

# Publications of Juhani Karhumäki

## A Refereed articles

- [1] Juhani Karhumäki, “An example of a PD0L-system with the growth type  $2\frac{1}{2}$ ”, *Information Processing Letters*, 2:5 (1973), 131–134.
- [2] Juhani Karhumäki, “The family of PD0L growth-sets is properly included in the family of D0L growth-sets”, *Annales Academiæ Scientiarum Fennicæ, Mathematica*, 590 (1974).
- [3] Juhani Karhumäki, “Some growth functions of context-dependent L systems” In *L systems*, LNCS 15, 125–135. Springer, 1974.
- [4] Juhani Karhumäki, “Two theorems concerning recognizable  $N$ -subsets of  $\sigma^*$ ”, *Theoretical Computer Science*, 1:4 (1976), 317–323.
- [5] Juhani Karhumäki, “Studies of informationless  $L$  systems”, *Annales Universitatis Turkuensis, Series A I*, 171 (1976).
- [6] Juhani Karhumäki, “The decidability of the equivalence problem for polynomially bounded D0L sequences”, *RAIRO Informatique Théorique et Applications*, 11:1 (1977), 17–28.
- [7] Juhani Karhumäki, “Remarks on commutative  $N$ -rational series”, *Theoretical Computer Science*, 5:2 (1977), 211–217.
- [8] Andrzej Ehrenfeucht, Juhani Karhumäki, Grzegorz Rozenberg, “A note on D0L length sets”, *Discrete Mathematics*, 22 (1978), 233–242.
- [9] Karel Čulik II, Juhani Karhumäki, “Interactive L systems with almost interactionless behaviour”, *Information and Control*, 43 (1979), 83–100.
- [10] Juhani Karhumäki, “On commutative DT0L systems”, *Theoretical Computer Science*, 9:2 (1979), 207–220.
- [11] Juhani Karhumäki, Imre Simon, “A note on elementary homomorphisms and the regularity of equality sets”, *Bulletin of the EATCS*, 9 (1979).
- [12] Karel Čulik II, Juhani Karhumäki, “Interactive L systems with almost interactionless behaviour”, In *Mathematical Foundations of Computer Science (MFCS 1979, Olomouc, Czechoslovakia)*, LNCS 74, 246–257. Springer, 1979.
- [13] Karel Čulik II, Juhani Karhumäki, “On the equality sets for homomorphisms on free monoids with two generators”, *RAIRO Informatique Théorique et Applications*, 14 (1980), 349–369.
- [14] Juhani Karhumäki, “Generalized Parikh mappings and homomorphisms”, *Information and Control*, 47:3 (1980), 155–165.
- [15] Juhani Karhumäki, “On the equivalence problem for binary D0L systems”, *Information and Control*, 50:3 (1981), 276–284.

- [16] Juhani Karhumäki, “Generalized Parikh mappings and homomorphisms”, *International Colloquium on Automata, Languages and Programming* (ICALP 1981, Acre, Israel), LNCS 115, 324–332. Springer, Berlin, 1981.
- [17] Juhani Karhumäki, “On strongly cube-free  $\omega$ -words generated by binary morphisms”, In *Fundamentals of Computation Theory* (FCT 1981, Szeged, Hungary), LNCS 117, 182–189. Springer, Berlin, 1981.
- [18] Jürgen Albert, Karel Čulik II, Juhani Karhumäki, “Test sets for context free languages and algebraic systems of equations over a free monoid”, *Information and Control*, 52:2 (1982), 172–186.
- [19] Andrzej Ehrenfeucht, Juhani Karhumäki, Grzegorz Rozenberg. “The (generalized) Post correspondence problem with lists consisting of two words is decidable”, *Theoretical Computer Science*, 21 (1982), 119–144.
- [20] Karel Čulik II, Juhani Karhumäki, “On test sets and the Ehrenfeucht conjecture”, In *International Colloquium on Automata, Languages and Programming* (Aarhus, Denmark, 1982), LNCS 140, 128–140. Springer, Berlin, 1982.
- [21] Juhani Karhumäki, “On the equivalence problem for binary D0L systems”, In *International Colloquium on Automata, Languages and Programming* (ICALP 1982, Aarhus, Denmark), LNCS 140, 339–347. Springer, Berlin, 1982.
- [22] Juhani Karhumäki, “Marked morphisms: a tool for solving problems concerning morphisms over a binary alphabet”, In *Foundations of Software Technology and Theoretical Computer Science* (FSTTCS 1982, Bangalore, India), 106–125. National Centre for Software Development and Computer Technology, Bombay, 1982.
- [23] Karel Čulik II, Juhani Karhumäki, “On the Ehrenfeucht conjecture for D0L languages”, *RAIRO Informatique Théorique et Applications*, 17:3 (1983), 205–230.
- [24] Karel Čulik II, Juhani Karhumäki, “Systems of equations over a free monoid and Ehrenfeucht conjecture”, *Discrete Mathematics*, 43 (1983), 139–153.
- [25] Andrzej Ehrenfeucht, Juhani Karhumäki, Grzegorz Rozenberg, “On binary equality sets and a solution to the test set conjecture in the binary case”, *Journal of Algebra*, 85:1 (1983), 76–85.
- [26] Juhani Karhumäki, “On cube-free  $\omega$ -words generated by binary morphisms”, *Discrete Applied Mathematics*, 5:3 (1983), 279–297.
- [27] Juhani Karhumäki, Matti Linna, “A note on morphic characterization of languages”, *Discrete Applied Mathematics*, 5:2 (1983), 243–246.
- [28] Christian Choffrut, Juhani Karhumäki, “Test sets for morphisms with bounded delay”, In *International Colloquium on Automata, Languages and Programming* (ICALP 1983, Barcelona, Spain), LNCS 154, 118–127. Springer, Berlin, 1983.
- [29] Juhani Karhumäki, “A note on intersections of free submonoids of a free monoid”, In *International Colloquium on Automata, Languages and Programming* (ICALP 1983, Barcelona, Spain), LNCS 154, 397–407. Springer, Berlin, 1983.
- [30] Juhani Karhumäki, “The Ehrenfeucht conjecture: a compactness claim for finitely generated free monoids”, *Theoretical Computer Science*, 29:3 (1984), 285–308.
- [31] Juhani Karhumäki, “A note on intersections of free submonoids of a free monoid”, *Semigroup Forum*, 29:1–2 (1984), 183–205.

