

Publications

Antal Járai

Publications are grouped into different categories ordered by decreasing importance. Different publications of essentially the same material (e.g., referred paper, conference talk abstract, etc.) are mentioned in the most important one of the categories using (a), (b), etc.

Referred papers

- [1] Antal Járai, *On measurable solutions of functional equations*. (a) Publ. Math. Debrecen 26 (1979), 17–35. MR80f:39008. (b) 16th International Symposium on Functional Equations, Leibnitz, Austria, 1978; Abstract: Aequationes Math. 19 (1979), 270.
- [2] Zoltán Daróczy, Antal Járai, *On the measurable solutions of a functional equation arising in information theory*. Acta Math. Acad. Sci. Hungar. 34 (1979), 105–116. MR80i:39009.
- [3] Antal Járai, *Regularity properties of functional equations*. (a) Aequationes Math. 25 (1982), 52–66. MR84k:39015; (b) Abstract: Aequationes Math. 25 (1982), 118–119; (c) Talk, 2nd International Symposium on Functional Equations and Inequalities, Debrecen, Hungary, 1979; Abstract: Publ. Math. Debrecen 27 (1980), 178.
- [4] Antal Járai, *Invariant extension of Haar measure*. (a) Diss. Math. 233 (1984), 1–26. MR86j:28010; (b) Talk, Functions, series, operators, Budapest, 1980; (c) Talk at Technical University, Bielsko-Biala, 1986.
- [5] Antal Járai, *A remark to a paper of J. Aczél and J. K. Chung*. (a) Studia Sci. Math. Hungar. 19 (1984), 273–274. MR87m:39006; (b) Talk, Aczél–Daróczy seminar, Debrecen, 1991.
- [6] Antal Járai, *Derivates are Borel functions*. Aequationes Math. 29 (1985), 24–27. MR87b:26019.

- [7] Zoltán Daróczy, Antal Járai, Imre Káta, *Interval filling sequences*. Annales Univ. Sci. Budapest, Sectio Computatorica 6 (1985), 53–63. MR89e:11004.
- [8] Antal Járai, *On regular solutions of functional equations*. (a) Aequationes Math. 30 (1986), 21–54. MR87g:39010; (b) Talk, University of Waterloo, 1982.
- [9] Zoltán Daróczy, Antal Járai, Imre Káta, *On functions defined by digits of real numbers*. (a) Acta Math. Hungar. 47 (1–2) (1986), 73–80. MR87e:11090; (b) Talk, 23th International Symposium on Functional Equations. Abstract: Proceedings of the 23th International Symposium on Functional Equations. Centre for Information Theory, University of Waterloo, Ontario, Canada, 1985.
- [10] Zoltán Daróczy, Antal Járai, Imre Káta, *Intervallfüllende Folgen und volladditive Functionen*. Acta Sci. Math. 50 (1986), 337–350. MR88k:11021.
- [11] Zoltán Daróczy, Antal Járai, Imre Káta, *On the distance of finite numbers of a given length*. Periodica Math. Hungar. 18 (1987), 193–201. MR88k:11049.
- [12] Antal Járai, *Differentiation of parametric integrals and regularity of functional equations*. (a) Grazer Math. Ber. 315 (1991), 45–50. MR93d:26010; (b) 29th International Symposium on Functional Equations, Wolfville, Canada, 1991; Abstract: Aequationes Math. 43 (1992), 272–273.
- [13] Zoltán Daróczy, Antal Járai, Imre Káta, *Some Remarks on Interval Filling Sequences and Additive Functions*. (a) Grazer Math. Ber. 315 (1991), 13–24. MR94d:39012; (b) Talk, 2nd International Conference on Functional Equations and Inequalities. Abstract: Proceedings of the 2nd International Conference on Functional Equations and Inequalities, Szczawnica, Poland, 1987, 188.
- [14] Antal Járai, *Hölder continuous solutions of functional equations*. Comptes Rendus Math. Rep. Acad. Sci. Canada 14 (1992), 213–218. MR94b:39027.
- [15] Zoltán Daróczy, Antal Járai, Tamás Szabó, *On sequences of solid type*. In: Probability theory and application, Kluwer Academic Publ., 1992, 335–342. MR94b:11070.
- [16] Antal Járai, *On Hölder continuous solutions of functional equations*. Publ. Math. Debrecen 43/3–4 (1993), 359–365. MR95a:39016.

