

Curriculum Vitæ

Name: Heribert Vollmer
Date of Birth: 15.10.1964 in Bad Fredeburg (Germany)
Citizenship: German
Marital Status: Married, two childdren
Address: Institut für Theoretische Informatik
Universität Hannover
Appelstraße 4
D-30167 Hannover, Germany
Phone: +49-511-762-19703, Fax: +49-511-762-19606
e-mail: vollmer@thi.uni-hannover.de
<http://www.thi.uni-hannover.de/>

Education:

1971–1974 Grundschule (Elementary School) in Bödefeld
1974–1984 August-Macke-Gymnasium (High School) in Meschede
July 1984 Abitur (High school diploma)
1984–1989 Student of Computer Science and Linguistics, Erziehungswissenschaftliche Hochschule Rheinland-Pfalz, Koblenz
July 1989 Diploma (Master of Science), summa cum laude (1.0)
February 1994 Doctorate (Ph.D.), magna cum laude (1.0),
Fachbereich für Mathematik und Informatik der Julius-Maximilians-Universität, Würzburg
July 2000 Habilitation,
Fachbereich für Mathematik und Informatik der Julius-Maximilians-Universität, Würzburg

Title of Doctoral Thesis: Komplexitätsklassen von Funktionen, 1994.

Title of Habilitation Thesis: Some Aspects of the Computational Power of Boolean Circuits of Small Depth, 2000.

Employment:

1986–1989	Teaching Assistant (Tutor) at the Computer Science Department, Erziehungswissenschaftliche Hochschule Rheinland-Pfalz, Koblenz
1989–1991	Research Assistant (Wissenschaftlicher Mitarbeiter) at the Computer Science Department, Johann Wolfgang Goethe University, Frankfurt
1991–1994	Research Assistant (Wissenschaftlicher Mitarbeiter) at the Department of Mathematics and Computer Science, Julius Maximilians University, Würzburg
1994–1995	Visiting Researcher at the Department of Mathematics, University of California, Santa Barbara; supported by a Feodor Lynen Fellowship of the Alexander von Humboldt Foundation
Spring Quarter 1995	Visiting Professor at the Department of Mathematics, University of California, Santa Barbara
1995–2000	Assistant Professor (Wissenschaftlicher Assistent) at the Department of Mathematics and Computer Science, Julius Maximilians University, Würzburg
2000–2002	Associate Professor (Privatdozent) at the Department of Mathematics and Computer Science, Julius Maximilians University, Würzburg
since March 2002	Full Professor for Theoretical Computer Science at the University of Hannover
05–06, 2006	Research Fellow, Issac Newton Institut for Mathematical Sciences, Cambridge, UK
04–09, 2011	Academic Visitor, Computing Laboratory, Oxford University.

Publications:

Books

- [1] A. Meier, H. Vollmer, *Komplexität von Algorithmen*, Mathematik für Anwendungen. Lehmanns, 2015.
- [2] B. Vöcking, H. Alt, M. Dietzfelbinger, R. Reischuk, C. Scheideler, H. Vollmer, D. Wagner (Eds.). *Algorithms Unplugged*. Springer Verlag, 2011.
English translation of [4].
- [3] N. Creignou, Ph. Kolaitis, H. Vollmer (Eds.). *Complexity of Constraints*. Volume 5250 of *Lecture Notes in Computer Science*, Springer Verlag, 2008.
- [4] B. Vöcking, H. Alt, M. Dietzfelbinger, R. Reischuk, C. Scheideler, H. Vollmer, D. Wagner (Eds.). *Taschenbuch der Algorithmen*. Springer Verlag, 2008.
- [5] H. Vollmer. *Introduction to Circuit Complexity – A Uniform Approach*. Texts in Theoretical Computer Science. An EATCS Series. Springer Verlag, 1999.

Contributions to books

- [6] N. Creignou, H. Vollmer. Boolean constraint satisfaction problems: When does Post’s lattice help? In [3], pp. 3–37.
- [7] H. Vollmer. First-order logic with groupoidal quantifiers. In A. Beckman, N. Preining (Eds.), *ESSLLI 2003*, Collegium Logicum Vol. VI, pp. 71–105. Kurt Gödel Society, 2004.
- [8] H. Vollmer. A generalized quantifier concept in computational complexity theory. In J. Väänänen (Ed.), *Generalized Quantifiers and Computation*, Volume 1754 of *Lecture Notes in Computer Science*, pp. 99–120. Springer Verlag, 2000.
- [9] H. Vollmer, K. W. Wagner. Measure one results in computational complexity theory. In D.-Z. Du, K.-I Ko (Eds.), *Advances in Algorithms, Languages, and Complexity*, pp. 285–312. Kluwer Academic Publishers, 1997.