- [32] Juhani Karhumäki, “On the regularity of equality languages”, *Annales Universitatis Turkuensis, Series A I*, 186 (1984), 47–58. (Studies in honour of Arto Kustaa Salomaa on the occasion of his fiftieth birthday)
- [33] Juhani Karhumäki, Derick Wood, “Inverse morphic equivalence on languages”, *Information Processing Letters*, 19:5 (1984), 213–218.
- [34] Juhani Karhumäki, “On three-element codes”, In *International Colloquium on Automata, Languages and Programming* (ICALP 1984, Antwerp, Belgium), LNCS 172, 292–302. Springer, Berlin, 1984.
- [35] Juhani Karhumäki, “A property of three-element codes”, In *Symposium on Theoretical Aspects of Computer Science* (STACS 1984, Paris, France), LNCS 166, 305–313. Springer, Berlin, 1984.
- [36] Juhani Karhumäki, H. C. M. Kleijn, “On the equivalence of compositions of morphisms and inverse morphisms on regular languages”, In *Mathematical Foundations of Computer Science* (MFCS 1984, Prague, Czechoslovakia), LNCS 176, 355–363. Springer, 1984.
- [37] Christian Choffrut, Juhani Karhumäki, “Test sets for morphisms with bounded delay”, *Discrete Applied Mathematics*, 12:2 (1985), 93–101.
- [38] Juhani Karhumäki, “On three-element codes”, *Theoretical Computer Science*, 40:1 (1985), 3–11.
- [39] Juhani Karhumäki, “A property of three-element codes”, *Theoretical Computer Science*, 41:2–3 (1985), 215–222.
- [40] Juhani Karhumäki, H. C. M. Kleijn, “On the equivalence of compositions of morphisms and inverse morphisms on regular languages”, *RAIRO Informatique Théorique et Applications*, 19:3 (1985), 203–211.
- [41] Karel Čulik II, Juhani Karhumäki, “The equivalence of finite valued transducers (on HDT0L languages) is decidable”, *Theoretical Computer Science*, 47:1 (1986), 71–84.
- [42] Karel Čulik II, Juhani Karhumäki, “A note on the equivalence problem of rational formal power series”, *Information Processing Letters*, 23:1 (1986), 29–31.
- [43] Karel Čulik II, Juhani Karhumäki, “Synchronizable deterministic pushdown automata and the decidability of their equivalence”, *Acta Informatica*, 23:5 (1986), 597–605.
- [44] Tero Harju, Juhani Karhumäki, “On the defect theorem and simplifiability”, *Semigroup Forum*, 33 (1986), 199–217.
- [45] Tero Harju, Juhani Karhumäki, H. C. M. Kleijn, “On morphic generation of regular languages”, *Discrete Applied Mathematics*, 15 (1986), 55–60.
- [46] Juhani Karhumäki, Yael Maon, “A simple undecidable problem: Existential agreement of inverses of two morphisms on a regular language”, *Journal of Computer and System Sciences*, 32:3 (1986), 315–322.
- [47] Karel Čulik II, Juhani Karhumäki, “The equivalence of finite valued transducers (on HDT0L languages) is decidable”, In *Mathematical Foundations of Computer Science* (MFCS 1986, Bratislava, Czechoslovakia), LNCS 233, 264–272. Springer, Berlin, 1986.
- [48] Karel Čulik II, Juhani Karhumäki, “The equivalence problem for single-valued two-way transducers (on NPDT0L languages) is decidable”, *SIAM Journal on Computing*, 16:2 (1987), 221–230.
- [49] Sándor Horváth, Juhani Karhumäki, H. C. M. Kleijn, “Results concerning palindromicity”, *Journal of Information Processing and Cybernetics*, 23:8–9 (1987), 441–451.

- [50] Juhani Karhumäki, “The Ehrenfeucht conjecture for transducers”, *Journal of Information Processing and Cybernetics*, 23:8–9 (1987), 389–401.
- [51] Juhani Karhumäki, “On recent trends in formal language theory” (invited talk), In *International Colloquium on Automata, Languages and Programming (ICALP 1987, Karlsruhe, Germany)*, LNCS 267, 136–162. Springer, Berlin, 1987.
- [52] Karel Čulik II, Juhani Karhumäki, “On totalistic systolic networks”, *Information Processing Letters*, 26:5 (1988), 231–236.
- [53] Juhani Karhumäki, Karel Čulik II. “Systems of equations over a finitely generated free monoid having an effectively findable equivalent finite subsystem”, In *Semigroups: Theory and Applications* (Oberwolfach, Germany, 1986), Lecture Notes in Mathematics 1320, 18–27. Springer, Berlin, 1988.
- [54] Karel Čulik II, Juhani Karhumäki, “HDT0L matching of computations of multitape automata”, *Acta Informatica*, 27:2 (1989), 179–191.
- [55] Karel Čulik II, Juhani Karhumäki, “On the equivalence problem for deterministic multitape automata and transducers”, In *Symposium on Theoretical Aspects of Computer Science (STACS 1989, Paderborn, Germany)*, LNCS 349, 468–479. Springer, Berlin, 1989.
- [56] Jürgen Dassow, Juraj Hromkovič, Juhani Karhumäki, Branislav Rován, Anna Slobodová, “On the power of synchronization in parallel computations”, In *Mathematical Foundations of Computer Science (MFCS 1989, Pořąbka Kozubnik, Poland)*, LNCS 379, 196–206. Springer, Berlin, 1989.
- [57] Karel Čulik II, Juhani Karhumäki, “A note on HT0L languages and the equivalence of deterministic pushdown transducers”, In R. Narasimhan (Editor), *Commemorative volume on theoretical computer science—In honour of Gift Siromoney*, 23–32. World Scientific, Singapore, 1989.
- [58] Karel Čulik II, Juhani Karhumäki, “Loops in automata and HDT0L relations”, *RAIRO Informatique Théorique et Applications*, 24:4 (1990), 327–337.
- [59] Tero Harju, Juhani Karhumäki, “The equivalence problem of multitape automata”, In *Proceedings of the 22nd Symposium on Theory of Computing (STOC 1990, Baltimore, USA)*, ACM, 1990.
- [60] Juhani Karhumäki, “Equations over finite sets of words and equivalence problems in automata theory”, In *International Colloquium on Words, Languages and Combinatorics* (Kyoto, Japan, 1990), 233–250. World Scientific, Singapore, 1990.
- [61] Tero Harju, Juhani Karhumäki, “The equivalence problem of multitape finite automata”, *Theoretical Computer Science*, 78 (1991), 347–355.
- [62] Juraj Hromkovič, Juhani Karhumäki, Branislav Rován, Anna Slobodová, “On the power of synchronization in parallel computations”, *Discrete Applied Mathematics*, 32:2 (1991), 155–182.
- [63] Stefan Jarominek, Juhani Karhumäki, Wojciech Rytter, “Efficient constructions of test sets for regular and context-free languages”, In *Mathematical Foundations of Computer Science (MFCS 1991, Kazimierz Dolny, Poland)*, LNCS 520, 249–258. Springer, Berlin, 1991.
- [64] Juhani Karhumäki, “Multiplicities: a deterministic view of nondeterminism”, *Theoretical Computer Science*, 98:1 (1992), 15–25.
- [65] Karel Čulik II, Juhani Karhumäki, “Iterative devices generating infinite words”, In *Symposium on Theoretical Aspects of Computer Science (STACS 1992, Cachan, France)*, LNCS 577, 531–543. Springer, Berlin, 1992.