- [17] Antal Járαι, *On continuous solutions of functional equations*. (a) Publ. Math. Debrecen, 44/1–2 (1994), 115–122. MR95g:39025; (b) 28th International Symposium on Functional Equations, Graz-Mariatrost, Austria, 1990. Abstract: Aequationes Math. 41 (1991), 262.
- [18] Antal Járαι, *On analytic solutions of functional equations*. (a) Annales Univ. Sci. Budapest, Sect. Comp. 14 (1994), 71–77. MR96f:39029; (b) 25th International Symposium on Functional Equations, Hamburg-Rissen, Germany, 1987; Abstract: Aequationes Math. 35 (1988), 94.
- [19] Antal Járαι, *On Lipschitz property of solutions of functional equations*. (a) Aequationes Math. 47 (1994) 69–78. MR94k:39037; (b) 31th International Symposium on Functional Equations, Debrecen, Hungary, 1993; Abstract: Aequationes Math. 47 (1994), 277.
- [20] Antal Járαι, Gyula Maksa, (a) *The measurable solutions of a functional equation of C. Alsina and J. L. Garcia-Roig*. Comptes Rendus Math. Rep. Acad. Sci. Canada, 17 (1995), 7–10. MR96f:39019; (b) *Remark 2. (Solution of a problem of C. Alsina and J. L. Garcia-Roig.)* Aequationes Math. 47 (1994), 302.
- [21] Antal Járαι, *A Steinhaus type theorem*. (a) Publ. Math. Debrecen 47 (1995), 1–13. MR97g:28002; (b) Talk: 22nd International Symposium on Functional Equations, Oberwolfach, Germany, 1984; Abstract: Aequationes Math. 29 (1985), 72; Tagungsbericht 52/1984, Mathematisches Forschungsinstitut Oberwolfach, 14; (c) Talk, XI. Österreichischer Mathematikerkongreß, Graz, 1985; Abstract: XI. Österreichischer Mathematikerkongreß, Vortragsauszüge, Österreichischer Mathematiker Gesellschaft, 1985.
- [22] Karl-Heinz Indlekofer, Antal Járαι, Imre Kátai, *On some properties of attractors generated by iterated function systems*. (a) Acta Sci. Math. Szeged 60 (1995), 411–427. MR96j:11104; (b) Talk, Janus Pannonius University, Pécs, 1994.
- [23] Antal Járαι, László Székelyhidi, *Regularization and General Methods in the Theory of Functional Equations*. (a) Survey paper. Aequationes Math. 52 (1996) 10–29. MR98c:39006; (b) Survey talk. 30th International Symposium on Functional Equations, Oberwolfach, Germany, 1992. Abstract: Mathematisches Forschungsinstitut Oberwolfach, Tagungsbericht 42/1992, 11; Aequationes Math. 46 (1993), 273.
- [24] Karl-Heinz Indlekofer, Antal Járαι, *Largest known twin primes*. Math. Comp. 65 (1996), 427–428. MR96d:11009; (b) Talk, Mátraháza, 1995.

- [25] Antal Járαι, Miklós Kozák, Péter Rózsa, *Comparison of the Methods of Rock-Microscopic Grain-Size Determination and Quantitative Analysis*. *Math. Geology* 29(8) (1997), 977–991.
- [26] Antal Járαι, Wolfgang Sander, *A regularity theorem in information theory*. *Publ. Math. Debrecen*, 50 (3–4), (1997), 339–357. MR99c:39029.
- [27] Antal Járαι, *Regularity Property of the Functional Equation of the Dirichlet Distribution*. (a) *Aequationes Math.* 56 (1998), pp. 37–46. MR99e:39083; (b) Talk on the 34th International Symposium on Functional Equations, Wisła, Poland (1996). Abstract: *Aequationes Math.* 53 (1997), 171.
- [28] Antal Járαι, *A generalization of a theorem of Piccard*. (a) *Publ. Math. Debrecen* 52(3-4) (1998), 497–506. MR99e:54020; (b) Talk, Universität Ulm, 1992.
- [29] Karl-Heinz Indlekofer, Antal Járαι, *Largest known twin primes and Sophie Germain primes*. (a) *Math. Comp.* 68, 1999, 1317–1324. MR99k:11013; (b) Talk, Eötvös Loránd University, 1997.
- [30] János Aczél, Roman Ger, Antal Járαι, *Solutions of an equation arising from utility that is both separable and additive*. (a) *Proc. Amer. Math. Soc.* 127 (1999), 2911–2915. MR2001a:91037; (b) Talk on the 35th International Symposium on Functional Equations, Graz, 1997. Abstract: *Aequationes Math.* 55 (1998), 283.
- [31] Antal Járαι, *Measurable solutions of functional equations satisfied almost everywhere*. *Math. Pannonica* 10/1 (1999), 103–110. MR2000f:39020.
- [32] Antal Járαι, Che Tat Ng, Weinian Zhang, *A functional equation involving three means*. *Rocznik Naukowo-dydaktyczny Akademii Pedagogicznej w Krakowie* 204 *Prace Matematyczne XVII* (2000), 117–123. MR2002c:39024.
- [33] Antal Járαι, *Baire property implies continuity for solutions of functional equations — even with few variables*. (a) *Acta Sci. Math. Szeged* 66 (2000), 579–601. MR2001i:54031; (b) Talk, 40th International Symposium on Functional Equations, Gronow, Poland. Abstract: *Aequationes Math.*, 65 (2003), 295.
- [34] Antal Járαι, *Solutions of functional equations having bounded variation*. *Aequationes Math.* 61 (2001), 205–211. MR2002f:39045.
- [35] Antal Járαι, Wolfgang Sander, *On the characterization of Weierstrass’s sigma function*. (a) In: Zoltán Daróczy, Zsolt Páles (Eds.), *Functional*

