1986.

Ph. D. - Candidate of Mathematical Sciences: Hungarian Academy of Sciences, Hungary, 1980.

M. Sc. in Mathematics: József Attila University, Szeged, Hungary, 1978.

Employment:

1989– Professor, University of South Florida, Tampa (joint appointment with)

1988– Professor, Chair, University of Szeged (previously József Attila University), Szeged

1983–88 Associate Professor, József Attila University, Szeged

1981–83 Assistant Professor, József Attila University, Szeged

1978–81 Research Assistant, József Attila University, Szeged

Editorial work:

1984– Journal of Approximation Theory

1985– Acta Scientiarum Mathematicarum (Szeged)

1989– Zeitschrift für Analysis und Ihre Anwendungen

1990– Constructive Approximation

1993 – Acta Mathematica Hungarica

2005– Surveys in Approximation Theory

Publications:

Monographs:

Moduli of Smoothness (with Z. Ditzian), Springer Series for Computational Mathematics, **9** Springer V., New York 1987.

General Orthogonal Polynomials (with H. Stahl), Encyclopedia of Mathematics, Cambridge University Press, 43, New York 1992.

Weighted approximation with varying weights, Lecture Notes in Mathematics, 1569, Springer Verlag, New York, 1994.

Logarithmic Potentials with External Fields (with E.B. Saff), Grundlehren der mathematischen Wissenschaften, **316**, Springer Verlag, Berlin, Heidelberg, 1997.

Metric properties of harmonic measures, Memoirs of the American Mathematical Society, 184, number 867, 2006.

Problems and Theorems in Set Theory (with P. Komjáth), Problem Books in Mathematics, Springer Verlag, 2006.

Polynomial Approximation on Polytopes, Memoirs of the American Mathematical Society, **212**(2014), 112 pp.

Papers: about 190, see below.

Longer invitations:

1983–85 The Ohio State University, Columbus, Ohio, USA
1984 University of Alberta, Edmonton, Canada
1986 University of Alberta, Edmonton, Canada
1986 University of Kuwait, Kuwait
1987–88 University of South Florida, Tampa, Florida, USA
1992 University of the Witwatersrand, Johannesburg, South Africa

Honors, awards and prizes:

Szele prize (János Bolyai Mathematical Society, 2012) Klebelsberg Prize (University of Szeged, 2011) Révai Emlékérem, (Révai Miklós Grammar School, 2002) Lester R. Ford Award (Mathematical Association of America, 2000) Member of the Hungarian Academy of Sciences, 1993

- G. Alexits Award (János Bolyai Mathematical Society, 1984)
- G. Grünwald Award (János Bolyai Mathematical Society, 1979)
- Miklós Schweitzer Contest, 1st prize 1978, 1st prize 1979, 2nd prize 1976,

Recent Talks:

- Convexity of harmonic measures, SEAM, Tampa, 2016 (plenary talk)
- The real world is complex, Coppenhagen, 2015 (plenary talk)
- International Conference on Applied Mathematics 2014, Hong Kong, 2014 (plenary talk)
- Constructive Functions, Nashville, USA, 2014 (plenary talk)
- Random matrices and Jacobi operators, Mittag-Leffler Institute, Stockholm, Sweden, 2014 (invited talk) XIth international conference on approximation optimization in the Caribbeans, Puebla, Mexico, 2013
- (plenary talk)
- International Workshop on Approximation and Applications (IWATA); Rifredda, Italy, 2013 (plenary talk)
- Erdős Centennial, Budapest, Hungary, 2013 (plenary talk)
- Numbers, Functions and Equations, Visegrad, Hungary, 2013 (invited talk)
- AMS Special Meeting on Approximation and Orthogonal Polynomials, Oxford, Mississippi, USA, 2013 (invited talk)
- AMS Special Meeting on Complex Analysis and Operator Theory, Tampa, FL, 2012 (invited talk)