- [66] Juhani Karhumäki, “Systems of equations over a finite set of words and automata theory”, In *Word Equations and Related Topics* (IWWERT 1990, Tübingen, Germany), LNCS 572, 247–249. Springer, Berlin, 1992.
- [67] Juhani Karhumäki, Wojciech Plandowski, Wojciech Rytter, “Polynomial size test sets for context-free languages”, In *International Colloquium on Automata, Languages and Programming* (ICALP 1992, Vienna, Austria), LNCS 623, 53–64. Springer, Berlin, 1992.
- [68] Karel Čulik II, Juhani Karhumäki, Arto Lepistö, “Alternating iteration of morphisms and the Kolakowski sequence”, In Grzegorz Rozenberg and Arto Salomaa (Editors), *Lindemayer Systems*, 93–106. Springer, 1992.
- [69] Juhani Karhumäki, “Equations over finite sets of words and equivalence problems in automata theory” *Theoretical Computer Science*, 108:1 (1993), 103–118.
- [70] Jarominek Stefan, Juhani Karhumäki, Wojciech Rytter, “Efficient constructions of test sets for regular and context-free languages” *Theoretical Computer Science*, 116:2 (1993), 305–316.
- [71] Juhani Karhumäki, “The impact of D0L problem”, In Grzegorz Rozenberg and Arto Salomaa (Editors), *Trends in Theoretical Computer Science*, 586–594. World Scientific, Singapore, 1993.
- [72] Karel Čulik II, Juhani Karhumäki, “Finite automata computing real functions”, *SIAM Journal on Computing*, 23:4 (1994), 789–814.
- [73] Karel Čulik II, Juhani Karhumäki, “Iterative devices generating infinite words”, *International Journal of Foundations of Computer Science*, 5:1 (1994), 69–97.
- [74] Denis Derencourt, Juhani Karhumäki, Michel Latteux, Alain Terlutte, “On continuous functions computed by finite automata”, *RAIRO Informatique Théorique et Applications*, 28:3–4 (1994), 387–403.
- [75] Juraj Hromkovič, Juhani Karhumäki, Arto Lepistö, “Comparing descriptonal and computational complexity of infinite words”, In Juhani Karhumäki, Hermann Maurer, Grzegorz Rozenberg (Editors), *Results and Trends in Theoretical Computer Science, Colloquium in Honor of Arto Salomaa* (Graz, Austria, June 10–11, 1994), LNCS 812, 169–182. Springer, Berlin, 1994.
- [76] Juraj Hromkovič, Juhani Karhumäki, “Two lower bounds on computational complexity of infinite word generation”, In *Information Processing '94, Vol. I* (Hamburg, Germany, 1994), IFIP Transactions A: Computer Science and Technology, vol. 51, 479–484. North-Holland, Amsterdam, 1994.
- [77] Juhani Karhumäki, Wojciech Plandowski, “On the size of independent systems of equations in semi-groups”, In *Mathematical Foundations of Computer Science* (MFCS 1994, Košice, Slovakia), LNCS 841, 443–452. Springer, Berlin, 1994.
- [78] Juhani Karhumäki, Wojciech Plandowski, “On the defect effect on many identities in free semigroups”, In Gheorghe Păun (Editor), *Mathematical Aspects of Natural and Formal Languages*, 225–233. World Scientific, Singapore, 1994.
- [79] Juhani Karhumäki, Wojciech Plandowski, Wojciech Rytter, “Polynomial size test sets for context-free languages”, *Journal of Computer and System Sciences*, 50:1 (1995), 11–19.
- [80] Julien Cassaigne, Juhani Karhumäki, “Toeplitz words, generalized periodicity and periodically iterated morphisms”, In *Computing and Combinatorics* (COCOON 1995, Xi’an, China), LNCS 959, 244–253. Springer, Berlin, 1995.
- [81] Tero Harju, Juhani Karhumäki, Wojciech Plandowski, “Compactness of systems of equations in semi-groups”, In *International Colloquium on Automata, Languages and Programming*, (ICALP 1995, Szeged, Hungary) LNCS 944, 444–454. Springer, 1995.

- [82] Larry J. Cummings, Juhani Karhumäki, Dennis Moore, “Borders of Fibonacci strings”, *Journal of Combinatorial Mathematics and Combinatorial Computing*, 20 (1996), 81–87.
- [83] Denis Derencourt, Juhani Karhumäki, Michel Latteux, Alain Terlutte, “On computational power of weighted finite automata”, *Fundamenta Informaticae*, 25:3 (1996), 285–293.
- [84] Juhani Karhumäki, Wojciech Plandowski, “On the size of independent systems of equations in semi-groups”, *Theoretical Computer Science*, 168:1 (1996), 105–119.
- [85] Tero Harju, Juhani Karhumäki, Daniel Kroh, “Remarks on generalized Post Correspondence Problem”, In *Symposium on Theoretical Aspects of Computer Science* (STACS 1996, Grenoble, France), LNCS 1046, 39–48. Springer, Berlin, 1996.
- [86] Julien Cassaigne, Juhani Karhumäki, “Toeplitz words, generalized periodicity and periodically iterated morphisms”, *European Journal of Combinatorics*, 18:5 (1997), 497–510.
- [87] Christian Choffrut, Tero Harju, Juhani Karhumäki, “A note on decidability questions on presentations of word semigroups”, *Theoretical Computer Science*, 183:1 (1997), 83–92.
- [88] Juhani Karhumäki, Filippo Mignosi, Wojciech Plandowski, “The expressibility of languages and relations by word equations”, In *International Colloquium on Automata, Languages and Programming* (ICALP 1997, Bologna, Italy), LNCS 1256, 98–109. Springer, Berlin, 1997.
- [89] Juhani Karhumäki, Filippo Mignosi, Wojciech Plandowski, “A lower bound for a constant in Shalit’s conjecture”, In *Developments in Language Theory* (DLT 1997, Thessaloniki, Greece), 103–118. Aristotle University of Thessaloniki, 1997.
- [90] Juhani Karhumäki, Wojciech Plandowski, Wojciech Rytter, “Pattern-matching problems for 2-dimensional images described by finite automata”, In *Fundamentals of Computation Theory* (FCT 1997, Kraków, Poland), LNCS 1279, 245–256. Springer, Berlin, 1997.
- [91] Tero Harju, Juhani Karhumäki, Mario Petrich, “Compactness of systems of equations on completely regular semigroups”, In J. Mycielski, Gheorghe Păun, Arto Salomaa (Editors), *Structures in Logic and Computer Science*, LNCS 1261, 268–280. Springer, Berlin, 1997. Dedicated to A. Ehrenfeucht.
- [92] Juraj Hromkovič, Juhani Karhumäki, “Two lower bounds on computational complexity of infinite words”, In Gheorghe Păun and Arto Salomaa (Editors), *New Trends in Formal Languages*, LNCS 1218, 366–376. Springer, Berlin, 1997.
- [93] Christian Choffrut, Juhani Karhumäki, “Combinatorics of words”, In: G. Rozenberg, A. Salomaa (Eds.), *Handbook of formal languages, Vol. 1*, 329–438. Springer, Berlin, 1997.
- [94] Tero Harju, Juhani Karhumäki, “Morphisms”, In: G. Rozenberg, A. Salomaa (Eds.), *Handbook of formal languages, Vol. 1*, 439–510. Springer, Berlin, 1997.
- [95] Julien Cassaigne, Juhani Karhumäki, “Examples of undecidable problems for 2-generator matrix semi-groups”, *Theoretical Computer Science*, 204:1–2 (1998), 29–34. Dedicated to the memory of Marcel-Paul Schützenberger.
- [96] Juhani Karhumäki, Arto Lepistö, Wojciech Plandowski, “Locally periodic infinite words and a chaotic behaviour”, In *International Colloquium on Automata, Languages and Programming* (ICALP 1998, Aalborg, Denmark), LNCS 1443, 421–430. Springer, Berlin, 1998.
- [97] Juhani Karhumäki, Ján Maňuch, Wojciech Plandowski, “On defect effect of bi-infinite words”, In *Mathematical Foundations of Computer Science* (MFCS 1998, Brno, Czech Republic), LNCS 1450, 674–682. Springer, Berlin, 1998.