- Equations — Results and Advances, Kluwer, 2002, 29–79. MR:1912704; (b) Talk, 38th International Symposium on Functional Equations, Noszvaj, Hungary, 2000; Abstract: Aequationes Math. 61 (2001), 290; (c) MTA, Közgyűlési Előadások: A Weierstrass-féle szigma függvény jellemzése, 2004 (Talk on the Hungarian Academie of Sciences).
- [36] Antal Járαι, *Continuity implies C^∞ for solutions of functional equations — even with few variables*. Acta Sci. Math. Szeged 67 (2001), 719–734. MR2003d:39041.
- [37] Antal Járαι, *On a problem of S. Mazur*. (a) Publ. Math. Debrecen 59 (2001), 187–193. MR2003d:28019; (b) Talk, XII. Österreichischer Mathematikerkongreß, Wien, 1989; Abstract: XII. Österreichischer Mathematikerkongreß, Vortragsauszüge, Österreichischer Mathematiker Gesellschaft, 1989; (c) Talk, 27th International Symposium on Functional Equations, Bielsko Biala–Katowice–Krakow, Poland, 1989; Abstract: Aequationes Math. 39 (1990), 280; (d) KLTE TTK Debrecen, Technical report 91/15, 1–6.
- [38] Antal Járαι *Regularity properties of functional equations on manifolds*. (a) Aequationes Math. 64 (2002), 248–262. MR:1914957; (b) Talk, 33th International Symposium on Functional Equations, Caldes de Malavella, Spain, 1995. Abstract: Aequationes Math. 51 (1996), 151; (c) Talk, Debrecen-Graz Seminar, Zamárdi, Hungary, 1995; Abstract: Grazer Math. Berichte 327 (1996), 53–54.
- [39] Antal Járαι, *Measurability implies continuity for solutions of functional equations — even with few variables*. (a) Aequationes Math. 65 (2003), 236–266; (b) Talk, Numbers, Functions, Equations’98 International Conference, Noszvaj, Hungary, 1998. Abstract: Proceedings of the Numbers, Functions, Equations’98 International Conference, Leaflets in Mathematics, Janus Pannonius Tudományegyetem, Pécs, 1998; (c) Talk, Kossuth Lajos Tudományegyetem, Debrecen, 1997; (d) Talk, 37th International Symposium on Functional Equations, Huntington, WV, USA, 1999.
- [40] Járαι Antal, Gyula Maksa, Zsolt Páles, *On Cauchy-differences that are also quasiums*. Submitted to Publ. Math. Debrecen.
- [41] Járαι Antal, *Regularity of functional equations on Lie groups*. (a) Submitted to Annales Univ. Sci. Budapest, Sect. Comp.; (b) Talk, 41th International Symposium on Functional Equations, Noszvaj, Hungary, 2003; Abstract: Aequationes Math. 67 (2004), 293.
- [42] Járαι Antal, *Regularity of functional equations with “few” variables*. (a) Ready to submit; (b) Talk, 42th International Symposium on Func-

tional Equations, Opava, Czech Republic, 2004; Abstract: Aequationes Math. 69 (2005), 171; (c) Talk, Third Analysis Miniseminar, 2001, Debrecen.

- [43] Járai Antal, *On regularity of solutions of a functional equation with few variables*. Submitted to Annales Univ. Sci. Budapest, Sect. Comp.

