

List of citations to papers of M. Horváth

The latest papers can be downloaded from www.math.bme.hu/horvath/publm.html. The data given below are mainly taken from the Web of Science and from scholar.google.com.

[1] M. Horváth and A. Sövegjártó, On convex functions, *Annales Univ. Sci. Budapest., Sectio Math.* 29(1986), 193-198.

1. G. Kassay, Minimax tételek és alkalmazásai, Report 1992-02, Eötvös Loránd University, Department of Operations Research.
2. G. Kassay, A simple proof for König's minimax theorem, *Acta Math. Hung.* 63(4)(1994), 371-374.
3. I. Joó, Answer to a problem of M. Horváth and A. Sövegjártó, *Annales Univ. Sci. Budapest., Sectio Math.* 29(1986), 203-207.
4. I. Joó, On some convexities, *Acta Math. Hung.* 54(1-2)(1989), 163-172.
5. I. Joó and G. Kassay, Convexity, minimax theorems and their applications, *Annales Univ. Sci. Budapest., Sectio Math.* 38(1995), 71-93.

[2] M. Horváth and N. H. Loi, A remark on signum type orthonormal systems, *Annales Univ. Sci. Budapest., Sectio Math.* 28(1986), 195-198.

[3] M. Horváth, Total variation in L_p -sense, *Annales Univ. Sci. Budapest., Sectio Math.* 29(1986), 199-202.

[4] A. Bogmér, M. Horváth and I. Joó, On the control of strings, *Coll. Math. Soc. J. Bolyai* 49, Alfred Haar Memorial Conference, Budapest 1988. , North-Holland, Amsterdam 1986, 199-211.

[5] S. A. Avdonin, I. Joó and M. Horváth, Riesz bases from elements of the form $x^k e^{i\lambda x}$ (in Russian), *Vesztnyik Leningrad-szk. Unyiv. Szer. 1. vip. 4. (22) (1989)*, 3-7.

1. A.M. Minkin, A first-order boundary value problem with boundary condition on a countable set of points, *Math. Notes* 62(3-4)(1997), 350-355.

"Another criterion was given by Avdonin, Joo and Horvath in the case of a spectrum lying in a horizontal strip"

2. A. Bogmér, On control problems, *Periodica Math. Hung.* 20(1)(1989), 13-25.

[6] M. Horváth, On the Muckenhoupt condition, *Periodica Math. Hung.* 18(1987), 53-58.

[7] M. Horváth, On multidimensional universal functions, *Studia Sci. Math.* 21(1986), 549-552.

1. X-X. Gan, K.L. Stromberg, On universal primitive functions, *Proc. Amer. Math. Soc.* 121(1)(1994), 151-161.

”Around three years later, Bogmér and Sövegjártó [3], Horváth [4] and Buczolic [5] independently proved that the above result fails to $p \geq 1$ ”

2. K.G. Grosse-Erdman, Universal families and hypercyclic operators, *Bull. Amer. Math. Soc.* 36(3)(1999), 345-381.

”Several authors showed that one cannot choose $p > 1$ here; see ...[Hor87]”

3. I. Joó, On the divergence of eigenfunction expansions, *Annales Univ. Sci. Budap., Sectio Math.* 32(1989), 3-36.

4. I. Joó, Horváth Miklós egy tételéről, *Mat. Lapok* 34(4)(1991), 301-306.

5. I. Joó and M. Palko, On the directional derivatives, *Studia Sci. Math. Hung.* 28(1993), 261-266.

6. Z. Buczolic, Universal series and universal functions, *Acta Math. Hung.* 49(1-2)(1987), 403-414.

[8] A. Bogmér, M. Horváth and I. Joó, Minimax theorems and convexity, *Preprint of the Math. Inst. of the Hung. Acad. Sci. No. 37/1985.*; *Minimax tételek és konvexitás, Mat. Lapok* 34(1-3)(1987), 149-170.

[9] M. Horváth, Answer to a problem of I. Joó, *Studia Sci. Math.* 23(1988), 245-250.

[10] M. Horváth, Vibrating strings with free ends, *Acta Math. Hung.* 51(1988), 171-180.