New Trends in Approximation Theory, Ein Gedi, Israel, 2012 (plenary talk)

ICREA Conference on Approximation Theory and Fourier Analysis, Barcelona,

Spain, 2011 (plenary talk)

Recent developments in Functional Analysis and Approximation Theory, Lecce, Italy, 2011 (pleanary talk)

Harmonic Analysis and Approximations, V., Tsaghadzor, Armenia, 2011 (pleanary talk)

11th Orthogonal Polynomials, Special Functions and Applications (OPSFA), Madrid, Spain, 2011 (plenary talk)

Complex Analysis, Operator Theory, and Approximation, Linz, Austria, 2011 (plenary talk) Special functions and orthogonal polynomials, FOCM, Budapest, Hungary, 2011 (invited talk)

Recent Grants:

National Science Foundation, DMS 1564541, 2016–2018 National Science Foundation, DMS 1265375, 2013–2015

Research papers:

- 192 The Gauss-Lucas theorem in an asymptotic sense, Bull. London Math. Soc., 48(2016), 848-854.
- 191 Barry Simon and the János Bolyai International Mathematical Prize, Acta Mathematica Hungar., 149(2016), 263–273
- 190 (with Z. Daroczy) Remarks on a functional equation, Acta Sci. Math., 81(2015), 527–531.
- 189 (with T. Bloom, N. Levenberg and F. Wielonski) Modified logarithmic potential theory and applications, International Mathematics Research Notices 2016; doi: 10.1093/imrn/rnw059
- 188 Universality under Szegő's condition, Canadian Math. Bull., 59(2016), 211-224.
- 187 (with A. Danielyan) A converse to a theorem of Salem and Zygmund, Bull. Sci. Math., 140(2016), 260–272.
- 186 A subharmonicity property of harmonic measures, Proc. Amer. Math. Soc., 144(2016), 2073–2079.
- 185 (with T. Danka) Christoffel functions with power type weights, J. European Math. (to appear)
- 185 Polynomials with zeros on systems of curves, Acta Sci Math. (Szeged), 81(2015), 151–175.
- 184 (with T. Varga) Chebyshev and fast decreasing polynomials, Proc. London Math. Soc., 110(2015), 1057–1098.
- 183 The tale of a formula, Contemporary Mathematics, **601**(2016), 29–40.
- 182 (with H. Stahl, N. Stylionopoulos and E. B. Saff) Orthogonal polynomials for area-type measures and image recovery, SIAM J. Math. Anal., 47(2015), 2442–2463.
- 181 (with L. Feng and S. Zhou) Trigonometric series with a generalized monotonicity condition, Acta Mathematica Sinica, English Series, 30(2014), 1289–1296.