Books and lecture notes

- [44] Antal Járai, *Mérték és integrál*. (a) Nemzeti Tankönyvkiadó, Budapest, 2002, 198 pages. (b) *Mérték és integrálmélet. Kézirat, KLTE TTK*. Tankönyvkiadó, Budapest, 1988; Reprint: 1992, 187 pages. (Measure and integration. Lecture notes.)
- [45] Antal Járai, *Analízis és valószínűségszámítás*. Kézirat, KLTE TTK. Debrecen, 1989, 68 pages. (Analysis and probability theory. Lecture notes.)
- [46] Antal Járai, *Modern alkalmazott analízis*. Kézirat, KLTE TTK, Debrecen, 1992, 361 pages. (Modern applied analysis. Lecture notes.)
- [47] Antal Járai, *Regularity properties of functional equations*. Leaflets in Mathematics. Janus Pannonius University, Pécs, 1996, 77 pages.
- [48] Járai Antal: *Regularity properties of functional equations in several variables*. 363 pages. Advances in Mathematics, Springer, 2005.
- [49] Antal Járai, *Számítógépes számelmélet*. Kézirat, ELTE IK, Budapest, 2004, 61 pages. (Computational Number theory. Lecture notes.)
- [50] Antal Járai (with co-authors), *Bevezetés a matematikába*. ELTE Eötvös Kiadó, Budapest, 2004, 241 pages. (Discrete mathematics. Lecture notes.)
- [51] Antal Járai, *Bevezetés az analízisbe I*. Kézirat, BME TTK, Budapest, 2004, 119 pages. (Calculus I. Lecture notes.)
- [52] Antal Járai, *Bevezetés az analízisbe II*. Kézirat, BME TTK, Budapest, 2004, 120 pages. (Calculus II. Lecture notes.)
- [53] Antal Járai, *Bevezetés az analízisbe III*. Kézirat, BME TTK, Budapest, 2004, 114 pages. (Calculus III. Lecture notes.)
- [54] Járai Antal, Kovács Attila, *Komputeralgebra. Könyvrészlet az Informatikai algoritmusok 1. című könyvben*. ELTE Eötvös Kiadó, Budapest, 2004, 38–93 pages. (Computer algebra. Part in the book Algorithms in computer science 1.)
- [55] Antal Járai, *Kalkulus I*. Kézirat, BME TTK, Budapest, 2006, 100 pages. (Calculus I. Lecture notes.)

Software

- [56] Antal Járαι, *SORT*. Very fast and space efficient sorting and pattern matching tool. User's guide: 4 pages, Z80 assembly: 48 pages, VT20/A, 1982.
- [57] Antal Járαι, *SORT/IV*. Previous program implemented under a different operating system. User's guide: 4 pages, Z80 assembly: 72 pages, VT20/IV, 1985.
- [58] Antal Járαι, *LIBRARY*. Macros and library functions for developing assembly programs. User's guide: 18 pages, Z80 assembly: 50 pages, VT20/A, 1982.
- [59] Antal Járαι, *LIBRARY*. Previous library implemented under a different operating system. Z80 assembly: 97 pages, Forth: 14 pages, VT20/IV, 1985.
- [60] Antal Járαι, *DIAS*. Disassembler for de-compiling executable files into source code with labels. User's guide: 5 pages, Z80 assembly: 32 pages, VT20/A, 1983.
- [61] Antal Járαι, *DIAS/IV*. Previous program implemented under a different operating system. User's guide: 5 pages, Z80 assembly: 38 pages, VT20/IV, 1985.
- [62] Antal Járαι, *MIRAK*. Relational database management system implementing relation algebra. User's guide: 31 pages, BASIC: 6 pages, Z80 assembly: 41 pages, Sinclair Spectrum, 1983.
- [63] Antal Járαι, *MIRAK*. Fully revised version of the previous program for business applications. Virtual file management. User's guide: 21 pages, Z80 assembly: 241 pages, VT20/A, 1983.
- [64] Antal Járαι, *BUSINESS FORTH SYSTEM*. High speed Forth language system with additional data processing features. Handles five different file types, implements string arithmetic, tracing and multi-tasking. User's guide: 74 pages, Z80 assembly: 206 pages, Forth: 11 pages, VT20/IV, 1985.
- [65] Antal Járαι, *DATMAN*. Data management system. Includes eight different functions using the same data form, such as entering, modifying and verifying data, different kinds of data queries, etc. High level language programming front-end. User's guide: 10 pages, Forth: 18 pages, Forth, VT20/IV, 1985.