Journal publications

- [10] N. Creignou, H. Vollmer. Parameterized complexity of weighted satisfiability problems: decision, enumeration, counting. *Fundamenta Informaticae*, 136:297–316, 2015.
A preliminary version appeared in: *Proceedings 15th Theory and Applications of Satisfiability Testing (SAT)*, Volume 7317 of *Lecture Notes in Computer Science*, pp. 341–354, Springer Verlag, 2012.

- [11] A. Durand, J. Ebbing, J. Kontinen, H. Vollmer. *Dependence Logic with a Majority Quantifier*. *Journal of Logic, Language and Information*, 24(3):289-305, 2015.
A preliminary version appeared in: *Proceedings 31st Foundations of Software Technology and Theoretical Computer Science*, Volume 13 of *Leibniz International Proceedings in Informatics*, pp. 252–263, Dagstuhl Publishing, 2011.
- [12] A. Meier, I. Schindler, J. Schmidt, M. Thomas, H. Vollmer. *On the parameterized complexity of non-monotonic logics*. *Archive of Mathematical Logic*, 54(5-6):685-710, 2015.
- [13] M. Aschinger, C. Drescher, G. Gottlob, H. Vollmer. *LoCo – A Logic for Configuration Problems*. *ACM Transactions on Computational Logic*, 15(3):20, 2014. See also [66].
- [14] J. Ebbing, J. Kontinen, J.-S. Müller, H. Vollmer. *A fragment of dependence logic capturing polynomial time*. *Logical Methods in Computer Science* 10(3):3, pp. 1–13, 2014.
- [15] O. Beyersdorff, S. Datta, Andreas Krebs, M. Mahajan, G. Scharfenberger-Fabian, K. Sreenivasaiah, M. Thomas, H. Vollmer. *Verifying proofs in constant depth*. *ACM Transactions on Computation Theory*, 5(1):2, 2013.
A preliminary version appeared in: *Proceedings 36th Mathematical Foundations of Computer Science*, Volume 6907 of *Lecture Notes in Computer Science*, pp. 84–95, Springer Verlag, 2011.
- [16] P. Lohmann, H. Vollmer. *Complexity results for modal dependence logic*. *Studia Logica*, 101(2):343–366, 2013.
A preliminary version appeared in: *Proceedings Computer Science Logic*, Volume 6247 of *Lecture Notes in Computer Science*, pp. 411–425, Springer Verlag, 2010.
- [17] E. Böhler, N. Creignou, M. Galota, S. Reith, H. Schnoor, H. Vollmer. *Complexity classifications for different equivalence and audit problems for Boolean circuits*. *Logical Methods in Computer Science*, 8(3):27, 2012.
- [18] N. Creignou, A. Meier, M. Thomas, H. Vollmer. *The complexity of reasoning for fragments of autoepistemic logic*. *ACM Transaction on Computational Logic*, 13(2):17, 2012.
- [19] O. Beyersdorff, A. Meier, M. Thomas, H. Vollmer. *The complexity of reasoning for fragments of default logic*. *Journal of Logic and Computation*, 22(3):587–604, 2012.

A preliminary version appeared in: *Proceedings 12th Theory and Applications of Satisfiability Testing (SAT)*, Volume 5584 of *Lecture Notes in Computer Science*, pp. 51–64, Springer Verlag, 2009.

- [20] S. Datta, M. Mahajan, B. V. Raghavendra Rao, M. Thomas, H. Vollmer. Counting classes and the fine structure between NC^1 and L . *Theoretical Computer Science*, 417:36–49, 2012.

A preliminary version appeared in: *Proceedings 35th Mathematical Foundations of Computer Science*, Volume 6281 of *Lecture Notes in Computer Science*, pp. 306–317, Springer Verlag, 2010.

- [21] O. Beyersdorff, A. Meier, S. Müller, M. Thomas, H. Vollmer. Proof complexity of propositional default logic. *Archive for Mathematical Logic*, 50:727–742, 2011.