- 180 (with P. Nevai) Christoffel functions for weights with jumps, CA, 42(2015), 265–280.
- 179 (with B. Nagy and S. Kalmykov) Asymptotically sharp Markov and Schur inequalities on general sets, Complex Anal. Oper. Theory, 9(2015), 1287–1302.
- 178 Bernstein and Markov type inequalities for trigonometric polynomials on general sets, Internat. Math. Res. Notices, doi:10.1093/imrn/rnu030
- 177 (with G. Nagy) A convexity property of discrete random walks, *Combinatorics, Probability and Computing* (to appear)
- 176 (with B. Nagy) Riesz-type inequalities on general sets, J. Math. Anal. Appl. 416(2014), 344-351.
- 175 (with P. Yuditskii) On a conjecture of Widom, J. Approx. Theory, 190(2015), 50-61.
- 174 Some problems of A. Kroó on multiple Chebyshev polynomials, J. Math. Anal. Appl., **414**(2014), 61–67.
- 173 (with T. Varga) A sharp L^p -Bernstein inequality on finitely many intervals Acta Sci. Math, **79**(2013), 401–421.
- 172 Erdos on polynomials, Erdős Centennial, Bolyai Society Mathematical Studies, 25(2013), 683–709.
- 171 Approximation by homogeneous polynomials, Journal of Approx. Theory, 174(2013), 192–205. DOI 10.1016/j.jat.2013.07.005
- 170 Chebyshev polynomials on compact sets, Potential Analysis, 40(2014), 511–524. DOI 10.1007/s11118-013-9357-6
- 169 A note on rational L^p approximation on Jordan curves Computational Methods and Function Theory, 13(2013), 425-431.
- 168 Asymptotics of Christoffel functions on arcs and curves, Advances in Mathematics, 252(2014), 114–149.
- 167 (with E. Lundberg) Lemniscate growth, Analysis and Mathematical Physics, 3(2013), 45–62, DOI 10.1007/s13324-012-0038-1
- 166 Bernstein type inequalities, J. Approx. Theory, 164(2012), 1390-1401, doi:10.1016/j.jat.2012.03.002
- 165 Normality of orthogonal polynomials, Jaen J. Approx., 4(2012), 73–83.
- 164 (with T. Varga) Nonsymmetric fast decreasing polynomials and applications, J. Math. Anal. Appl., 394(2012), 378390.
- 163 Fast decreasing and orthogonal polynomials, Contemporary Mathematics, 578(2012), 241–254.
- 162 (with L. Kérchy) Compression of quasianalytic spectral sets of cyclic contractions, J. Funct. Anal., 263, 2754-2769.
- 161 The size of irregular points for a measure, Acta Math. Hungar., 136(2012), 222-231,
- 160 (with B. Nagy) Bernstein's inequality for algebraic polynomials on circular arcs, Constructive Approx. 37(2013), 223–232.
- 159 Chebyshev polynomials on a systems of curves, J. d'Analyse Math., 118(2012), 317–338.
- 158 Polynomials with zeros and small norm on curves, Proc. Amer Math. Soc., 140(2012), 3531-3539.
- 157 Szegő's problem on curves, American J. Math., 135(2013), 1507–1524.
- 156 The polynomial inverse image method, Approximation Theory XIII: San Antonio 2010, Springer Proceedings in Mathematics 13, M. Neamtu and L. Schumaker (eds.), 345–367. DOI 10.1007/978-1-4614-0772-0 22
- 155 (with D. Benko and P. Dragnev) Convexity of harmonic densities, Rev. Mat. Iberoam. 28(2012), 947–960. DOI 10.4171/rmi/698
- 154 The norm of minimal polynomial on several intervals, *Journal of Approx. Theory*, **163**(2011), 738–746. doi:10.1016/j.jat.2010.07.002
- 153 (with G. Mastroianni) Uniform spacing of zeros of orthogonal polynomials, Constructive Approx., 32(2010), 181–192.
- 152 (with R. Taylor) Lebesgue constants for Leja Points, IMA Journal of Num. Anal., **30**(2010), 462–486.
- 151 Chebyshev constants and the inheritance problem, *Journal of Approximation Theory*, **160**(2009), 187–201.
- 150 Christoffel functions on curves and domains, Transactions of the Amer. Math. Soc., 362(2010), 2053-2087.
- 149 Universality and fine zero spacing on general sets, Arkiv för Math., 47(2009), 361-391.
- 148 (with P. P. Varjú) Smooth equilibrium measures and approximation, Advances in Math., 212(2007), 571–616.