- [66] Antal Járαι, *DATMAN4*. Multi-tasking, multi-terminal version of DATMAN using a time sharing operating system written by the author. User's guide: 10 pages, Forth: 19 pages, Forth, VT20/IV, 1986.
- [67] Antal Járαι, *FLOAT*. Floating point arithmetic library. Real and complex arithmetic and elementary functions, expression evaluation. User's guide: 32 pages, Z80 assembly: 36 pages, VT20/A, 1986.
- [68] Antal Járαι, *FLOAT/IV*. Previous program implemented under a different operating system. User's guide: 2 pages, Forth: 4 pages, VT20/IV, 1986.
- [69] Antal Járαι, *FORTH ASSEMBLER*. Enables one writing Forth words in assembly language as an extension to Forth. User's guide: 2 pages, Forth: 4 pages, VT20/IV, 1985.
- [70] Antal Járαι, *KRIPT*. Encryption-decryption program allowing multiple keys. User's guide: 1 pages, Z80 assembly: 8 pages, VT20/A, 1985.
- [71] Antal Járαι, *KRIPT/IV*. Previous program implemented under a different operating system. User's guide: 1 pages, Z80 assembly: 8 pages, VT20/IV, 1985.
- [72] Antal Járαι, *CSEBISEV*. Subroutines computing Chebychev polynomials upto a 60-digit precision. User's guide: 2 pages, Forth: 5 pages, VT20/IV, 1986.
- [73] Antal Járαι, *FFT*. Fast Fourier Transform for physical signal processing and analysis. User's guide: 1 pages, Z80 assembly 2 pages, BASIC: 4 pages, Sinclair Spectrum, 1985.
- [74] Antal Járαι, *ARCHIV/IV*. Archivation program. Increases disc capacity by 40 to 200 percent. User's guide: 1 pages, Z80 assembly: 20 pages, VT20/IV, 1986.
- [75] Antal Járαι, *ARCHIV*. Previous program implemented under a different operating system. User's guide: 1 pages, Forth: 7 pages, VT20/A, 1986.
- [76] Antal Járαι, *FORMAT*. Document formatting program. User's guide: 1 pages, Forth: 7 pages, VT20/IV, 1986.
- [77] Antal Járαι, Ilona Matisz, *Accounting and supply management system* BASIC: 18 pages, Z80 assembly: 192 pages, VT20/A, 1983; BASIC: 30 pages, Z80 assembly: 157 pages, VT20/A, 1984.
- [78] Antal Járαι, Ilona Matisz, *Accounting and supply management system* Forth: 104 pages, VT20/IV, 1985.

- [79] Antal Járαι, Ilona Matisz, *CALC*. Spreadsheet program. BASIC: 12 pages, Sinclair Spectrum and ZX81, 1984; BASIC: 6 pages, 6509 assembly: 5 pages, Commodore 720, 1985.
- [80] András Ari, Mária Buri, Antal Járαι, *Chief account-book and bank account administration system*. Program plan: ≈ 120 pages, Z80 assembly: ≈ 100 pages, VT20/A, 1987.
- [81] Antal Járαι, Ilona Matisz, Béláné Kovács, *Buy up and sell administration system*. Made for BARNEVÁL company, Debrecen. Program plan: ≈ 120 pages, Forth: ≈ 100 pages, VT20/IV, 1986.
- [82] Antal Járαι, Margit Lénárd, Imre Makai, Zsolt Páles, György Szabó, *Stock administration system*. Program plan: ≈ 120 pages, Foxbase: ≈ 150 pages, IBM XT/AT network, 1987.
- [83] Antal Járαι, *Travelling administration system*. Program plan: 65 pages, Foxbase: 193 pages, IBM XT/AT network, 1989.
- [84] Antal Járαι, Béla Kis, *Payment administration system*. Program plan: 71 pages, Foxbase: 47 pages, IBM XT/AT network, 1990.
- [85] Antal Járαι, Zoltán Járαι, *Hungarian hyphenation and fonts for T_EX*. Macro package as an extension to the T_EX system to allow hyphenation of Hungarian texts. Hungarian accented letters have been implemented according to the suggestion of D. E. Knuth, the author of T_EX. A total of 1736 Hungarian fonts. T_EX: ≈ 20 pages, METAFONT: ≈ 10 pages, IBM XT/AT, 1991.
- [86] Antal Járαι, *Number systems and fractal geometry*. We used this program with Karl-Heinz Indlekoferrel and Imre Kátai to investigate various questions about number systems and fractal geometry. Maple: ≈ 34 pages, SUN, 1993–94.
- [87] Antal Járαι, *Classical arithmetic algorithms*. C: 17 pages, SPARC-V8 assembly: 15 pages, Unix, 1994.
- [88] Antal Járαι, *Karatsuba multiplication*. (First version joint work with Béla Almási. This makes up 27% of the new version.) Program draft: 3 pages, SPARC-V8 assembly: 40 pages, Unix, 1994.
- [89] Antal Járαι, *Multiplication using Fermat number transform*. (With contribution of Béla Almási in some parts.) Program draft: 6 pages, C: 25 pages, SPARC-V8 assembly: 37 pages, Unix, 1994.
- [90] Antal Járαι, *Complex FFT multiplication*. Program draft and Maple program: 16 pages, C: 35 pages, SPARC-V8 assembly: 76 pages, Unix, 1995.