1. E. Zuazua, Controllability of partial differential equations and its semi-discrete approximations, *Discrete and Continuous Dynamical Systems* Volume 8, Issue 2, April 2002, Pages 469-513

2. P. Michelberger, L. Náday, P. Várlaki and I. Joó, Riesz bases in control theory, *Periodica Polytechnica, Transp. Eng.* 30(1-2)(2002), 21-36. [Chapter 4. is devoted to present my results]

3. I. Joó, N.V. Su, On the controllability of a string with restrained controls, *Acta Math. Hung.* 66(1-2)(1995), 11-23.
4. I. Joó, Exact controllability and oscillation properties of circular membranes, DSc 1995.
5. V. Komornik, Exact controllability and stabilization: the multiplier method, Masson, John Wiley, RAM36, 1994.
6. I. Joó, The control of a string in two interior points, *Periodica Math. Hung.* 22(1991), 15-25.
7. N.V. Su, Controllability of discrete time systems with restrained controls in infinite dimensional spaces (in Hungarian), PhD, Budapest 1992.
8. Bogmér A., A rezgő húr irányítása, PhD, Budapest 1988.
9. I. Joó, On the optimal control of circular membranes, *Acta Math. Hung.* 59(3-4)(1992), 365-376.
10. S.A. Avdonin, S.A. Ivanov and I. Joó, On a theorem of N.K. Bari, *Studia Sci. Math. Hung.* 24(1989), 259-261.
11. S.A. Avdonin, S.A. Ivanov and I. Joó, On Riesz bases from vector exponentials II., *Annales Univ. Sci. Budap., Sectio Math.* 32(1989), 115-126.
12. A. Bogmér, A string equation with special boundary conditions, *Acta Math. Hung.* 53(3-4)(1989), 367-376.
13. I. Joó, On some Riesz bases, *Periodica Math. Hung.* 22(3)(1991), 187-196.
14. A. Bogmér, On control problems, *Periodica Math. Hung.* 20(1)(1989), 13-25.
15. I. Joó, On the control of a net of strings, *Acta Math. Hung.* 61(1-2)(1993), 99-110.
16. I. Joó and N. V. Su, Internal controllability of the string with restrained controls, *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* 38(1995), 19-29.

[11] M. Horváth, I. Joó and V. Komornik, An equiconvergence theorem, *Annales Univ. Sci. Budapest., Sectio Math.* 31(1988), 19-26.

1. M.B. Tahir, On the convergence of some eigenfunction expansions, PhD Budapest 1992.
2. M.B. Tahir, An equiconvergence theorem, *Studia Sci. Math. Hung.* 29(1994), 233-239.

[12] **M. Horváth, Notes on a convexity, Annales Univ. Sci. Budapest., Sectio Math. 30(1987), 259-264.**

1. J. Eckhoff, The partition conjecture, Discrete Math. 221(1-3)(2000), 61-78.

"That this is indeed possible is a special case of Baranyai's theorem on factorizing complete uniform hypergraphs; see the corrected proofs in [6, 22, 45]."

2. I. Joó, On some convexities, Acta Math. Hung. 54(1-2)(1989), 163-172.

3. I. Joó, An inequality between the Helly and Caratheodory numbers... Annales Univ. Sci. Budap., Sectio Math. 33(1990), 143-146.

[13] **M. Horváth, On additive functions, Annales Univ. Sci. Budapest., Sectio Math. 31(1988), 87-93.**

1. I. Joó, On the growth of the eigenfunctions of the Schrödinger operator II., Annales Univ. Sci. Budap., Sectio Math. 31(1988), 75-85.

2. P. Erdős and I. Joó, On the expansions $1 = \sum q^{-n_i}$, Periodica Math. Hung. 23(1)(1991), 27-30.

"The second motivation comes from [13] where the author shows a connection of the number of consecutive zeros with additive functions"

[14] **M. Horváth, On eigenfunction expansions, Annales Univ. Sci. Budapest., Sectio Math. 32(1989), 159-190.**

1. I. Joó, On some problems of M. Horváth (Saturation theorems for Walsh-Fourier expansion, Annales Univ. Sci. Budap., Sectio Math. 31(1988), 243-260.

2. I. Joó, On Laguerre functions (estimates for the sums of the squares), Annales Univ. Sci. Budap., Sectio Math. 35(1992), 133-146.

3. S. Szabó and M.B. Tahir, On the Fejér summability of eigenfunction expansions, Annales Univ. Sci. Budap., Sectio Math. 35(1992), 157-188.

[15] **Horváth M. and Joó I., On the Ky Fan-convexity (in Hungarian), Mat. Lapok 34(1-3)(1987), 137-140.**

[16] **M. Horváth, Infinite string with discrete spectrum, Periodica Math. Hung. 20(1989), 261-278.**

1. S.A. Avdonin, S.A. Ivanov and I. Joó, On Riesz bases from vector exponentials II., Annales Univ. Sci. Budap., Sectio Math. 32(1989), 115-126.

2. I. Joó, On the optimal control of circular membranes, *Acta Math. Hung.* 58(3-4)(1991), 365-376.

[17] A. Bogmér, M. Horváth and I. Joó, Note to some papers of V. Komornik on vibrating membranes , *Periodica Math. Hung.* 20(1989), 193-205.