- 147 (with P. P. Varjú), Polynomials with prescribed zeros and small norm, Acta Sci. Math., (Szeged) 73(2007), 593–612
- 146 (with L. Golinskii) Orthogonal polynomials from Jacobi to Simon, Spectral Theory and Mathematical Physics: A Festschrift in Honor of Barry Simon's 60th Birthday: Ergodic Schrdinger Operators, Singular Spectrum, Orthogonal Polynomials, and Inverse Spectral Theory, Proceedings of Symposia in Pure Mathematics, AMS, Providence 2007, pp. 821–874.
- 145 Orthogonal polynomials, Surveys in Approximation Theory, 1(2005), 70–125.
- 144 Equilibrium measures and polynomials, Proceedings of the 4th European Congress of Mathematics, Stockholm, Sweden, 2004, A. Laptev editor, European Mathematical Society, 2005, 501–515.
- 143 (with F. Toókos) Markov inequality and Green functions, Rend. Circ. Mat. Palermo, Serie II, 76(2005), 91–102.
- 142 (with B. Nagy) Sharpening of Hilbert's lemniscate theorem, J. D'Analyse Math., 96(2005), 191–223.
- 141 (with L. Baratchart and R. Küstner) Zero distribution via orthogonality Annales de lInstitut Fourier, 55(2005), 1455–1499.
- 140 (with B. Simon) Limits of zeros of orthogonal polynomials on the circle, Mathematische Nachrichten, 278(2005), 1615–1620.
- 139 (with P. Nevai) Denisov's theorem on recurrence coefficients, J. Approx. Theory, 127(2004), 240–245.
- 138 (with L. Carleson) Hölder continuity of Green's functions, Acta Sci. Math., 70(2004), 557–608.
- 137 (with L. P. Bos, A. Brudnyi and L. Levenberg), Tangential Markov inequalities on exponential curves, *Contr. Approx.*, 19(2003), 339–354.
- 136 Approximation on compact subsets of R, Proc. Conf. Dortmund, 2001, Internat. Ser. Num. Math., 142(2002), 203–274.
- 135 How to prove results for polynomials on several intervals? Approximation Theory: A Volume dedicated to B. Sendov, 397–410, DARBA, Sofia, 2002
- 134 Sets with minimal order Markoff factors, Rend. Circ. mat. Palermo, 34(2002), 169–183.
- 133 On Markoff's inequality, Constructive Approximation, 18(2002), 427–441.
- 132 (with D. Benkő) sets with interior extremal points for the Markoff inequality, J. Approx. Theory, 110(2001), 261–265.
- 131 Potential theoretical methods in approximation, Paul Erdős and his Mathematics, Bolyai Society Mathematical Studies, 11, Budapest, 2002, pp. 687–703.
- 130 Asymptotics for Christoffel functions with varying weights Advances of Applied Math., 25(2000), 322-351.
- 129 Polynomial inverse images and polynomial inequalities Acta Math. (Scandinavian), 187(2001), 139–160.
- 128 Asymptotics for Christoffel functions for general measures on the real line, J. D'Analyise Math., 81 (2000), 283–303.
- 127 (with G. Mastroianni) Best approximation and moduli of smoothness for doubling weights J. Approx. Theory, 110(2001), 180-199.
- 126 (with G. Mastroianni) Jackson type inequalities for doubling weights, II. East J. Approx., 5(1999), 101–116.
- 125 Orthogonal polynomials with respect to varying weights, in Orthogonal Polynomials and its Applications, Proc. conf. Sevilla, Spain, 1997, Ed. A. Duran, J. Comp. Appl. Math., 99(1998), 373–385.
- 124 Counterexample to a problem in tensor product approximation, J. Approx. Theory, 94(1998), 300–305.
- 123 (with G. Mastroianni) Jackson type inequalities for doubling and A_p weights, Proc. Conference in Maratea, Italy, 1996, *Rend. Circ. Mat. Palermo*, Serie II, **52**(1998), 83–99.
- 122 Weighted polynomial approximation for convex fields, Constr. Approx., 16(2000), 261–281.
- 121 Weighted polynomial approximation for weights with slowly varying extremal density, J. Approx. Theory, **99**(1999), 258–288.
- 120 (with G. Mastroianni) Weighted polynomial inequalities with doubling and A_{∞} weights, Constr. Approx., 16 (2000), 37–71.
- 119 Markoff constants for Cantor sets, Acta Sci. Math. (Szeged), 60(1995), 715–734.
- 118 (with P. Erdős) On the size of distances from prescribed points, Proc. Cambridge Phil. Soc., 120(1996), 403–409.