- [91] Antal Járαι, *Modular arithmetic for short and special modulus*. SPARC-V8 assembly: 53 pages, Unix, 1995.
- [92] Antal Járαι, *Sieve programs*. C: 24 pages, Unix, 1994-1996.
- [93] Antal Járαι, *Probabilistic primality test*. Our team with the leading of Karl-Heinz Indlekofer set up seven world records in the field of computational number theory. This program together with the previous six gives approximately 80%, the most decisive part of the programming work. C: 19 pages, Unix, 1994-1995)
- [94] Antal Járαι, *General arithmetic program package*. Programming interface for the arithmetic subroutines above. Program draft: 2 pages, CWEB: approx. 17 pages, Unix, 1997.
- [95] Antal Járαι, *Elliptic curve primality proving program*. High performance programme for primality testing. Program draft: 56 pages, CWEB: up till now approx. 47 pages, Unix, 1997.
- [96] Antal Járαι, Zoltán Járαι, *FAP: Fast Arithmetic Package*. General purpose fast arithmetic subroutines. CWEB: approx. 230 pages, CWEB interface to muPAD: approx. 30 pages, MMIX: approx. 50 pages, SuperSPARC assembly: approx. 50 pages, UltraSPARC assembly: approx. 20 pages, AMD64 assembly: approx. 50 pages, Unix, 2001-.

Conference proceedings

- [97] Antal Járαι, *Remark 17. Solution of two problems of W. Sander*. Aequationes Math. 19 (1979), 286-288.
- [98] Antal Járαι, *Remark 12. In: Proceedings of the 23th International Symposium on Functional Equations*. Centre for Information Theory, University of Waterloo, Waterloo, Ontario, Canada, 1985, 57-58.
- [99] Antal Járαι, Gyula Maksa, *Remark 19. Solution of a problem of C. Alsina*. In: *Proceedings of the 23th International Symposium on Functional Equations*. Centre for Information Theory, University of Waterloo, Waterloo, Ontario, Canada, 1985, 64.
- [100] Antal Járαι, (a) *Remark 11. Solution of the problem 4 of C. Alsina and J.-L. Garcia-Roig*. Aequationes Math. 35 (1988), 120; (b) *Remark 3. Solution of a problem of C. Alsina and J.-L. Garcia-Roig*. Aequationes Math. 37 (1989), 98.
- [101] Antal Járαι, *Interval filling sequences and continuous additive functions*. 26th International Symposium on Functional Equations, Sant Feliu de Guixols, Spain, 1988; Abstract: Aequationes Math. 37 (1989), 70-71.

- [102] Antal Járαι, *Remark 22 (to a theorem of J. Aczél)*. Aequationes Math. 37 (1989), 111.
- [103] Antal Járαι, *New results in the regularity theory of functional equations*. 32th International Symposium on Functional Equations, Gargnano, Italy, 1994. Abstract: Aequationes Math. 49 (1995), 173–174.
- [104] Antal Járαι, *Remark 30. (Solution of a problem of K. Lajkó.)* Aequationes Math. 49 (1995), 196.
- [105] Antal Járαι, *Remark 23. (To the talk of R. Badora.)* Aequationes Math. 51 (1996), 178.
- [106] Antal Járαι, Zsolt Páles, *Remark 10. Solution of a problem of T. M. K. Davidson*. Aequationes Math. 53 (1997), 190.
- [107] Karl-Heinz Indlekofer, Antal Járαι, *Some world records in computational number theory*. (a) In: Aritmetical Functions, Leaflets in Mathematics, Pécs, 1998, 49–56; (b) Talk, Universität Lübeck, Germany, 1996; (c) Talk, Rutgers University, USA, NJ, 1997; (d) Talk, Kossuth Lajos University, Debrecen, Hungary, 1997; (e) Talk, Eötvös Loránd University, Budapest, Hungary, 1997; (f) Talk, Eszterházy Károly Tanárképző Főiskola, Eger, Hungary, 1998; (g) Talk, Universität GH Paderborn, Seminar of the research group of von zur Gathen, 1998; (h) Talk, CWI, Amsterdam, Seminar of the research group of te Riele.
- [108] Járαι, Antal, *Új eredmények a többváltozós függvényegyenletek regularitáselméletében*. Előadások a Magyar Tudományos Akadémián. Közgyűlési Előadások, 2000 május. (Hungarian Academie of Sciences.)
- [109] Járαι, Antal, Maksa, Gyula, Páles, Zsolt, *24. Remark (To Aczél's 4. Problem)* Aequationes Math. 65 (2003), 314–315.
- [110] Járαι, Antal, *Solution of a problem of Zsolt Páles*. Ann. Math. Silesianae 17 (2003), 81–82.
- [111] Járαι, Antal, *Comparison of methods advancing regularity properties for functional equations with few variables (in Hungarian)*. Előadások a Magyar Tudományos Akadémián. Közgyűlési Előadások, 2006 május.
- [112] Csajbók, Timea, Farkas, Gábor, Járαι, Antal, Járαι, Zoltán, Kasza, János, *Report on the largest known twin primes*. Ann. Univ. Sci. Budapest, Sect. Comp. 25 (2005), 247–248.