1. A. M. Lindner, Growth estimates for sine-type functions and applications to Riesz bases of exponentials, *Approximation Theory and Applications (N.S.)* 18(3)(2002), 26-41. "We also give an explicit lower bound for a theorem of Bogmér-Horváth-Joó"

2. V. Komornik and P. Loreti, Partial observability of coupled linear systems, *Acta Math. Hungar.* 86 (2000), no. 1-2, 49-74.

3. I. Joó, On the control of a circular membrane I, *Acta Mathematica Hungarica*, 61(3-4)(1993), 303-325.

4. I. Joó, On some Riesz bases, *Periodica Math. Hung.* 22(3)(1991), 187-196.

5. I. Joó, A remark on the vibration of a circular membrane in different points , *Acta Mathematica Hungarica*, 59(1-2)(1992), 245-252.

[18] M. Horváth, I. Joó and I. Szalkai, Proving theorems in analysis using mathematical logical methods, Third conference of program designers (July 1-3, 1987), ed. by A. Iványi, Budapest, 1987. 145-149.

[19] Horváth M., Joó I. és Szalkai I., A Banach-elvről, *Mat. Lapok* 34(4)(1991), 253-300.

[20] M. Horváth and I. Joó, On Riesz bases II., *Annales Univ. Sci. Budapest., Sectio Math.* 33(1990), 261-271.

1. A.M. Lindner, Growth estimates for sine-type functions and applications to Riesz bases of exponentials, *Approximation Theory and Applications (N.S.)* 18(3)(2002), 26-41.

"...the exponential type σ is related with the number S_r via the following lemma by Horváth and Joó"

[21] M. Horváth, The vibration of a membrane in different points, *Annales Univ. Sci. Budapest., Sectio Math.* 33(1990), 31-38.

1. V. Komornik, On the vibrations of rectangular membranes, *Diff. Int. Equations* 6(2)(1993), 319-327.

2. Komornik V., *Evolúciós rendszerek egzakt irányíthatósága és oszcillációs tulajdonságai*, DSc, Budapest 1989.

3. S.A. Avdonin, S.A. Ivanov and I. Joó, Exponential series in the problems of initial and pointwise control of a rectangular vibrating membrane, *Studia Sci. Math. Hung.* 30(1995),no. 3-4, 243–259.
4. I. Joó, On the control of a circular membrane and related problems, *Annales Univ. Sci. Budap., Sectio Math.* 34(1991), 231-266.
5. I. Joó, Exact controllability and oscillation properties of circular membranes, DSc, Budapest 1992.
6. N.V. Su, Controllability of discrete time systems with restrained controls in infinite dimensional spaces (in Hungarian), PhD, Budapest 1992.
7. I. Joó, On some Riesz bases, *Periodica Math. Hung.* 22(3)(1991), 187-196.

[22] M. Horváth, Some saturation theorems for classical orthogonal expansions I., *Periodica Math. Hung.* 22(1)(1991),27-60.

1. K. Stempak, Addendum: Conjugate expansion for ultraspherical functions, *Tohoku Math. J.* 46(1994), 293-294.

”I have recently become aware of Horváth [1], where, among other things, another approach to the conjugacy for the ultraspherical expansions is suggested and investigated” ”I would also like to acknowledge that ... [3, Theorem 2.2] are identical with those in [1, Lemma 1 and Theorem 1]”

2. I. Joó, On some problems of M. Horváth (Saturation theorems for Walsh-Fourier expansion, *Annales Univ. Sci. Budap., Sectio Math.* 31(1988), 243-260.
3. Á. P. Horváth, Characterization of Hermite-Fourier series, in: *Coll. Math. Soc. János Bolyai* 58, Approximation Theory, Kecskemét, Hungary, 1990, 367-375.
4. I. Joó, On the conjugate function of Dirichlet series, *Annales Univ. Sci. Budap., Sectio Math.* 35(1992), 59-67.
5. I. Joó, Alexits type theorem for multidimensional trigonometric series, *Annales Univ. Sci. Budap., Sectio Math.* 34(1991), 173-180.
6. I. Joó, On Riesz means of Hermite-Fourier series of functions from Lipschitz class, *Annales Univ. Sci. Budap., Sectio Math.* 35(1992), 69-76.
7. I. Joó, On some notions of harmonic analysis for Sturm-Liouville expansions, *Annales Univ. Sci. Budap., Sectio Math.* 35(1992), 77-98.
8. I. Joó, On Hermite-conjugate functions, *Annales Univ. Sci. Budap., Sectio Math.* 33(1990), 109-118.

