Szilárd György Révész

LIST OF PUBLICATIONS

- [1] On the least prime in an arithmetic progression. Studia Sci. Math. Hungar., 15 (1980), no. 1-3, 83–87.
- [2] Irregularities in the distribution of prime ideals. I. Studia Sci. Math. Hungar., 18 (1982), no. 1, 57–67.
- [3] Irregularities in the distribution of prime ideals. II. Studia Sci. Math. Hungar., 18 (1983), no. 2-4, 343–369.
- [4] Note on a problem of Q. I. Rahman and P. Turán. Acta Math. Hungar., 44 (1984), no. 3-4, 367–377.
- [5] Oscillatorial properties of real- and complex-valued functions having a Laplace transform of a certain type. (in Hungarian), doctoral thesis, L. Eötvös University, Budapest, 76 pages.
- [6] On a theorem of Phragmén. In: Complex analysis and applications '85 (Varna, 1985), pages 556–568. Publ. House Bulgar. Acad. Sci., Sofia, 1986.
- [7] (joint with M. Laczkovich), Periodic decompositions of functions. Real Analysis Exchange, 13 (1987), no. 1, 126–128, 107–108.
- [8] Effective oscillation theorems for a general class of real-valued remainder terms. Acta Arith., 49 (1988), no. 5, 481–505.
- [9] Extremal problems for polynomials. (in Hungarian), thesis for the "candidate degree", Budapest, 119 pages.
- [10] Exact inhomogeneous Bernstein inequalities. In: Approximation theory VI, Vol. II (College Station, TX, 1989), pages 557–560. Academic Press, Boston, MA, 1989.
- [11] (joint with M. Laczkovich), Periodic decompositions of continuous functions. Acta Math. Hungar., **54** (1989), no. 3-4, 329–341.
- [12] (joint with M. Laczkovich), Decompositions into the sum of periodic functions belonging to a given Banach space. Acta Math. Hungar., **55** (1990), no. 3-4, 353–363.
- [13] Extremal problems and a duality phenomenon. In: Approximation, optimization and computing, pages 279–281. North-Holland, Amsterdam, 1990.
- [14] On the convergence of Fourier series of U.A.P. functions. J. Math. Anal. Appl., 151 (1990), no. 2, 308–317.
- [15] Rearrangements of Fourier series. J. Approx. Theory, 60 (1990), no. 1, 101–121.

- [16] A Fejér type extremal problem. Acta Math. Hungar., **57** (1991), no. 3-4, 279–283.
- [17] On a class of extremal problems. Approx. Theory Appl., 7 (1991), no. 3, 86–96.
- [18] (joint with I. Z. Ruzsa), On approximating Lebesgue integrals by Riemann sums. Glasgow Math. J., 33 (1991), no. 2, 129–134.
- [19] Some trigonometric extremal problems and duality. J. Austral. Math. Soc. Ser. A, **50** (1991), no. 3, 384–390.
- [20] Interest rate risk and its coverage. (in Hungarian), thesis for the M.B.A. degree, Budapest University of Economical Sciences, Budapest, 65 pages.
- [21] On Beurling's prime number theorem. Period. Math. Hungar., 28 (1994), no. 3, 195–210.
- [22] Rearrangement of Fourier series and Fourier series whose terms have random signs. Acta Math. Hungar., **63** (1994), no. 4, 395–402.
- [23] Fourier synthesis of bounded mean periodic functions by rearrangement of Fourier series. J. Anal., 3 (1995), 179–188.
- [24] The least possible value at zero of some nonnegative cosine polynomials and equivalent dual problems. In: Proceedings of the Conference in Honor of Jean-Pierre Kahane (Orsay, 1993), number Special Issue, pages 485–508. 1995.
- [25] Minimization of maxima of nonnegative and positive definite cosine polynomials with prescribed first coefficients. Acta Sci. Math. (Szeged), **60** (1995), no. 3-4, 589–608.
- [26] The risk of interest rate changes and its hedge. Vezetéstudomány (Management Science), **XXVI** (1995), no. 7, 33–38. (in Hungarian).
- [27] (joint with A. Kroó), On Bernstein and Markov-type inequalities for multivariate polynomials on convex bodies. J. Approx. Theory, **99** (1999), no. 1, 134–152.
- [28] (joint with Y. Sarantopoulos), Chebyshev's extremal problems of polynomial growth in real normed spaces. Izv. Nats. Akad. Nauk Armenii Mat. (Contemp. Math. Anal., Armen. Acad. Sci), **36** (2001), no. 5, 62–81 (2002).
- [29] Uniqueness of Markov-extremal polynomials on symmetric convex bodies. Constr. Approx., 17 (2001), no. 3, 465–478.
- [30] Uniqueness of multivariate Chebyshev-type extremal polynomials for convex bodies. East J. Approx., 7 (2001), no. 2, 205–240.
- [31] (joint with M. N. Kolountzakis), On a problem of Turán about positive definite functions. Proc. Amer. Math. Soc., 131 (2003), no. 11, 3423–3430.
- [32] (joint with Y. Sarantopoulos), On Markov constants of homogeneous polynomials over real normed spaces. East J. Approx., 9 (2003), no. 3, 277–304.