- 117 (with L. Hatvani and T. Krisztin) A necessary and sufficient condition for the asymptotic stability of the equilibrium of the damped oscillator, J. Differential Equations 119(1995), 209–223.
- 116 (with S. Csörgő) Quantile construction for Khinchin's and Pruitt's theorem and Doeblin's universal laws, Advances in Applied Mathematics, 14(1993), 226–246.
- 115 (with D.S.Lubinsky) How to discretize a logarithmic potential? Acta Sci. Math. (Szeged), 57(1993), 419–428.
- 114 (with D.S.Lubinsky) Weighted polynomial approximation with Freud weights, Constructive Approx., 10(1994), 301–315.
- 113 (with D.S.Lubinsky) Best weighted polynomial approximation via Jacobi expansions, SIAM J. Math. Anal. 25(1994), 555–570.
- 112 (with N.A. Shirokov) Polynomial approximation on the boundary and strictly inside, Constr. Approx., 10(1994), 153–178.
- 111 Strong converse inequalities, J. Approx. Theory, 76(1994), 369–375.
- 110 Approximation by Bernstein polynomials, Amer. J. Math., 116(1994), 1-24.
- 109 Distribution of simple zeros of polynomials, Acta Math. (Scandinavian), 170(1993), 1–28.
- 108 Approximation by algebraic polynomials, in: Approximation Theory VII, Eds. E.W. Chui, C.K. Chenei, L.L. Schumaker, Academic Press, San Diego, 1992, 227–249.
- 107 (with J. Ullman) Local asymptotic distribution of zeros of orthogonal polynomials, Trans. Amer. Math. Soc., 341(1994), 881–894.
- 106 (with L. Hatvani) Asymptotic stability of the equilibrium of the damped oscillator, Differential and Integral Equations, 6(1993), 835–848.
- 105 (with P. Nevai and J. Zhang) Orthogonal polynomials: their growth relative to their sums, J. Approx. Theory, 67(1991), 215–234.
- 104 Sharpness of Timan's converse theorem for polynomial approximation, J. Approx. Theory, 67(1991), 357–359.
- 103 (with E. B. Saff) What parts of a measure's support attract zeros of the corresponding orthogonal polynomials? Proc. Amer. Math. Soc., 114(1992), 185–190.
- 102 Orthogonal polynomials with ratio asymptotics, Proc. Amer. Math. Soc., 114(1992), 491–495.
- 101 Derivatives of entire functions of higher order, J. Approx. Theory, 64(1991), 209–213.
- 100 (with A. Máté and P. Nevai) Szegő's extremum problem on the unit circle, Annals of Math., 134(1991), 433–453.
- 99 Polynomial approximation with locally geometric rates, Approximation Theory, Proc. Conf. in Kecske mét, Hungary, 1990, Coll. Math. Soc. János Bolyai, 58, Akadémiai Kiadó/North-Holland, Budapest 1992, 663–671.
- 98 (with H. Stahl) N-th root asymptotic behavior of orthonormal polynomials, Orthogonal Polynomials and its Applications, NATO Advanced Study Conference, Columbus, USA, 1989. NATO ASI Series C, Kluwer Academic Publishers, 1990, 395–417.
- 97 Fast decreasing polynomials via potentials, J. D'Analyse Math. 62(1994), 131–154.
- 96 Regular behavior of orthogonal polynomials and its localization, J. Approx. Theory, 66(1991), 162–169.
- 95 On a polynomial inequality of Turán, J. Approx. Theory, 63(1990), 121–122.
- 94 (with B. Della Vecchia and G. Mastroinanni) Approximation by the Sheppard operator, Approximation Theory and Appl., 6(1990), 76–84.
- 93 (with E.B. Saff) Zeros of Chebyshev polynomials associated with a compact set on the plane, SIAM J. Math. Anal. 21(1990), 799–802.
- 92 (with K.G. Ivanov and E.B. Saff) On the behaviour of zeros of polynomials of best and near best approximation, J. Canadian Math. Soc., 43(1991), 1010–1021.
- 91 (with K.G. Ivanov and E.B. Saff) Approximation by polynomials with locally geometric rates, Proc. Amer. Math. Soc., 106(1989), 153–161.
- 90 (with Z. Ditzian) Remarks on Besov spaces and best polynomial approximation, Proc. Amer. Mat. Soc., 104(1988), 1059–1066.
- 89 (with K.G. Ivanov) Fast decreasing polynomials, Constructive Approximation, 6(1990), 1–20.
- 88 (with E.B. Saff) Limitations of the Carathéodory–Fejér method of approximation, J. Approx. Theory, 58(1989), 284–296.