- [98] Julien Cassaigne, Tero Harju, Juhani Karhumäki, “On the undecidability of freeness of matrix semi-groups”, *International Journal of Algebra and Computation*, 9:3–4 (1999), 295–305. Dedicated to the memory of Marcel-Paul Schützenberger.
- [99] Juhani Karhumäki, Sabrina Mantaci, “Defect theorems for trees”, *Fundamenta Informaticae*, 38:1–2 (1999), 119–133.
- [100] Juhani Karhumäki, Wojciech Plandowski, Wojciech Rytter, “Generalized factorizations of words and their algorithmic properties”, *Theoretical Computer Science*, 218:1 (1999), 123–133.
- [101] Juhani Karhumäki, Wojciech Plandowski, Wojciech Rytter, “The compression of subsegments of images described by finite automata”, In *Combinatorial Pattern Matching* (CPM 1999, Warwick, UK), LNCS 1645, 186–195. Springer, 1999.
- [102] Juhani Karhumäki, Leonid P. Lisovik, “On the equivalence of finite substitutions and transducers”, In Juhani Karhumäki, Hermann Maurer Grzegorz Rozenberg, Gheorghe Păun (Editors), *Jewels are forever*, 97–108. Springer, Berlin, 1999.
- [103] Juhani Karhumäki, Filippo Mignosi, Wojciech Plandowski, “The expressibility of languages and relations by word equations”, *Journal of the ACM*, 47:3 (2000), 483–505.
- [104] Juhani Karhumäki, Wojciech Plandowski, Wojciech Rytter, “Pattern-matching problems for two-dimensional images described by finite automata”, *Nordic Journal of Computing*, 7:1 (2000), 1–13.
- [105] Juraž Hromkovič, Juhani Karhumäki, Hartmut Klauck, Georg Schnitger, Sebastian Seibert, “Measures of nondeterminism in finite automata”, In *International Colloquium on Automata, Languages and Programming* (ICALP 2000, Geneva, Switzerland), LNCS 1853, 199–210. Springer, Berlin, 2000.
- [106] Juhani Karhumäki, Ion Petre, “On the centralizer of a finite set”, In *International Colloquium on Automata, Languages and Programming* (ICALP 2000, Geneva, Switzerland), LNCS 1853, 536–546. Springer, Berlin, 2000.
- [107] Juhani Karhumäki, Sabrina Mantaci, “Defect theorems for trees”, In *Developments in Language Theory* (DLT 1999, Aachen, Germany), 164–177. World Scientific, Singapore, 2000.
- [108] Juhani Karhumäki, Wojciech Plandowski, Wojciech Rytter, “On the complexity of computing the order of repetition of a string”, In *Developments in Language Theory*, (DLT 1999, Aachen, Germany), 178–184. World Scientific, Singapore, 2000.
- [109] Juhani Karhumäki, “D0L Sequences”, In: *The Kluwer Encyclopaedia of Mathematics*, 141–142. Kluwer, Dordrecht, 2000.
- [110] Julien Cassaigne, Juhani Karhumäki, Ján Maňuch, “On conjugacy of languages”, *RAIRO Informatique Théorique et Applications*, 35:6 (2001), 535–550.
- [111] Juhani Karhumäki, Filippo Mignosi, Wojciech Plandowski, “On the expressibility of languages by word equations with a bounded number of variables”, *Bulletin of Belgian Mathematical Society—Simon Stevin*, 8:2 (2001), 293–305.
- [112] Juhani Karhumäki, Ion Petre, “Conway’s problem and the commutation of languages”, *Bulletin of the EATCS*, 74 (2001), 171–177.
- [113] Tero Harju, Oscar Ibarra, Juhani Karhumäki, Arto Salomaa, “Decision questions concerning semilinearity, morphisms, and commutation of languages”, In *International Colloquium on Automata, Languages and Programming* (ICALP 2001, Heraklion, Crete, Greece), LNCS 2076, 579–590. Springer, Berlin, 2001.

- [114] Juhani Karhumäki, “Challenges of commutation (an advertisement)” (invited talk), In *Fundamentals of Computation Theory* (FCT 2001, Riga, Latvia), LNCS 2138, 15–23. Springer, Berlin, 2001.
- [115] Juhani Karhumäki, Wojciech Plandowski, Wojciech Rytter, “On the complexity of decidable cases of commutation problem for languages”, In *Fundamentals of Computation Theory* (FCT 2001, Riga, Latvia), LNCS 2138, 193–203. Springer, Berlin, 2001.
- [116] Juhani Karhumäki, “Combinatorial and computational problems on finite sets of words” (invited talk), In *Machines, Computations and Universality* (MCU 2001, Chişinău, Moldova), LNCS 2055, 69–81. Springer, Berlin, 2001.
- [117] Juhani Karhumäki, Leonid P. Lisovik, “A simple undecidable problem: the inclusion problem for finite substitutions on  $ab^*c$ ”, In *Symposium on Theoretical Aspects of Computer Science* (STACS 2001, Dresden, Germany), LNCS 2010, 388–395. Springer, Berlin, 2001.
- [118] Christian Choffrut, Juhani Karhumäki, “On Fatou properties of rational languages”, In Carlos Martín-Vide, Victor Mitrană (Editors) *Where Mathematics, Computer Science, Linguistics and Biology Meet*, 227–235. Kluwer, Dordrecht, 2001.
- [119] Christian Choffrut, Juhani Karhumäki, Nicolas Ollinger, “The commutation of finite sets: a challenging problem”, *Theoretical Computer Science*, 273:1–2 (2002), 69–79.
- [120] Karel Čulik II, Juhani Karhumäki, Jarkko Kari, “A note on synchronized automata and road coloring problem”, *International Journal of Foundations of Computer Science*, 13:3 (2002), 459–471.
- [121] Tero Harju, Oscar Ibarra, Juhani Karhumäki, Arto Salomaa, “Some decision problems concerning semilinearity and commutation”, *Journal of Computer and System Sciences*, 65:2 (2002), 278–294.
- [122] Juraj Hromkovič, Juhani Karhumäki, Hartmut Klauck, Georg Schnitger, Sebastian Seibert, “Communication complexity method for measuring nondeterminism in finite automata”, *Information and Computation*, 172:2 (2002), 202–217.
- [123] Juhani Karhumäki, Arto Lepistö, Wojciech Plandowski, “Locally periodic versus globally periodic infinite words”, *Journal of Combinatorial Theory, Series A*, 100:2 (2002), 250–264.
- [124] Juhani Karhumäki, Ján Maňuch, “Multiple factorizations of words and defect effect”, *Theoretical Computer Science*, 273:1–2 (2002), 81–97.
- [125] Juhani Karhumäki, Ion Petre, “Conway’s problem for three-word sets”, *Theoretical Computer Science*, 289:1 (2002), 705–725.
- [126] Karel Čulik II, Juhani Karhumäki, Jarkko Kari, “A note on synchronized automata and road coloring problem”, In *Developments in Language Theory* (DLT 2001, Vienna, Austria), LNCS 2295, 175–185. Springer, Berlin, 2002.
- [127] Juhani Karhumäki, “Applications of finite automata” (invited talk), In *Mathematical Foundations of Computer Science* (MFCS 2002, Warsaw, Poland), LNCS 2420, 40–58. Springer, Berlin, 2002.
- [128] Mika Hirvensalo, Juhani Karhumäki, “Computing partial information out of intractable one—the first digit of  $2^n$  at base 3 as an example”, In *Mathematical Foundations of Computer Science* (MFCS 2002, Warsaw, Poland), LNCS 2420, 319–327. Springer, Berlin, 2002.
- [129] Juhani Karhumäki, Leonid P. Lisovik, “The equivalence problem of finite substitutions on  $ab^*c$ , with applications”, In *Symposium on Theoretical Aspects of Computer Science* (STACS 2002, Antibes Juan-les-Pins, France), LNCS 2380, 812–820. Springer, 2002.