Dissertations, technical reports and non-published lecture notes

- [113] Antal Járαι, *Átrendezést tartalmazó egyenlőtlenségek. Diákköri dolgozat*. (Rearrangement inequalities.) KLTE, Debrecen, 1971, 16 pages.

- [114] Antal Járai, *Mérhető függvények korlátosságáról. Diákköri dolgozat.* (On boundedness of measurable functions.) KLTE, Debrecen, 1973, 15 pages.
- [115] Antal Járai, *Függvényegyenletek mérhető megoldásairól.* (Measurable solutions of functional equations.) KLTE, Debrecen, 1976. (PhD thesis.) 46 pages.
- [116] Antal Járai, *Függvényegyenletek regularitási tulajdonságai.* (Regularity properties of functional equations.) (a) Kandidátusi értekezés. Debrecen, 1989, 96 pages; (b) Kandidátusi értekezés tézisei. Debrecen, 1989, 21 pages. (Thesis for candidate degree.)
- [117] Antal Járai, *Solutions of functional equations of bounded variation.* KLTE TTK Debrecen, Technical report 91/16, 4 pages.
- [118] Antal Járai, *Spektrálelmélet.* (Spectral theory.) Lecture notes, Debrecen, 1992, 20 pages.
- [119] Antal Járai, *Cryptology.* Lecture notes, Paderborn, 1992, 12 pages.
- [120] Antal Járai, *A/D converters and interval filling sequences.* (a) Technical report, Paderborn, 1992, 3 pages. (b) Talk, 27th International Symposium on Functional Equations, Bielsko-Biala, Poland, 1989; Abstract: *Aequationes Math.* 39 (1990), p. 327.
- [121] Antal Járai, *The Čech-Stone compactification.* Lecture notes, Paderborn, 1992, 11 pages.
- [122] Antal Járai, *Report on fast software algorithms for cryptology.* Program draft, Paderborn, 1993, 7 pages.
- [123] Antal Járai, *Bohr compactification.* Lecture notes, Paderborn, 1993, 6 pages.
- [124] Antal Járai, *Parallel Computing in Number Systems.* Program draft. Paderborn, 1993, 20 pages.
- [125] Antal Járai, *Parallel Computing Division.* Program draft. Paderborn, 1994, 7 pages.
- [126] Antal Járai, *Large Twin Primes.* Program draft and Maple program. Paderborn, 1994, 18 pages.
- [127] Antal Járai, *Large Sophie Germain Primes.* Program draft and Maple program. Paderborn, 1994, 20 pages.
- [128] Antal Járai, *The Waring Conjecture.* Program draft and Maple program. Paderborn, 1994, 31 pages.