- [33] (joint with Y. Sarantopoulos), The generalized Minkowski functional with applications in approximation theory. J. Convex Anal., 11 (2004), no. 2, 303–334.
- [34] (joint with A. Pappas), Linear polarization constants of Hilbert spaces. J. Math. Anal. Appl., 300 (2004), no. 1, 129–146.
- [35] On generalized strong A-summability. Sci. Math. Jpn., 60 (2004), no. 3, 595–611.
- [36] (joint with Y. Sarantopoulos), Plank problems, polarization and Chebyshev constants. J. Korean Math. Soc., 41 (2004), no. 1, 157–174. Satellite Conference on Infinite Dimensional Function Theory.
- [37] Some polynomial inequalities on real normed spaces. Publicaciones del Dpto. de Análisis del Matemático Sección 1, **63** (2004), 111–135.
- [38] (joint with L. B. Milev), Bernstein's inequality for multivariate polynomials on the standard simplex. J. Inequal. Appl., (2005), no. 2, 145–163.
- [39] (joint with B. Farkas), Rendezvous numbers in normed spaces. Bull. Austral. Math. Soc., 72 (2005), no. 3, 423–440.
- [40] A comparative analysis of Bernstein type estimates for the derivative of multivariate polynomials. Ann. Polon. Math., 88 (2006), no. 3, 229–245.
- [41] Inequalities for multivariate polynomials. Annals of the Marie Curie Fellowships, 4 (2006), 6 pages. (electronic); http://www.mariecurie.org/annals/.
- [42] On a paper of Erőd and Turán-Markov inequalities for non-flat convex domains. East J. Approx., 12 (2006), no. 4, 451–467.
- [43] (joint with M. N. Kolountzakis), On pointwise estimates of positive definite functions with given support. Canad. J. Math., **58** (2006), no. 2, 401–418.
- [44] (joint with V. A. Anagnostopoulos), Polarization constants for products of linear functionals over \mathbb{R}^2 and \mathbb{C}^2 and Chebyshev constants of the unit sphere. Publ. Math. Debrecen, **68** (2006), no. 1-2, 63–75.
- [45] (joint with B. Farkas), Potential theoretic approach to rendezvous numbers. Monatsh. Math., 148 (2006), no. 4, 309–331.
- [46] (joint with B. Farkas), Rendezvous numbers of metric spaces—a potential theoretic approach. Arch. Math. (Basel), 86 (2006), no. 3, 268–281.
- [47] (joint with B. Farkas), Tiles with no spectra in dimension 4. Math. Scand., 98 (2006), no. 1, 44–52.
- [48] Turán type reverse Markov inequalities for compact convex sets. J. Approx. Theory, **141** (2006), no. 2, 162–173.

- [49] (joint with M. N. Kolountzakis), Turán's extremal problem for positive definite functions on groups. J. London Math. Soc. (2), 74 (2006), no. 2, 475–496.
- [50] (joint with B. Farkas), Decomposition as the sum of invariant functions with respect to commuting transformations. Aequationes Math., 73 (2007), no. 3, 233–248.
- [51] On some extremal problems of Landau. Serdica Math. J., 33 (2007), no. 1, 125–162.
- [52] (joint with N. N. Reyes and G. A. M. Velasco), Oscillation of Fourier transforms and Markov-Bernstein inequalities. J. Approx. Theory, 145 (2007), no. 1, 100–110.
- [53] Schur-type inequalities for complex polynomials with no zeros in the unit disk. J. Inequal. Appl., (2007), Art. ID 90526, 10.
- [54] (joint with A. San Antolín), Equilvalence of A-approximate continuity for self-adjoint expansive linear maps. Linear Algebra Appl., 429 (2008), no. 7, 1504–1521.
- [55] (joint with A. Bonami), Failure of Wiener's property for positive definite periodic functions. C. R. Math. Acad. Sci. Paris, **346** (2008), no. 1-2, 39-44.
- [56] (joint with G. A. Munoz and J. B. Seoane), Geometry of homogeneous polynomials on non symmetric convex bodies. Math. Scand, 104 (2008), 1–14.
- [57] In memoriam János Erőd. History of Approximation Theory, (electronic), http://pages.cs.wisc.edu/~deboor/HAT/erod.pdf.
- [58] (joint with B. Farkas, V. Harangi and T. Keleti), Invariant decomposition of functions with respect to commuting invertible transformations. Proc. Amer. Math. Soc., 136 (2008), no. 4, 1325–1336.
- [59] Megemlékezés Erőd Jánosról. Mat. Lapok (N.S.), 14 (2008), no. 1, 1–8.
- [60] (joint with B. Farkas), Positive bases in spaces of polynomials. Positivity, 12 (2008), no. 4, 691–709.
- [61] Extremal problems for positive definite functions and polynomials. thesis for the degree "Doctor of the Academy", Budapest, 2009, 164 pages.
- [62] (joint with A. Bonami), Integral concentration of idempotent trigonometric polynomials with gaps. Amer. J. Math., 131 (2009), 1065–1108.
- [63] (joint with P. Jamming and M. Matolcsi), On the extremal rays of the cone of positive, positive definite functions. J. Fourier Anal. Appl., 15 (2009), no. 4, 561–582.
- [64] On uniform asymptotic upper density in locally compact abelian groups, 2009. See on ArXiv as arXiv:0904.1567, 13 pages.