- [130] Juhani Karhumäki, Ion Petre, “The branching point approach to Conway’s problem”, In Wilfried Brauer, Hartmut Ehrig, Juhani Karhumäki, Arto Salomaa (Editors), *Formal and Natural Computing*, LNCS 2300, 69–76. Springer, Berlin, 2002. Essays Dedicated to Grzegorz Rozenberg.
- [131] Tero Harju, Juhani Karhumäki, Wojciech Plandowski, “Independent systems of equations”, In: D. Perrin, J. Berstel (Eds.), *M. Lothaire: Algebraic Combinatorics on Words*, 443–472. Cambridge University Press, Cambridge, 2002.
- [132] Jean Berstel, Juhani Karhumäki, “Combinatorics on words: a tutorial”, *Bulletin of the EATCS*, 79 (2003), 178–228.
- [133] Vesa Halava, Tero Harju, Juhani Karhumäki, “Decidability of the binary infinite Post correspondence problem”, *Discrete Applied Mathematics*, 130:3 (2003), 521–526.
- [134] Juhani Karhumäki, Leonid P. Lisovik, “The equivalence problem of finite substitutions on  $ab^*c$ , with applications”, *International Journal of Foundations of Computer Science*, 14:4 (2003), 699–710.
- [135] Juhani Karhumäki, Leonid P. Lisovik, “A simple undecidable problem: the inclusion problem for finite substitutions on  $ab^*c$ ”, *Information and Computation*, 187:1 (2003), 40–48.
- [136] Juhani Karhumäki, Ján Maňuch, Wojciech Plandowski, “A defect theorem for bi-infinite words”, *Theoretical Computer Science*, 292:1 (2003), 237–243. Selected papers in honor of Jean Berstel.
- [137] Juhani Karhumäki, Wojciech Plandowski, Wojciech Rytter, “The complexity of compressing subsegments of images described by finite automata”, *Discrete Applied Mathematics*, 125:2–3 (2003), 235–254.
- [138] Juhani Karhumäki, “Automata on words” (invited talk), In *Implementation and Application of Automata* (CIAA 2003, Santa Barbara, USA), LNCS 2759, 3–10. Springer, Berlin, 2003.
- [139] Juhani Karhumäki, Michel Latteux, Ion Petre, “The commutation with codes and ternary sets of words”, In *Symposium on Theoretical Aspects of Computer Science* (STACS 2003, Berlin, Germany), LNCS 2607, 74–84. Springer, Berlin, 2003.
- [140] Tero Harju, Juhani Karhumäki, “Many aspects of defect theorems”, *Theoretical Computer Science*, 324:1 (2004), 35–54.
- [141] Juhani Karhumäki, Jeffrey Shallit, “Polynomial versus exponential growth in repetition-free binary words”, *Journal of Combinatorial Theory, Series A*, 105:2 (2004), 335–347.
- [142] Jean Berstel, Juhani Karhumäki, “Combinatorics on words: a tutorial”, In Gheorghe Păun, Grzegorz Rozenberg, Arto Salomaa (Editors), *Current Trends in Theoretical Computer Science. The Challenge of the New Century*, 415–476. World Scientific, Singapore, 2004.
- [143] Vincent D. Blondel, Julien Cassaigne, Juhani Karhumäki, “Freeness of multiplicative matrix semi-groups”, In Vincent D. Blondel, Alexandre Megretski (Editors), *Unsolved Problems in Mathematical System and Control Theory*, 309–314. Princeton University Press, New Jersey, 2004.
- [144] Karel Čulik II, Juhani Karhumäki, Petri Salmela, “Fixed point approach to commutation of languages”, In Natasha Jonoska, Gheorghe Păun, Grzegorz Rozenberg (Editors), *Aspects of Molecular Computing, Essays Dedicated to Tom Head on the Occasion of His 70th Birthday*, LNCS 2950, 119–131. Springer, Berlin, 2004.
- [145] Juhani Karhumäki, Ion Petre, “Two problems on commutation of languages”, In Grzegorz Rozenberg, Arto Salomaa (Editors), *Recent Trends in Theoretical Computer Science*, 477–493. World Scientific, Singapore, 2004.