9. I. Joó, On Hermite-functions II., *Acta Math. Hung.* 68(1-2)(1995), 111-116.
10. I. Joó, Saturation theorems for Hermite-Fourier series, *Acta Math. Hung.* 57(1-2)(1991), 169-179.

[23] M. Horváth, Some saturation theorems for classical orthogonal expansions II., *Acta Math. Hung.* 58(1-2)(1991), 157-191.

1. Á. P. Horváth, Characterization of Hermite-Fourier series, in: *Coll. Math. Soc. János Bolyai* 58, Approximation Theory, Kecskemét, Hungary, 1990, 367-375.
2. I. Joó, On the conjugate function of Dirichlet series, *Annales Univ. Sci. Budap., Sectio Math.* 35(1992), 59-67.
3. I. Joó, Alexits type theorem for multidimensional trigonometric series, *Annales Univ. Sci. Budap., Sectio Math.* 34(1991), 173-180.
4. I. Joó, On Hermite-conjugate functions, *Annales Univ. Sci. Budap., Sectio Math.* 33(1990), 109-118.
5. I. Joó, On Riesz means of Hermite-Fourier series of functions from Lipschitz class, *Annales Univ. Sci. Budap., Sectio Math.* 35(1992), 69-76.
6. I. Joó, On Hermite-functions II., *Acta Math. Hung.* 68(1-2)(1995), 111-116.
7. I. Joó, On some notions of harmonic analysis for Sturm-Liouville expansions, *Annales Univ. Sci. Budap., Sectio Math.* 35(1992), 77-98.
8. I. Joó, On some problems of M. Horváth (Saturation theorems for Walsh-Fourier expansion, *Annales Univ. Sci. Budap., Sectio Math.* 31(1988), 243-260.

[24] M. Horváth, I. Joó and A. Sövegjártó , On Sturm-Liouville difference equations, *Annales Univ. Sci. Budapest., Sectio Comp.* 10(1990), 135-165.

1. A.A. Szamarszkij, *Bevezetés a numerikus módszerek elméletébe*, Tankönyvkiadó, Budapest 1989.

[25] A. Bogmér, M. Horváth and A. Sövegjártó, On some problems of I. Joó, *Acta Math. Hung.* 58(1-2)(1991), 153-155.

1. M. Pedecini, Greedy expansions and sets with deleted digits, *Theoretical Computer Science* 332(1-3)(2005), 313-336.

"We give here a new proof of this fact by adapting an approach used by Bogmer, Horvath and Sovegarto in (BHS91)."

2. P. Erdős and V. Komornik, Developments in non-integer bases, *Acta Math. Hung.* 79(1-2)(1998), 57-83.

3. Y. Bugeaud, On a property of Pisot numbers and related questions, *Acta Math. Hung.* 73(1-2)(1996), 33-39.

"To show it, we use the same argument as Bogmer, Horvath and Sovegarto [2], based on algebraic number theory."

4. P. Erdős and I. Joó, On the number of expansions.... *Annales Univ. Sci. Budap., Sectio Math.* 35(1992), 129-132.

5. P. Erdős, M. Joó and I. Joó, On a problem of Tamás Varga, *Bull. Soc. Math. France* 120(1992), 101-116.

6. I. Joó, On the distribution of the set...., *Acta Math. Hung.* 58(1-2)(1991), 199-203.

7. P. Erdős, I. Joó and V. Komornik, Characterization of the unique expansions and related problems, *Bull. Soc. Math. France* 118(1990), 377-390.

"We recall from [8]...that if q is a Pisot number then..."

8. I. Joo, On some Riesz bases, *Periodica Math. Hung.* 22(1991), 187-196.

[26] M. Horváth, I. Joó and Z. Szentmiklóssy, A problem in game theory, *Studia Sci. Math. Hung.* 27(1992), 385-389.

[27] P. Erdős, M. Horváth and I. Joó, On the uniqueness of the expansions $1 = \sum q^{-n_i}$, *Acta Math. Hung.* 58(3-4)(1991), 333-342.

1. D.S. Broomhead, N. Sidorov, Mutual information and capacity of a linear digital channel, *Nonlinearity* 17(6)(2004), 2203-2223.

2. E. Herrmann, Intervall-filling sequences involving reciprocal Fibonacci numbers, *Fibonacci Quarterly* 41(5) (2003), 441-450.

3. V. Komornik, P. Loreti and A. Pethő, The smallest univoque number is not isolated, *Publ. Math. Debrecen* 62(3-4)(2003), 429-435.

4. J.P.Allouche and M. Cosnard, Non-integer bases, iteration of continuous real maps and an arithmetic self-similar set, *Acta Math. Hung.* 91(4)(2001), 325-332.