- [65] (joint with A. Bonami), Concentration of the integral norm of idempotents. In: Recent developments in fractals and related fields, Proceedings of the Conference in Honor of Jacques Peyrière, (held in Tunis, Tunisia, 2007), volume Applied and Numerical Harmonic Analysis Barral, Julien; Seuret, Stéphane (Eds.), pages 107–130, 2010. see also at; http://www.springer.com/birkhauser/mathematics/book/978-0-8176-4887-9.
- [66] (joint with D. Burns, N. Levenberg and S. Ma'u), Monge-Ampère measures for convex bodies and Berstein-Markov type inequalities. Trans. Amer. Math. Soc., **362** (2010), no. 12, 6325-6340.
- [67] Conjectures and Results on the Multivariate Bernstein Inequality on Convex Bodies. In: Constructive Theory of Functions (In memory of Borislav Bojanov) (held in Sozopol, Bulgaria, 2010), G. Nikolov and R. Uluchev (Eds.), pages 318–353. Prof. Marin Drinov Academic Publishing House, Bulgar. Acad. Sci., Sofia, 2011.
- [68] Turán's extremal problem on locally compact Abelian groups. Anal. Math., **37** (2011), no. 1, 15–50.
- [69] On asymptotic uniform upper density in locally compact Abelian groups. Real Analysis Exchange, **37** (2012), no. 1, 24–31. (in the Supplement 35th Summer Symposium Conference Reports).
- [70] (joint with A. D. Roton), Generalization of the effective Wiener-Ikehara theorem. Int. J. Number Th., 9 (2013), no. 8, 2091–2128.
- [71] (joint with B. Farkas and J. Pintz), On the optimal weight function in the Goldston-Pintz-Yıldırım method for finding small gaps between consecutive primes. In: Number Theory, Analysis and Combinatorics: Proceedings of the Paul Turán Memorial Conference held August 22–26, 2011 in Budapest, pages 75–104. de Gruyter, Berlin, 2013. See also at arXiv:1306.2133.
- [72] Turán-Erőd type converse Markov inequalities for convex domains on the plane. In: Complex Analysis and Applications '13: Proceedings of the International Conference held in Sofia, 31 October 2 November, 2013, Virginia Kiryakova (Ed.), pages 252–281. Institute of Mathematics and Informatics, Bulgarian Acad. Sci., Sofia, 2013. See at http://www.math.bas.bg/complan/caa13.
- [73] (joint with B. Farkas), The periodic decomposition problem. In: Theory and Applications of Difference Equations and Discrete Dynamical Systems; Proceedings of the 19th International Conference on Difference Equations and Applications (ICDEA 2013) held in Muscat-Oman, May 26-30, 2013. Ziyad AlSharawi, Jim Cushing and Saber Elaydi (Eds.), volume 102 of Springer Proceedings in Mathematics and Statistics, pages 143–169. Springer-Verlag, Berlin Heidelberg, 2014. DOI 10.1007/978-3-662-44140-4_8. See also at http://arxiv.org/abs/1312.3798.
- [74] (joint with S. Krenedits), Maximum of values attained at a given point by positive definite functions in locally compact Abelian groups. J. Approx. Theory, **194** (2015), 108– 131.

- [75] The point value maximization problem for positive definite functions supported in a given subset of a locally compact group, 2015. arXiv preprint arXiv:1504.03808. (joint with S. Krenedits).
- [76] A potential theoretic minimax problem on the torus, 2015. arXiv preprint arXiv:1512.09169. (joint with B. Farkas and B. Nagy).
- [77] Turán type oscillation inequalities in L^q norm on the boundary of convex domains, 2015. arXiv preprint arXiv:1512.08268. (joint with P. Y. Glazyrina).
- [78] (joint with A. G. Babenko and M. V. Deikalova), Weighted one-sided approximation of characteristic functions of intervals by polynomials on a closed interval (in Russian). P. Steklov Inst. Math. (Supplementary Issues), 21 (2015), no. 4, 46–53.
- [79] A discrete extension of the Blaschke Rolling Ball Theorem. Geometriae Dedicata, to appear (2016), See on ArXiv as arXiv:0903.4815, 21 pages.