A preliminary version appeared in: *Proceedings 13th Theory and Applications of Satisfiability Testing (SAT)*, Volume 6175 of *Lecture Notes in Computer Science*, pp. 30–43, Springer Verlag, 2010.

- [22] O. Beyersdorff, A. Meier, M. Mundhenk, M. Thomas, H. Vollmer, T. Schneider. Model Checking CTL is almost always inherently sequential. *Logical Methods in Computer Science*, 7(2):12, 2011.

A preliminary version appeared in: *Proceedings 16th Temporal Representation and Reasoning (TIME-2009)*, IEEE Computer Society Press, 2009.

- [23] M. Bauland, M. Mundhenk, T. Schneider, H. Schnoor, I. Schnoor, H. Vollmer. The tractability of model checking for LTL: the good, the bad, and the ugly fragments. *ACM Transactions on Computational Logic* 12(2):13, 2011.

A preliminary version appeared in: *Proceedings 5th Workshop on Methods for Modalities (M4M)*, Electronic Notes in Theoretical Computer Science 231, pp. 277–292, 2009.

- [24] J. Kontinen, H. Vollmer. On second-order monadic groupoidal quantifiers. *Logical Methods in Computer Science* 6(3):25, 2010.

A preliminary version appeared in: *Proceedings Workshop on Logic, Language, Information, and Computation*, Volume 5110 of *Lecture Notes in Computer Science*, pp. 238–248, Springer Verlag, 2008.

- [25] P. McKenzie, M. Thomas, H. Vollmer. Extensional uniformity for Boolean circuits. *SIAM Journal on Computing* 39:7, 3186–3206, 2010.

A preliminary version appeared in: *Proceedings Computer Science Logic*, Volume 5213 of *Lecture Notes in Computer Science*, pp. 64–78, Springer Verlag, 2008.

- [26] M. Bauland, E. Böhler, N. Creignou, S. Reith, H. Schnoor, H. Vollmer. The complexity of problems for quantified constraints. *Theory of Computing Systems* 47:454–490, 2010.
- [27] A. Meier, M. Mundhenk, M. Thomas, H. Vollmer. The complexity of satisfiability for fragments of CTL and CTL*. *International Journal of Foundations of Computer Science* 20(5):901–918, 2009.
A preliminary version appeared in: *Proceedings 2nd Workshop on Reachability Problems in Computational Models*, Electronic Notes in Theoretical Computer Science 223, pp. 201–213, 2008.
- [28] O. Beyersdorff, A. Meier, M. Thomas, H. Vollmer. The complexity of propositional implication. *Information Processing Letters* 109:1071–1077, 2009.
- [29] E. Allender, M. Bauland, N. Immerman, H. Schnoor, H. Vollmer, The complexity of satisfiability problems: Refining Schaefer’s theorem. *Journal of Computer and System Sciences* 75(4): 245–254, 2009.
A preliminary version appeared in: *Proceedings 30th Mathematical Foundations of Computer Science*, Volume 3618 of *Lecture Notes in Computer Science*, pp. 71–82, Springer Verlag, 2005.
- [30] M. Bauland, T. Schneider, H. Schnoor, I. Schnoor, H. Vollmer The complexity of generalized satisfiability for linear temporal logic. *Logical Methods in Computer Science* 5(1):1, 2009.
A preliminary version appeared in: *Proceedings 10th International Conference on Foundations of Software Science and Computation Structures (FOSSACS)*, Volume 4423 of *Lecture Notes in Computer Science*, pp. 48–62, Springer Verlag, 2007.
- [31] H. Vollmer. The complexity of deciding if a Boolean function can be computed by Boolean circuits over a restricted base. *Theory of Computing Systems* 44:82–90, 2009.
- [32] P. McKenzie, T. Schwentick, D. Thérien, H. Vollmer. The many faces of a translation. *Journal of Computer and Systems Sciences* 72:163–179, 2006.
A preliminary version appeared in: *Proceedings 27th International Colloquium on Automata, Languages and Programming*, Volume 1853 of *Lecture Notes in Computer Science*, pp. 890–901. Springer Verlag, 2000.
- [33] F. Steimann, H. Vollmer. Exploiting practical limitations of UML for model validation and execution. *Software and Systems Modeling*, 5: 26–47, 2006.