- [129] Antal Járari, *Large Non-Mersenne Primes*. Program draft and Maple program. Paderborn, 1994, 18 pages.
- [130] Antal Járari, *Primetests. Theory and Exercises with Solutions*. Lecture notes and Maple program. Paderborn, 1994, 64 pages.
- [131] Antal Járari, *Függvényegyeletek regularitási tulajdonságai*. (Regularity properties of functional equations.) (a) Habilitációs értekezés. Debrecen, KLTE, 1994, 132 pages; (b) Habilitációs értekezés tézisei. Debrecen, KLTE, 1994, 34 pages. (Habilitation thesis.)
- [132] Antal Járari, *High Speed Division*. Program draft. Paderborn, 1995, 2 pages.
- [133] Antal Járari, *Fermat Primes*. Program draft. Paderborn, 1995, 4 pages.
- [134] Antal Járari, *Divisors of Fermat Numbers*. Program draft. Paderborn, 1995, 3 pages.
- [135] Antal Járari, *Largest prime*. Program draft and Maple program. Paderborn, 1995, 19 pages.
- [136] Antal Járari, *Largest primes having the form $n^2 + 1$, $n^4 + 1$* . Program draft, Maple program. Paderborn, 1995, 12 pages.
- [137] Antal Járari, *Fractals and Number Systems on Computers*. Lecture notes, Paderborn, 1996, 37 pages.
- [138] Antal Járari, *Factorization with Elliptic Curves*. Program draft, Paderborn, 1996, 10 pages.
- [139] Antal Járari, *Find the next Mersenne prime*. Program draft, Paderborn, 1996, 10 pages.
- [140] Antal Járari, *Large Twin and Sophie Germain Primes*. Program draft and Maple program. Paderborn, 1996, 17 pages.
- [141] Karl-Heinz Indlekofer, Antal Járari, *Largest known prime having the form $n^4 + 1$* . Technical report, 1996, 6 pages.
- [142] Antal Járari, *Find the Largest Prime*. Program draft, Paderborn, 1996, 5 pages.
- [143] Antal Járari, *Exact prime test with elliptic curves: Asymptotic running time analysis*. Lecture notes, Paderborn, 1997, 9 pages.
- [144] Antal Járari, *Analízis programozó matematikusoknak*. (Analysis for computer science students.) Lecture notes, Budapest, 1998, 50 pages.
- [145] Antal Járari, *Analízis programozó matematikusoknak II*. (Analysis for computer science students II.) Lecture notes, Budapest, 1998, 50 pages.

- [146] Antal Járαι, *Analízis programozó matematikusoknak III.* (Analysis for computer science students III.) Lecture notes, Budapest, 1999, 50 pages.
- [147] Antal Járαι, *Analízis programozó matematikusoknak IV.* (Analysis for computer science students IV.) Lecture notes, Budapest, 1999, 141 pages.
- [148] Antal Járαι, *Többváltozós függvényegyenletek regularitási tulajdonságai.* (Regularity properties of functional equations in several variables.) (a) Akadémiai doktori értekezés. 1999, 252 pages; (b) Akadémiai doktori értekezés tézisei. 1999, 46 pages. (Thesis for D.Sc. degree.)

Talks

- [149] Antal Járαι, *Parallel Computing in Computational Number Theory.* Talk about joint results with Karl-Heinz Indlekofer, 14 pages. (a) Heinz Nixdorf Institute, Paderborn, Germany, 1995; (b) Mátraháza, Hungary, 1995.
- [150] Antal Járαι, *Functional Equations and Differential Equations.* Talk, Universität Braunschweig, 1993.
- [151] Antal Járαι, *Fastest computers today and tomorrow.* Talk, Kövestető, Hungary, 1997.
- [152] Antal Járαι, *When does measurability imply strong regularity for solutions of functional equations?* (a) Talk, University of Waterloo, Waterloo, Ontario, Canada, 1998; (b) Talk, Universität Paderborn, Germany, 17 February, 2000.
- [153] Antal Járαι, *Regularity properties of functional equations with “few” variables.* (a) Talk, 42th International Symposium on Functional Equations, Opava, Czech Republic, 2004; (b) Talk, Third Analysis Miniseminar, 2001, Debrecen.
- [154] Antal Járαι, Zoltán Járαι, *FAP: Fast Arithmetic Package.* Talk, Universität Paderborn, Germany, 18th December, 2002.
- [155] Járαι Antal, *A remark on the translation equation.* Talk, The third Katowicze–Debrecen Winter Seminar on functional equations and inequalities, 2003, Bedlewo, Poland; Abstract: *Ann. Math. Silesienae* 17 (2003), 74.
- [156] Járαι Antal, *Reduction of regularity problems of functional equations with “few” variables to regularity of functional equations with “enough” variables.* Talk, 43th International Symposium on Functional Equations.

Other papers

- [157] Karl-Heinz Indlekofer, Antal Járαι, *Primzahlzwillingsrekorde — nicht nur ein Jagd nach Monster*. Forschungsforum Paderborn, 1999/2, 76–80.
- [158] Karl-Heinz Indlekofer, Antal Járαι, *Naibilsι z vidomih bliznjukiv ta cisel Dzsermein*. TBiMC 1998, 9–10.

Translation

- [159] Cormen, T. H., Leiserson, C. E., Rivest, R. L., *Algoritmusok (Introduction to Algorithms)*. Műszaki Könyvkiadó, Budapest, 1999, 669–691.

Broadcasting, TV and other news media appearances

- [160] Several articles, TV and broadcasting reports about the world records (e.g. Die Zeit, Frankfurter Allgemeine Zeitung, WDR, RTL2, Guinness Book, local newspapers, Internet, etc.), 1994–2000.

Budapest, 23th July, 2006.