- 87 (with S.M. Mazhar) Approximation of continuous functions by *T*-means of Fourier series, *J. Approx. Theory*, **60**(1990), 174–182.
- 86 (with E.B. Saff) Behaviour of polynomials of best uniform approximation, Trans. Amer. Math. Soc., 316(1989), 567–593.
- 85 (with E.B. Saff) Polynomial approximation of piecewise analytic functions, J. London Math. Soc., 39(1989), 487–498.
- 84 (with H.P. Blatt and E.B. Saff) The distribution of extreme points in best polynomial approximation, Constructive Approximation, 5(1989), 357–370.
- 83 (with Z. Ditzian) *K*-functionals and weighted moduli of smoothness, *J. Approx. Theory*, **63**(1190), 3–29.
- 82 On Hölder's theorem that $\Gamma(x)$ does not satisfy algebraic differential equations, Acta Sci. Math. (Szeged), 57(1993), 495–496.
- 81 Solution to two problems in inverse interpolation, Rocky Mount. J. Math., 20(1990), 243–249.
- 80 Sharp converse theorem of L^p -polynomial approximation, Constructive Approximation, 4(1988), 419-433.
- 79 (with E.B. Saff) Weighted polynomial approximation of analytic functions, Proc. London Math. Soc., 37(1988), 455–463.
- 78 (with J. Csirik) On-line algorithms for a dual version of bin packing, Discrete Appl. Math., 21(1988), 163–167.
- 77 On the generalization of Fejér's summation theorem, *Colloquia Math. Soc. János Bolyai*, 35, Functions, Series, Operators, Budapest, 1980, North–Holland, Akadémiai Kiadó, Budapest 1983, 1195–1199.
- 76 (with Z. Ditzian) K-functionals and moduli of smoothness with applications, Proc. Conf. in Texas., 1986, Acad. Press, New York 1986, 327–330.
- 75 (with A. Máté and P. Nevai) Twisted difference operators and perturbed Chebysbev polynomials, Duke Math. J., 57(1988), 301–331.
- 74 (with P. Nevai) Orthogonal polynomials and their zeros, Acta Sci. Math. (Szeged), 53(1989), 99–104.
- 73 (with Z. Ditzian, D. S. Lubinsky and P. Nevai) Polynomial approximation with exponential weights, Acta Math. Hungar., 50(1987), 165–175.
- 72 (with P. Nevai) Sharp Nikolskii inequalities with exponential weights, Analysis Math., 13(1987), 261–267.
- 71 A conjecture of G. Petruska, Aequationes Math., **39**(1990), 261–263.
- 70 (with A. Máté and P. Nevai) Asymptotics for zeros of orthogonal polynomials associated with infinite intervals, J. London Math. Soc., 33(1986), 303–310.
- 69 (with P. Nevai) Weighted polynomial inequalities, Constructive Approximation, 2(1986), 113–127.
- 68 (with A. Pinkus) One-sided L¹-approximation, Canad. Math. Bull., 29(1986), 84–90.
- 66–67 (with A. Máté and P. Nevai) Extensions of Szegő's theory of orthogonal polynomials, *Constructive Approximation*, **3**(1987), 51–72, 73–96
 - 65 (with Z. Ditzian) K-functionals and best polynomial approximation in weighted $L^p(\mathbf{R})$, J. Approx. Theory, 46(1986), 38–41.
 - 64 (with A. Máté and P. Nevai) Asymptotics for the greatest zero of orthogonal polynomials, SIAM J. Math. Anal., 17(1986), 745–751.
 - 63 (with A. Máté and P. Nevai) Mean Cesaro summability of orthogonal polynomials, Constructive Theory of Functions, Proc. Conf. Varna, Publ. House Bulgarian Acad. Sci., Sofia 1984, 588–599.
 - 62 (with A. Máté and P. Nevai) Asymptotics for orthogonal polynomials defined by a recurrence relation, Constructive Approximation, 1(1985), 231–248.
 - 61 (with A. Máté and P. Nevai) Asymptotics for the ratio of the leading coefficients of orthonormal polynomials on the unit circle, *Constructive Approximation*, 1(1985), 63–69.
 - 60 (with A. Máté and P. Nevai) Oscillatory behaviour of orthogonal polynomials, Proc. Amer. Math. Soc., 96(1986), 261–268.
 - 59 (with A. Máté and P. Nevai) Necessary conditions for weighted mean convergence of Fourier series in orthogonal polynomials, J. Approx. Theory, 46(1986), 314–322.
 - 58 (with A. Máté and P. Nevai) Strong and weak convergence of orthogonal polynomials, *Amer. J. Math.*, **109**(1987), 239–282.