- [146] Christian Choffrut, Juhani Karhumäki, “Some decision problems on integer matrices”, *RAIRO Informatique Théorique et Applications*, 39:1 (2005), 125–131.
- [147] Juhani Karhumäki, Michel Latteux, Ion Petre, “Commutation with ternary sets of words”, *Theory of Computing Systems*, 38:2 (2005), 161–169.
- [148] Juhani Karhumäki, Wojciech Plandowski, Wojciech Rytter, “On the complexity of decidable cases of the commutation problem of languages”, *Theoretical Computer Science*, 337:1–3 (2005), 105–118.
- [149] Juhani Karhumäki, Michel Latteux, Ion Petre, “Commutation with codes”, *Theoretical Computer Science*, 340:2 (2005), 322–333.
- [150] Juhani Karhumäki, “Finite sets of words and computing (a survey)” (invited talk), In *Machines, Computations and Universality* (MCU 2005, St. Petersburg, Russia), LNCS 3354, 36–49. Springer, Berlin, 2005.
- [151] Vesa Halava, Tero Harju, Juhani Karhumäki, “Undecidability in  $\omega$ -regular languages”, *Fundamenta Informaticae*, 73:1–2 (2006), 119–125.
- [152] Juhani Karhumäki, Michal Kunc, Alexander Okhotin, “Computing by commuting”, *Theoretical Computer Science*, 356:1–2 (2006), 200–211.
- [153] Juhani Karhumäki, “Words vs. matrices” (invited talk), In *EMS International School and Conference on Combinatorics, Automata and Number Theory* (CANT 2006, Liège, Belgium), University of Liège, 2006.
- [154] Juhani Karhumäki, Michal Kunc, Alexander Okhotin, “Communication of two stacks and rewriting”, In *International Colloquium on Automata, Languages and Programming, Part II* (ICALP 2006, Venice, Italy), LNCS 4052, 468–479. Springer, Berlin, 2006.
- [155] Elena Czeizler, Juhani Karhumäki, “On non-periodic solutions of independent systems of word equations over three unknowns”, *International Journal of Foundations of Computer Science*, 18 (2007), 873–898.
- [156] Elena Czeizler, Stepan Holub, Juhani Karhumäki, Markku Laine, “Intricacies of simple word equations: an example”, *International Journal of Foundations of Computer Science*, 18 (2007), 1167–1175.
- [157] Vesa Halava, Tero Harju, Juhani Karhumäki, “The structure of infinite solutions of marked and binary Post Correspondence Problem”, *Theory of Computing Systems*, 40 (2007), 43–54.
- [158] Vesa Halava, Tero Harju, Juhani Karhumäki, Michel Latteux, “Extension of the decidability of the marked pcp to instances with unique blocks”, *Theoretical Computer Science*, 380 (2007), 355–362.
- [159] Juhani Karhumäki, Yuri Lifitsits, Wojciech Rytter, “Tiling periodicity”, In *Combinatorial Pattern Matching* (CPM 2007, London, Ontario, Canada), LNCS 4580, 295–306. Springer, Berlin, 2007.
- [160] Paul Bell, Vesa Halava, Tero Harju, Juhani Karhumäki, Igor Potapov, “Matrix equations and Hilbert’s Tenth Problem”, *International Journal of Algebra and Computation*, 18 (2008), 1231–1241.
- [161] Vesa Halava, Tero Harju, Mika Hirvensalo, Juhani Karhumäki, “Post correspondence problem for short words”, *Information Processing Letters*, 108 (2008), 115–118.
- [162] Juhani Karhumäki, Jarkko Kari, Joachim Kupke, “A note on binary applications on automatic functions”, *RAIRO Informatique Théorique et Applications*, 42 (2008), 217–236.
- [163] Oscar Ibarra, Juhani Karhumäki, Alexander Okhotin, “On stateless multihead automata: Hierarchies and the emptiness problem”, In *LATIN 2008: Theoretical Informatics* (Búzios, Brazil, April 7–11, 2008), LNCS 4957, 94–105. Springer, Berlin, 2008.

- [164] Juhani Karhumäki, Alekski Saarela, “An analysis and a reproof of hmelevskii’s theorem”, In *Developments in Language Theory* (DLT 2008, Kyoto, Japan), LNCS 5257, 467–478. Springer, Berlin, 2008.
- [165] Julien Cassaigne, Juhani Karhumäki, Petri Salmela, “Conjugacy of finite biprefix codes”, *Theoretical Computer Science*, 410:24–25 (2009), 2301–2452.
- [166] Juhani Karhumäki, “On the power of cooperating morphisms via reachability problems”, *International Journal of Foundations of Computer Science*, 20 (2009), 803–818.
- [167] Christian Choffrut, Juhani Karhumäki, “Unique Decipherability in the Monoid of Languages: an Application of Rational Relations”, In *International Computer Science Symposium in Russia* (CSR 2009, Novosibirsk, Russia), LNCS 5675, 71–79. Springer, Berlin, 2009.
- [168] Juhani Karhumäki, Michal Kunc, Alexander Okhotin, “Computational power of two stacks with restricted communication”, *Information and Computation*, 208 (2010), 1060–1089.
- [169] Oscar Ibarra, Juhani Karhumäki, Alexander Okhotin, “On stateless multihead automata: hierarchies and the emptiness problem”, *Theoretical Computer Science* 411 (2010), 581–593.
- [170] Mika Hirvensalo, Juhani Karhumäki, Alexander Rabinovich, “Computing Partial Information out of Intractable”, *Journal of Number Theory* 130 (2010), 232–253.
- [171] Juhani Karhumäki, Yuri Lifshits, Wojciech Rytter, “Tiling periodicity”, *Discret. Math. & Theoret. Comput. Sci.* 12(2) (2010), 237–248.
- [172] Juhani Karhumäki, Alekski Saarela, “Noneffective regularity of equality languages of bounded delay morphisms” *Discrete Math Theor. Comput. Sci.* 12 (2010), 9–18.
- [173] Juhani Karhumäki, Alekski Saarela, “On maximal chains of systems of word equations”, *Proceedings of the Steklov Institute of Mathematics* 207 4 (2011), 1–8, a special volume in honour of Academician S. I. Adian’s 80th birthday.
- [174] Mari Huova, Juhani Karhumäki, Alekski Saarela, Kalle Saari, “Local squares, periodicity and finite automata”, in C. Calude, G. Rozenberg, A. Salomaa (eds), *Rainbow of Computer Science*, LNCS 6570, Springer (2011), 90–101.
- [175] Christian Choffrut, Juhani Karhumäki, “Unique Decipherability in the Monoid of Languages: An Application of Rational Relations” *Theory of Comp. Systems* 49 (2011), 353–364.
- [176] Juhani Karhumäki, Turo Sallinen, “Weighted Finite Automata: Computing with Different Topologies”, *Proceedings of UC*, LNCS 6714 (2011), 14–33.
- [177] Juhani Karhumäki, Svetlana Puzynina, “Locally catenative sequences and Turtle graphics”, *Theoret. Inf. Appl.* 45 (2011), 311–330.
- [178] Juhani Karhumäki, Alekski Saarela, “The unique decipherability in the monoid of regular languages is undecidable”, in special issue devoted to O. H. Ibarra, *Fund. Inform.* 110:1–4 (2011), 197–200.
- [179] Mari Huova, Juhani Karhumäki, “Equations in the partial semigroup of words with overlapping products”, in H. Bordihn, M. Kutrib, B. Truthe (eds), *Languages Alive*, LNCS 7300, Springer (2012), 99–110.
- [180] Sergey Avgustinovich, Juhani Karhumäki, Svetlana Puzynina, “An abelian version of critical factorization theorem”, *Theoret. Inf. Appl.* 46 (2012), 3–15.
- [181] Juhani Karhumäki, Svetlana Puzynina, Alekski Saarela, “Fine and Wilf’s theorem for  $k$ -abelian periods”, *Proceedings of the 16th DLT*, LNCS 7410, Springer (2012), 296–307.