"For open problems, see for example [20,22]"

5. V. Komornik and P. Loreti, Unique developments in non-integer bases, *Amer. Math. Monthly* 105(7)(1998), 636-639.

6. V.S. Dimitrov, G.A. Jullien and W.C. Miller, A residue number system implementation of real orthogonal transforms, *IEEE Trans. on Signal Processing* 46(3)(1998), 563-570.

7. V. Komornik and P. Loreti, On the expansions in non-integer bases, *Rendiconti di Mat, Serie VII*, vol. 19 (1999), 615-634.

In the abstract: "In [2] Erdos, Horvath and Joo found a curious uniqueness property for the expansions of the number 1 in some non-integer bases q ."

8. V. Komornik and P. Loreti, On the topological structure of univoque sets, *Journal of Number Theory* 122 (1): 157-183 JAN 2007

"Surprisingly, as discovered by Erdős, Horváth and Joó [6], for some q there is only one such expansions." "The first three properties were established by Erdős, Horváth and Joó [6]."

9. M. de Vries, A property of algebraic univoque numbers, *Acta Math. Hungar.* 119(1-2)(2008), 57-62. (Arxiv preprint math NT/0612603, 2006.)

"Erdős, Horváth and Joó ([4]) discovered in 1991 that for some real numbers $q > 1$ there exists only one q -expansion."

10. A. C. Lai, Developments in non-integer bases: representability of real numbers and uniqueness, PhD Thesis, Rome III, 2006.

11. P. Loreti and V. Komornik, Expansions in complex bases, *Canadian Math. Bulletin* 50(3)(2007), 399-408.

12. M. de Vries and V. Komornik, Unique expansions of real numbers, *Advances in Mathematics* 221 (2009) 390427. (arXiv:math/0609708v2, 2006.)

"A new research field was opened when Erdős, Horváth and Joó discovered continuum many non-integer real numbers $q > 1$ for which only one sequence..." "It is well known that the set U has Lebesgue measure zero [10,19]."

13. J-P. Allouche and C. Frougny, Univoque numbers and a Thue-Morse avatar, arXiv:0712.0102v1 [math.NT] 1 Dec 2007.

14. M. de Vries, On the number of unique expansions in non-integer bases, *Topology and its Applications* 156(2009), 652-657.

"Starting with a discovery of Erdős, Horváth and Joó [6], many works during the last fifteen years were devoted to the study of the exceptional set U_q consisting of those numbers ... with a unique expansion in base q ." "It was shown in [6] that the set ... has continuum many elements."

[28] M. Horváth, **Local uniform convergence of the eigenfunction expansion associated with the Laplace operator I**, *Acta Math. Hung.* **64(1994)**, 1-25.

1. I. Joó and P. Várlaki, Stabilization of Dirac expansions by Riesz and other means, *Annales Univ. Sci. Budap., Sectio Math.* **39(1996)**, 113-123.

[29] M. Horváth, **Local uniform convergence of the eigenfunction expansion associated with the Laplace operator II**, *Acta Math. Hung.* **64(2)(1994)**, 101-138.

1. I. Joó and P. Várlaki, Stabilization of Dirac expansions by Riesz and other means, *Annales Univ. Sci. Budap., Sectio Math.* **39(1996)**, 113-123.

[30] M. Horváth, **Exact norm estimates for the singular Schrödinger operator**, *Acta Math. Hung.* **60(1-2)(1992)**, 177-195.

[31] M. Horváth, **Uniform estimations of the Green function for the singular Schrödinger operator**, *Acta Math. Hung.* **61(3-4)(1993)**, 327-342.

[32] M. Horváth, **Sur le développement spectral de l'opérateur de Schrödinger**, *Comptes Rendus Acad. Sci. Paris, Série I.* **311(1990)**, 499-502.

1. C. Brouder, Multiple-scattering theory (manuscript from lmcp.jussieu.fr), 2002.

"We can add to this some bounds that were proved for the potential we used. In [22] it is shown that..."

[33] M. Horváth and I. Joó, **On a minimax theorem**, *Annales Univ. Sci. Budapest., Sectio Math.* **37(1994)**, 119-123.

[34] **Eigenfunction expansions for the one-dimensional Dirac operators**, *Acta Sci. Math. Szeged*, **61(1995)**, 225-240.

1. I. Joó and P. Várlaki, Stabilization of Dirac expansions by Riesz and other means, *Annales Univ. Sci. Budap., Sectio Math.* **39(1996)**, 113-123.

[35] **Local uniform convergence of the Riesz means of Laplace and Dirac expansions**, *Annales de la Faculte des Sciences de Toulouse* **6(1997)**, 653-696.