- 57 (with A. Máté and P. Nevai) What is beyond Szegő's theory of orthogonal polynomials, *Rational Approximation and Interpolation*, Lecture Notes in Mathematics, Vol. **1105**, Springer V., New York 1984, 502–510.
- 56 (with I. Vincze) Equivalence of coefficient conditions, Acta Sci. Math., (Szeged), 50(1986), 93–98.
- 55 The necessity of a new kind of modulus of smoothness, Anniversary Volume on Approximation Theory and Functional Analysis, Proc. Conf. Oberwolfach, ISNM 65, Birkhäuser V., Basel–Boston–Stuttgart 1984, 233–248.
- 54 (with F. Móricz) Pointwise convergence of multiple series concerning different convergence definitions, Anal. Math., 12(1986), 49–57.
- 53 (with K. Tandori) Remarks on the convergence of orthogonal series, Publ. Math. (Debrecen), 31(1984), 181–184.
- 52 (with S. Csörgő and K. Tandori) On the convergence of series of pairwise independent random variables, Acta Math. Hungar., 45(1985), 445–450.
- 51 Note on a result of K. Tandori, Analysis, 3(1983), 135–142.
- 50 (with L. Leindler and A. Meir) On approximation of continuous functions in Lipschitz norms, Acta Math. Hungar., 45(1985), 441–443.
- 49 Saturation of Kantorovich-type operators, Period. Math. Hungar., 16(1985), 115-126.
- 48 Uniform approximation by exponential-type operators, J. Math. Anal. Appl., 132(1988), 238-246.
- 47 Uniform approximation by positive operators on infinite intervals, Anal. Math., 10(1984), 163–182.
- 46 (with S. M. Mazhar) Approximation by modified Szász operators, *Acta Sci. Math.* (Szeged), **49**(1985), 257–269.
- 45 The gamma perators in L^p spaces, Publ. Math., (Debrecen), **32**(1985), 43–55.
- 44 Recovery of H^p functions, Proc. Amer. Math. Soc., **90**(1984), 531–537.
- 43 A one-circle-theorem of offbeat integral geometry, Bull. London Math. Soc., 16(1984), 292-294.
- 42 Uniform approximation by Bernstein-type operators, Indag. Math., 87(1984), 87–93.
- 40–41 Representation of functionals via summation methods, *Acta Sci. Math.* (Szeged), 48(1985), 483–498, 49(1985), 235–256.
 - 39 Quantitative results in the theory of overconvergence of complex interpolating polynomials, J. Approx. Theory, 47(1986), 173–183.
 - 38 Solutions to three problems concerning the overconvergence of complex interpolating polynomials, Acta Sci. Math. (Szeged), 45(1983), 415–418.
 - 37 (with S. Csörgő) On how long interval is the empirical characteristic function uniformly consistent?, Acta Sci. Math. (Szeged), 42(1983), 141–149.
 - 36 (with S. Csörgő and K. Tandori), On the strong law of large numbers for pairwise independent random variables, Acta Math. Hungar., 42(1983), 319–330.
 - 35 Approximation by Meyer–Kőnig and Zeller type operators, Math. Z., 182(1983), 425–446.
 - 34 On a problem concerning L^p moduli of smoothness, Studia Sci. Math. Hungar., 19(1984), 97–101.
 - 33 On the so called elementary method of approximation theory, *Mat. Lapok*, **31**(1978–1983), 175–190.(Hungarian)
 - 32 An interpolation theorem and its application to positive operators, *Pacific J. Math.*, **111**(1984), 447–481.
 - 31 Some properties of a new kind of modulus of smoothness, Z. Anal. Anwendungen, 3(1984), 167–178.
 - 30 Saturation for Bernstein type rational functions, Acta Math. Hungar., 43(1984), 219–250.
 - 29 Problems and solutions concerning Kantorovich operators, J. Approx. Theory, 37(1983), 51–68.
 - 28 Approximation in L^1 by Kantorovich polynomials, Acta Sci. Math. (Szeged), 46(1983), 211–222.
 - 27 $L^p(p > 1)$ -approximation by Kantorovich polynomials, Analysis, **3**(1983), 79–100.
 - 26 Approximation by Szász–Mirakjan–Kantorovich operators in $L^p(p > 1)$, Anal. Math., 9(1983), 147–167.
 - 25 Uniform approximation by Baskakov and Meyer–Kőnig and Zeller operators, *Period. Math. Hungar.*, **14**(1983), 209–228.
 - 24 Uniform approximation by Szász–Mirakjan–type operators, Acta Math. Hungar., 41(1983), 291–307.
 - 23 On the equivalence of different kinds of partial sums of orthogonal series, Acta Sci. Math. (Szeged), 46(1983), 223–232.
 - 22 (with J. Kincses) Theorems and counterexamples on contractive mappings, *Math. Balcanica*, 4(1990), 69–90.