- [182] Mari Huova, Juhani Karhumäki, Alekski Saarela, “Problems in between words and abelian words:  $k$ -abelian avoidability”, *Theoret. Comput. Sci.* 454 (2012), 172–177.
- [183] Juhani Karhumäki, Alekski Saarela, Luca Q. Zamboni, “On a generalization of Abelian equivalence and complexity of infinite words”, *J. Combin. Theory Ser. A* 120:8 (2013), 2189–2206.
- [184] Mari Huova, Juhani Karhumäki, “On the unavoidability of  $k$ -abelian squares in pure morphic words”, *J. Integer Seq.* 16:2 (2013), 13.2.9.
- [185] Juhani Karhumäki, Svetlana Puzynina, Alekski Saarela, “Fine and Wilf’s theorem for  $k$ -abelian periods”, *Internat. J. Found. Comput. Sci.* 24:7 (2013), 1135–1152.
- [186] Juhani Karhumäki, Svetlana Puzynina, “On  $k$ -abelian palindromic rich and poor words”, *Proceedings of the 18th DLT*, LNCS 8633, Springer (2014), 191–202.
- [187] Juhani Karhumäki, Alekski Saarela, Luca Q. Zamboni, “Variations of the Morse–Hedlund theorem for  $k$ -abelian equivalence”, *Proceedings of the 18th DLT*, LNCS 8633, Springer (2014), 203–214.
- [188] Juhani Karhumäki, Alexander Okhotin, “On the determinization blowup for finite automata recognizing equal-length languages” in C. Calude, R. Freivalds, I. Kazuo (eds), *Computing with New Resources*, LNCS 8808, Springer (2014), 71–82.
- [189] Tero Harju, Juhani Karhumäki, “Finite transducers and rational transductions”, a chapter in Handbook of Automata, *EMS* (to appear).
- [190] Juhani Karhumäki, Jarkko Kari, “Finite automata and image manipulation”, a chapter in Handbook of Automata, *EMS* (to appear).

## B Nonrefereed articles

- [191] Juhani Karhumäki, “On length sets of informationless L systems”, In *Automata, Languages and Development*, 227–242. North-Holland, Amsterdam, 1976.
- [192] Juhani Karhumäki, “The equivalence of mappings on languages”, In *Trends, Techniques, and Problems in Theoretical Computer Science* (Smolenice, Czechoslovakia, 1986), LNCS 281, 26–38. Springer, Berlin, 1987.
- [193] Karel Čulik II, Juhani Karhumäki, “The decidability of the DT0L sequence equivalence problem and related decision problems”, In Hannu Laakso and Arto Salomaa (Editors), *The very knowledge of coding*, 43–54. Univ. Turku, Turku, 1987.
- [194] Karel Čulik II, Juhani Karhumäki, “Matching computations in (equivalent) automata”, In *Second Conference on Automata, Languages and Programming Systems* (Salgótarján, Hungary, 1988), volume 88, 73–76. Karl Marx University of Economics, Budapest, 1988.
- [195] Christian Choffrut, Juhani Karhumäki, “Characterizing the subsets of words commuting with a set of two words”, In *Proceedings of the Seventh Nordic Combinatorial Conference* (Turku, Finland, 1999), TUCS General Publication vol. 15, 1–6. Turku Centre for Computer Science, 1999.
- [196] Juhani Karhumäki, “Some open problems on combinatorics of words and related areas”, In *Workshop on Algebraic Systems, Formal Languages and Computations* (Kyoto, Japan, 2000), RIMS Proceedings 1166, 118–130. Research Institute for Mathematical Sciences, Kyoto University.
- [197] Juhani Karhumäki, “Combinatorics on words: A new challenging topic”, In M. Abel (Ed.), *Proceedings of FinEst*, 64–79. Estonian Mathematical Society, Tartu, 2004.

- [198] Juhani Karhumäki, Elena Petre, “On some special equations on words”, In *Journées Montoises d’Informatique Théorique* (Liège, Belgium, 2004), 208–227. University of Liège, 2004.
- [199] Juhani Karhumäki, Arto Lepistö, “Combinatorics on infinite words”, In Carlos Martín-Vide, Victor Mitrana, Gheorghe Păun (Editors), *Formal Languages and Applications*, Studies on Fuzziness and Soft Computing, vol. 148, 393–410. Springer, Berlin, 2004.
- [200] Vesa Halava, Tero Harju, Juhani Karhumäki, Michel Latteux, “Post correspondence problem for morphism with unique blocks”, In *Proceedings of WORDS’05* (Montreal, Canada, 2005), Publications du LaCIM, vol 36, 265–274.
- [201] Juhani Karhumäki, “Combinatorics on words and complexity” (invited talk), In *Automata and Formal Languages* (AFL 2005, Dobogókő, Hungary), 16–21. University of Szeged, 2005.
- [202] Juhani Karhumäki, “Open problems and exercises on words and languages” (invited talk), In *Conference on Algebraic Informatics* (CAI 2005, Thessaloniki, Greece), 295–305. Aristotle University of Thessaloniki, 2005.
- [203] Juhani Karhumäki, Michal Kunc, Alexander Okhotin, “Computing by commuting”, In *Workshop on Semigroups and Automata* (Lisbon, Portugal, 2005), 69–77. European Science Foundation, AutoMathA, 2005.
- [204] Julien Cassaigne, Juhani Karhumäki, Petri Salmela, “Conjugacy of finite biprefix codes”, *Theory and Applications of Language Equations* (TALE 2007, Turku, Finland, July 2, 2007), TUCS General Publications, vol. 44, 33–42, 2007.
- [205] Juhani Karhumäki, “Dimension properties of words” (invited talk), In *Euler and Modern Combinatorics* (St. Petersburg, Russia, 2007). Euler International Institute, Russian Academy of Sciences, 2007.
- [206] Juhani Karhumäki, “Reachability via Cooperating Morphisms” (invited talk), In *Workshop on Reachability Problems in Computational Models* (RP 2008, Liverpool, UK), ENTCS 223, 15–27, Elsevier, 2008.
- [207] Juhani Karhumäki, Aleksi Saarela, “Noneffective regularity of equality languages and bounded delay morphisms” In *Auto Math A conference*, University of Liege (2009).
- [208] Juhani Karhumäki, “Independent systems of word equations and related topics”, an abstract, In *Oberwolfach minisymposium on combinatorics on words*, Oberwolfach Reports (2010).
- [209] Sergey Avgustinovich, Juhani Karhumäki, Svetlana Puzynina, “On Abelian versions of Critical Factorization Theorem”, In *Proceedings of JM*, Université de Picardie Jules Verne (2010).
- [210] Juhani Karhumäki, “Local vs. global regularities of words and automata theory”, Invited talk in JM2010, abstract (2010).
- [211] Mari Huova, Juhani Karhumäki, “Observations and problems on  $k$ -abelian avoidability”, in Dagstuhl Seminar *Combinatorics and Algorithmic Aspects of Sequence Processing* 11081, 2215–2219 (2011).

## C Scientific monographs

- [212] Christian Choffrut, Juhani Karhumäki (Guest Editors), Special issue in honour of 60th birthday of K. Čulik II, *RAIRO Informatique Théorique et Applications*, 28:3–4 (1994).