1. I. Joó and P. Várlaki, Stabilization of Dirac expansions by Riesz and other means, *Annales Univ. Sci. Budap., Sectio Math.* 39(1996), 113-123.

[36] M. Horváth and I. Joó, On some special pseudoconvex spaces, *Acta Math. Hung.* 81(1-2)(1998), 13-20.

[37] M. Horváth, Eigenfunction expansion for the three-dimensional Dirac operator, *J. Differential Equations* 160(2000), 139-174.

[38] M. Horváth, On a theorem of Ambarzumian, *Proc. Royal Soc. Edinburg*, 131A(2001), 899-907.

1. M. Kiss, An n-dimensional Ambarzumian type theorem for Dirac operators, *Inverse Problems* 20(2004), 1593-1597.

“For Dirac operators with scalar potentials, Horvath in [4] proved a similar theorem with the assumption $m \geq 1/2$.” “Counterexamples for the one-dimensional case can be found in Horvath [4].”

2. F. Serier, Problemes spectraux inverses pour des operateurs AKNS et de Schrodinger singuliers sur $[0, 1]$, PhD Thesis, Universite de Nantes, 2005.

”...les travaux de Horvath...montre que l’operateur de Dirac possede une propriete d’injectivite spectrale analogue au theoreme de Borg...”

3. S. Albeverio, R. Hryniv, Ya. Mykytyuk, Inverse spectral problems for Dirac operators with summable potentials, *RUSSIAN JOURNAL OF MATHEMATICAL PHYSICS* 12 (4): 406-423 OCT-DEC 2005

”Ambartsumyan-type theorems were proved in [24]”

4. C-F. Yang, Ambarzumyan’s theorems for Sturm-Liouville operators with general boundary conditions, *J. London Math. Soc.* (to appear).

”Various generalizations of Ambarzumyan’s theorem can be found in [...13,...]”

5. Chuan-Fu Yang and Zhen-You Huang, Inverse spectral problems for $2m$ -dimensional canonical Dirac operators, *Inverse Problems* 23(2007), 2565-2574.

”The papers [14, 21] gave Ambarzumyan-type theorems for the stationary Dirac operator; the different methods, based on the properties of the moments of a function [14] and a special variable [21], respectively, were used in their proofs.”

[39] M. Horváth, On the inverse spectral theory of Schrödinger and Dirac operators, *Trans. Amer. Math. Soc.* 353(10)(2001), 4155-4171.

1. C. Remling, Schrödinger operators and de Branges spaces, *J. Funct. Anal.* 196(2)(2002), 323-394.

“Finally, for still another recent treatment of uniqueness questions, see [20]”

2. Y. Kurylev and M. Lassas, Inverse problem for a Dirac-type equation on a vector bundle, arXiv:math. AP/0501049, 2005.

“Inverse problems for the Dirac equation in the 1-dimensional case were considered earlier e.g. in [19]”

3. S. Albeverio, R. Hryniv and Y. Mykytyuk, Inverse spectral problems for Dirac operators with summable potentials *RUSSIAN JOURNAL OF MATHEMATICAL PHYSICS* 12 (4): 406-423 OCT-DEC 2005.

4. M. M. Malamud, Uniqueness of the Matrix Sturm-Liouville Equation given a Part of the Monodromy Matrix, and Borg Type Results, in: *Sturm-Liouville Theory, Past and Present*, Werner O. Amrein, Andreas M. Hinz and David P. Pearson, eds, Birkhauser, Basel 2005.

”In the case of 2x2 Dirac system, Corollary 6.11 has independently been discovered by ... Horvath [26]”

5. R. del Rio, Boundary Conditions and Spectra of Sturm-Liouville Operators in: *Sturm-Liouville Theory, Past and Present*, Werner O. Amrein, Andreas M. Hinz and David P. Pearson, eds, Birkhauser, Basel 2005.

”Generalizations of some of the above results can be found in a paper by M. Horvath [22].”

6. *Spectral Theory and Mathematical Physics: A Festschrift in Honor of Barry Simon’s 60th Birthday*, Fritz Gesztesy et al.(ed), Amer. Math. Soc. 2007.

”Further refinements of Corollary 5.27, involving N spectra, were proved by Horvath [124] (he also studies the corresponding analog for a Dirac-type operator).”

7. Y. Kurylev and M. Lassas, Inverse problems and index formulae for Dirac operators, *Advances in Mathematics* 221 (2009) 170216.

”For previous results in inverse problems for the Dirac equation in the 1-dimensional case, see e.g. [14,20,26]”

8. C-T. Shieh and V. Yurko, Inverse nodal and inverse spectral problems for discontinuous boundary value problems, *J. Math. Anal. Appl.* 347 (2008) 266272.