- 21 On two open problems of contractive mappings, *Publ. Inst. Math.* (Beograd), (N.S.) **34**(**48**)(1983), 239–242.
- 20 On the approximation of holomorphic functions in the unit ball of \mathbb{C}^n , Approx. and Function Theory, Proc. Conf. in Varna, 1981, Publishing House of the Bulgarian Academy of Sciences, Sofia 1983, 564–574.
- 19 On the divergence of Fourier series, Publ. Math. (Debrecen), 29(1982), 251–264.
- 18 Strong approximation by the de la Vallee Poussin and Abel means of Fourier series, J. Indian Math. Soc., (N.S.) 45(1981), 85–108.
- 17 Notes on Fourier series in homogeneous Banach spaces, Anal. Math., 8(1982), 321–333.
- 16 Notes on Fourier series: Strong approximation, J. Approx. Theory, 43(1985), 105–111.
- 15 Summability in the classes H^{ω} , Mat. Zametki, **33**(1983), 207–213. (Russian)
- 14 On a possible generalization of strong approximation results, Approximation and Function Spaces, Proc. Conf. in Gdansk, 1979, Polish Sci. Publ. and North Holland, 1981, 804–820.
- 13 Comparison of "uniform" and "almost everywhere" summability properties, Acta Math. Acad. Sci. Hungar., 12(1977), 429–443.
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