- [213] Juhani Karhumäki, Hermann Maurer, Grzegorz Rozenberg (Editors), *Results and Trends in Theoretical Computer Science, Colloquium in Honor of Arto Salomaa* (Graz, Austria, June 10–11, 1994), LNCS 812, Springer, Berlin, 1994.
- [214] Juhani Karhumäki, Alexandru Mateescu, Grzegorz Rozenberg (Guest Editors), Special issue dedicated to A. Salomaa, *Fundamenta Informaticae*, 38 (1999).
- [215] Juhani Karhumäki, Hermann Maurer, Gheorghe Păun, Grzegorz Rozenberg (Editors), *Jewels are forever, Contributions on Theoretical Computer Science in Honor of Arto Salomaa*, Springer, Berlin, 1999.
- [216] Wilfried Brauer, Hartmut Ehrig, Juhani Karhumäki, Arto Salomaa (Editors), *Formal and Natural Computing—Essays Dedicated to Grzegorz Rozenberg on the occasion of his 60th birthday*, LNCS 2300, Springer, 2002.
- [217] Tero Harju, Juhani Karhumäki (Editors), *WORDS'03, Proceedings of 4th International Conference on Combinatorics on Words*, TUCS General Publication vol. 27 (2003).
- [218] Jean Berstel, Juhani Karhumäki, Dominique Perrin (Guest Editors), Special issue on combinatorics on words with applications, *International Journal of Foundations of Computer Science*, 15 (2004).
- [219] Josep Díaz, Juhani Karhumäki, Arto Lepistö, Don Sannella (Editors), *Automata, Languages and Programming, 31st International Colloquium*, (Proceedings of ICALP 2004), LNCS 3142, Springer, Berlin, 2004.
- [220] Juhani Karhumäki, Hermann Maurer, Gheorghe Păun, Grzegorz Rozenberg (Editors), *Theory is forever, Essays Dedicated to Arto Salomaa on the Occasion of His 70th Birthday*, LNCS 3113, Springer, Berlin, 2004.
- [221] Josep Díaz, Juhani Karhumäki (Guest Editors), Automata, languages and programming: Algorithms and complexity (ICALP 2004), *Theoretical Computer Science*, 348:2–3 (2005).
- [222] Juhani Karhumäki, Grzegorz Rozenberg (Guest Editors), Special issue dedicated to the 70th birthday of Arto Salomaa, *Theoretical Computer Science*, 330 (2005).
- [223] Tero Harju, Juhani Karhumäki, Antonio Restivo (Guest Editors), Special issue of WORDS 2003, *Theoretical Computer Science*, 339 (2005).
- [224] Alberto Bertoni, Zoltan Esik, Juhani Karhumäki (Guest Editors), Special issue dedicated to the 60th birthday of Christian Choffrut, *Theoretical Computer Science*, 330:1–2 (2006).
- [225] Anssi Yli-Jyrä, Lauri Karttunen, Juhani Karhumäki (Editors), *Finite State Methods in Natural Language Processing* (Proceedings of FSMNLP 2005), LNCS 4002, Springer, 2006.
- [226] Anne-Maria Enrvall-Hytönen, Matti Jutila, Juhani Karhumäki, Arto Lepistö (Editors), *Proceedings of Conference on Algorithmic Number Theory 2007*, TUCS General Publications, vol. 46, 2007.
- [227] Tero Harju, Juhani Karhumäki, Arto Lepistö (Editors), *Developments in Language Theory 2007*, LNCS 4588, Springer, 2007.
- [228] Giorgio Ausiello, Juhani Karhumäki, Giancarlo Mauri, C.-H. Luke Ong (Editors), *Fifth IFIP International Conference On Theoretical Computer Science* (Proceedings of TCS 2008), IFIP 273, Springer, 2008.
- [229] Viliam Geffert, Juhani Karhumäki, Alberto Bertoni, Bart Preneel, Mária Bieliková, Pavol Návrat (Editors), *SOFSEM 2008: Theory and Practice of Computer Science* (Proceedings of SOFSEM 2008) LNCS 4910, Springer, 2008.

- [230] Tero Harju, Juhani Karhumäki (Guest Editors), Special issue of selected papers of DLT 2007, *International Journal of Foundations of Computer Science*, 19 (2008), 495–690.
- [231] Jean Berstel, Tero Harju, Juhani Karhumäki (Guest Editors), Special issue of workshop on Fibonacci words, *RAIRO Informatique Théorique et Applications*, 42:4 (2008).
- [232] Valerie Berthe, Juhani Karhumäki, Dirk Nowotka, Jeffrey Shallit (Editors), Mini Workshop: Combinatorics on Words, *Oberwolfach Reports* 7:3 (2010), 2195–2244.
- [233] Juhani Karhumäki, Gheorghe Paun, Grzegorz Rozenberg, Arto Salomaa (Guest Editors), “Theory that Counts”, A special issue in honour of 70th birthday of Oscar H. Ibarra, *Fundamenta Informaticae* 110:1-41 (2011), 1–359.
- [234] Giorgio Ausiello, Hendrik Jan Hoogeboom, Juhani Karhumäki, Ion Petre, Arto Salomaa (Guest Editors), “Magic in Science”, A special issue in honour of 70th birthday of G. Rozenberg, *Theoret. Comput. Sci.* 429 (2012), 1–304.
- [235] Vesa Halava, Juhani Karhumäki, Dirk Nowotka, Grzegorz Rozenberg (Guest Editors), “Words, Graphs, Automata, and Languages”, A special issue in honour of the 60th birthday of T. Harju, *Fund. Inform.* 116 (2012).
- [236] Edward Hirsch, Juhani Karhumäki, Arto Lepistö, Michail Prilutskii (Editors), *Proceedings of the 7th CSR*, LNCS 7353, Springer (2012).
- [237] Juhani Karhumäki, Arto Lepistö, Luca Q. Zamboni (Editors), *Proceedings of the 9th WORDS*, LNCS 8079, Springer (2013).
- [238] Vesa Halava, Juhani Karhumäki, Yuri Matiyasevich (Guest Editors), Special issue of RuFiDiM, *Fund. Inform.* 132:1 (2014).
- [239] Pierpaolo Degano, Juhani Karhumäki, Paolo Massazza (Guest Editors), “From Models to Languages”, A special issue, *Fund. Inform.* 134:3–4 (2014).
- [240] Helmut Jürgensen, Juhani Karhumäki, Alexander Okhotin (Editors), *Proceedings of the 16th DCFS*, LNCS 8614, Springer (2014).
- [241] Vesa Halava, Tero Harju, Juhani Karhumäki, “Undecidability through Post Correspondence Problem”, *EATCS monographs*, Springer (to appear).

## D Professional publications

- [242] Juhani Karhumäki, “Theory of Codes by J. Berstel and D. Perrin”, *Bulletin of American Mathematical Society*, 17:161–167, 1987.
- [243] Juhani Karhumäki, “A short biography of Arto Salomaa [b. 1934]”, *Information and Computation*, 151:1–2 (1999), 2–4.
- [244] Juhani Karhumäki, “A short biography of Arto Salomaa [b. 1934]”, *Theoretical Computer Science*, 226 (1999), 2–5.
- [245] Juhani Karhumäki, Arto Lepistö, “Fibonacciin ääretön sana”, *Dimensio*, 3 (2005), 40–45.
- [246] Juhani Karhumäki, “Sanat ja automaatit”, *Tietojenkäsittelytiede*, 27 (2007), 31–59.
- [247] Juhani Karhumäki, Arto Lepistö, Tommi Meskanen, Sami Mäkelä, Hannu Nurmi, Tommi Penttinen, Ari Renvall, Petri Salmela, Seppo Virtanen, “Auditointiraportti kunnallisvaalien sähköisen äänestyksen pilotista”, *TUCS National Publication* 15, Turku Centre for Computer Science, 2008, Turku, Finland.