”We also note that for classical SturmLiouville operators incomplete inverse problems were investigated in [6,9,10].”

9. D.J. Kaup and H. Steudel, Inverse scattering for an AKNS problem with rational reflection coefficients, *Inverse Problems*, 24 (2008) 025015.

10. S. Clark, F. Gesztesy and M. Zinchenko, Weyl-Titchmarsh theory and Borg-Marchenko type uniqueness results for CMW operators With matrix-valued Verblunsky coefficients, *Operators and Matrices* 1(4)(2007), 535-592.

”Still other proofs were presented in [60] and [61].”

[40] M. Horváth, On the first two eigenvalues of Sturm-Liouville operators, Proc. Amer. Math. Soc. 131(2003), 1215-1224.

1. S. Abramovich, On frequencies of strings and deformation of beams, *Quarterly of Applied Math.* 2005 63 (2005), no. 2, 291–299.

2. R.G. Pinsky, Comparison theorems for the spectral gap of diffusion processes and Schrödinger operators on an interval, *J. London Math. Soc.* 72(2005),621-631.

“Recently it was shown in [4] that the inequality continues to hold in the Dirichlet case for all single-well potentials with transition point ... It was also shown that the inequality does not always hold ...for single-barrier potentials...” “The following corollaries are the diffusion analogs of the result cited above in [4].” ”We will obtain a diffusion analog of the above cited result from [4]...”

3. R.G. Pinsky, Spectral gap and rate of convergence to equilibrium for a class of conditioned Brownian motions *STOCHASTIC PROCESSES AND THEIR APPLICATIONS* 115 (6): 875-889 JUN 2005

”It is known that if V is a single-wellpotential...then the spectral gap satisfies...[1],[3] and [4]”

4. S.Y. Kung and T. Kaohsiung, Density functions with extremal antiperiodic eigenvalues and related topics, e-Thesis, National Sun Yat-sen University 2004. (see etd.lib.nsysu.edu.tw).

“... it was proved that the constant potential gives the minimum Dirichlet eigenvalue gaps when the potential is ... single-well [7]”

5. H.K. Huang and T. Kaohsiung, Optimal estimates of the eigenvalue gap and eigenvalue ratio with variational analysis, Master Thesis, National Sun Yat-sen University 2004. (see etd.lib.nsysu.edu.tw).

“Recently a series of works by ... and Horvath [6] show that the first eigenvalue gap ... and the first eigenvalue ratio of the string ... are dual to each other”

6. M. Kiss, Eigenvalue ratios of vibrating strings, *Acta Math. Hung.* 2005. 110 (2006), no. 3, 253–259.

“Horvath [6] extended Huang’s results to (not necessarily symmetric) single-barrier functions with transition point ...”

7. Y.H.Cheng, Inverse Problems for Various Sturm-Liouville Operators PhD Thesis, National Sun Yat-sen University, 2005.

"Huang's work was generalized...by Horvath. Horvath's method also makes use of variational analysis. Horvath....also studied the optimal...eigenvalue gap..."

8. M. Ashbaugh, The Fundamental Gap, in: Low eigenvalues of Laplace and Schrodinger operators, ARCC Workshop, Palo Alto, California, May 22-26, 2006.

"Further work with single-well potentials in one dimension includes that of Horvath [24], who was able to eliminate the symmetry hypothesis of Ashbaugh and Benguria"

9. M-J. Huang and T-M. Tsai, The eigenvalue gap for one-dimensional Schrödinger operators with symmetric potentials, Proc. Royal Soc. Edinburgh A 139(2009), 359-366.

"(d) single-well potentials with transition point $t = a/2$ ([4])", "Horvath [4] also gave counterexamples which show that..."

10. M-J. Huang, The eigenvalue gap for vibrating strings with symmetric densities, Acta Math. Hungar. 117(4)(2007), 341-348.

"For single-barrier (not necessarily symmetric) density with transition point $x = a/2$, we can apply the ratio result of Horváth [5] to obtain:....."

"Proof: Under the hypotheses on ρ , Horváth [5] proved that...."

11. A. Henrot, Extremum Problems for Eigenvalues of Elliptic Operators, Birkhauser 2006.

"Our first result is due to M. Horvath in [112]. He was inspired by a previous paper of M. Ashbaugh and R. Benguria [6] where they assumed a supplementary symmetry that M. Horvath succeeded to remove."

"Theorem 8.4.2 (Horvath) The constant potential minimize the gap..."

"Proof of Theorem 8.4.2 : For any M, let us introduce the class..."

"For an extension of Theorem 8.4.2 to double-well potentials...we refer to [1]."

"...the assumption that the transition point is the middle seems important since... M. Horvath was able to exhibit a potential V with a smaller gap..."

"...we refer for the proof to [112]."

H-K. Huang, Optimal estimates for the eigenvalue gap and eigenvalue ratio with variational analysis, 2004. "Recently a series of work by ... and Horvath [6] show that the first eigenvalue gap ... and the first eigenvalue ratio ... are dual problems" "Theorem 1.2 ([6])" "[Horvath 2002] (detailed citation of the results, repetition of complete proofs)"

[41] M. Horváth, **Inverse spectral problems and closed exponential systems**, *Annals of Math.* **162(2005)**, 885-918.

1. N. Makarov and A. Poltoratski, Meromorphic Inner Functions, Toeplitz Kernels and the Uncertainty Principle, a chapter in the book: *Perspectives in Analysis, Essays in Honor of Lennart Carleson's 75th Birthday*, Math. Phys. Studies vol. 27. Springer 2005. "To obtain necessary conditions one has to use more specific techniques of the Schrödinger operator theory, see [7], [22]."

2. MA Na-rui, FU Sliou-zhong and WEI Guang-sheng, A Class of Inverse Sturm-Liouville Eigenvalue Problems, *ACTA SCIENTIARUM NATURALIUM UNIVERSITATIS NEIMONGOL* 2006 Vol.37 No.5 P.481-483.

3. Chuan-Fu Yang and Zhen-You Huang, Inverse spectral problems for 2m-dimensional canonical Dirac operators, *Inverse Problems* 23(2007), 2565-2574.

"Recently, the inverse spectral theory has started to develop intensively, we mention only the papers [9, 10, 11, 15, 24]."

4. *Spectral Theory and Mathematical Physics: A Festschrift in Honor of Barry Simon's 60th Birthday*, Fritz Gesztesy et al.(ed), Amer. Math. Soc. 2007.

"Optimal and nearly optimal conditions for a set of eigenvalues to determine the potential in terms of closedness properties of the exponential system corresponding to the known eigenvalues (implying Theorem 5.25 and a generalization thereof) were also derived by Horvath [125]."

5. C-T. Shieh and V. Yurko, Inverse nodal and inverse spectral problems for discontinuous boundary value problems, *J. Math. Anal. Appl.* 347 (2008) 266272.

"The following theorem has been proven by M. Horvath [11] for the Sturm-Liouville equation without interior discontinuity. We show it also holds for (1)-(3)."

6. C-F. Yang and X-P. Yang, An interior inverse problem for the Sturm-Liouville operator with discontinuous conditions, *Applied Mathematics Letters* 22(2009), 1315-1319.

"Later, inverse problems for a regular and singular Sturm-Liouville operator appeared in various versions [4-29,31]."

7. V. Chelkak and E. Korotyaev, Weyl-Titchmarsh functions of vector-valued Sturm-Liouville operators on the unit interval, Oberwolfach preprints, OWP 2008-13,

http://arxiv.org/PS_cache/arxiv/pdf/0808/0808.2547v2.pdf

"Note that there are two classical assumptions about the potential that

make the knowledge of the spectrum sufficient: symmetry or the [partial] knowledge of $q(x)$ (the Hochstadt-Lieberman theorem [HL78], see also [GS00], [Ho05], [MP05]).”

[42] M. Horváth, Inverse scattering with fixed energy and an inverse eigenvalue problem on the half-line, Trans. Amer. Math. Soc. 358 (11)(2006), 5161-5177.

1. A. Ramm, Some results on inverse scattering, arXiv:0710.3686v1 [math-ph] 19 Oct 2007.

”...This conjecture was proved in [4].”

2. Spectral Theory and Mathematical Physics: A Festschrift in Honor of Barry Simon’s 60th Birthday, Fritz Gesztesy et al.(ed), Amer. Math. Soc. 2007.

”For an interesting half-line problem related to this circle of ideas we also refer to Horvath [126].”

[43] M. Horváth and M. Kiss, A bound for the ratios of eigenvalues of Schrödinger operators with single-well potentials, Proc. Amer. Math. Soc. 134 (5)(2006), 1425-1434.

1. A. Henrot, Extremum Problems for Eigenvalues of Elliptic Operators, Birkhauser 2006.

”The previous inequality has been recently improved for single-well potentials by M. Horvath and M. Kiss in [113]. Namely, they prove that one can replace $\lceil n/m \rceil$ by n/m in the right hand side. For similar results with Neumann boundary conditions, we refer to [115].”

[44] M. Horváth and M. Kiss, A bound for ratios of eigenvalues of Schrödinger operators on the real line, in: Proceedings of the AIMS’ Fifth International Conference on Dynamical Systems and Differential Equations, Supplement Volume of Discrete and Continuous Dynamical Systems, 2005., 403-409.