- [34] E. Böhler, S. Reith, H. Schnoor, H. Vollmer, Bases for Boolean co-clones. *Information Processing Letters*, 96:59–66, 2005.
- [35] M. Galota, H. Vollmer. Functions computable in polynomial space. *Information and Computation*, 198:56–70, 2005.
- [36] C. Glaßer, S. Reith, H. Vollmer. The complexity of base station positioning in cellular networks. *Discrete Applied Mathematics*, 148:1–12, 2005.
A preliminary version appeared in: *Approximation and Randomized Algorithms in Communication Networks*, ICALP Workshops 2000, Proceedings in Informatics 8, pp. 167–177. Carleton Scientific, 2000.
- [37] P. McKenzie, H. Vollmer, K. W. Wagner. Arithmetic circuits and polynomial replacement systems. *SIAM Journal on Computing*, 33:1513–1531, 2004.
A preliminary version appeared in: *Proceedings 20th Foundations of Software Technology and Theoretical Computer Science*, Volume 1974 of *Lecture Notes in Computer Science*, pp. 164–175. Springer Verlag, 2000.
- [38] T. Ebert, W. Merkle, H. Vollmer. On the autoreducibility of random sequences; *SIAM Journal on Computing*, 32(6):1542–1569, 2003.
A preliminary version appeared as: T. Ebert, H. Vollmer. On the autoreducibility of random sequences. In *Proceedings 25th Symposium on Mathematical Foundations of Computer Science*, Volume 1893 of *Lecture Notes in Computer Science*, pp. 333–342. Springer Verlag, 2000.
- [39] S. Reith, H. Vollmer. Optimal satisfiability for propositional calculi and constraint satisfaction problems. *Information and Computation*, 186(1):1–19, 2003.
A preliminary version appeared in: *Proceedings 25th Symposium on Mathematical Foundations of Computer Science*, Volume 1893 of *Lecture Notes in Computer Science*, pp. 640–649. Springer Verlag, 2000.
- [40] M. Galota, S. Kosub, H. Vollmer. Generic separations and leaf languages. *Mathematical Logic Quarterly*, 49(4):353–362, 2003.
- [41] T. Peichl, H. Vollmer. Finite automata with generalized acceptance criteria. *Discrete Mathematics and Theoretical Computer Science*, 4:179–192:2001.
A preliminary version appeared in: *Proceedings 26th International Colloquium on Automata, Languages and Programming*, Volume 1644 of *Lecture Notes in Computer Science*, pp. 605–614. Springer Verlag, 1999.
- [42] C. Lautemann, P. McKenzie, T. Schwentick, H. Vollmer. The descriptive complexity approach to LOGCFL. *Journal of Computer and System Sciences*,

62(4):629–652, 2001.

A preliminary version appeared in: *Proceedings 16th Symposium on Theoretical Aspects of Computer Science*, Volume 1563 of *Lecture Notes in Computer Science*, pp. 444–454. Springer Verlag, 1999.

- [43] M. Agrawal, E. Allender, S. Datta, H. Vollmer, K. W. Wagner. Characterizing small depth and small space classes by operators of higher types. *Chicago Journal on Theoretical Computer Science*, Article 2, 2000.
- [44] S. Kosub, H. Schmitz, H. Vollmer. Uniform characterizations of complexity classes of functions. *International Journal of Foundations of Computer Science*, 11(4):525–551, 2000.
A preliminary version appeared in: *Proceedings 15th Symposium on Theoretical Aspects of Computer Science*, Volume 1373 of *Lecture Notes in Computer Science*, pp. 607–617. Springer Verlag, 1999.
- [45] U. Hertrampf, S. Reith, H. Vollmer. A note on closure properties of logspace MOD-classes. *Information Processing Letters*, 75(3):91–93, 2000.
- [46] H. Vollmer. Was leistet die Komplexitätstheorie für die Praxis? *Informatik-Spektrum*, 22(5):317–327, 1999.
English translation: “What can computational complexity theory do for practice?”. In *Center of Network Optimization*, Activity Report 1998–1999, Würzburg, 1999.
- [47] S. Fenner, F. Green, S. Homer, A. L. Selman, T. Thierauf, H. Vollmer. Complements of multivalued functions. *Chicago Journal on Theoretical Computer Science*, Article 3, 1999.
A preliminary version appeared in: *Proceedings 11th Conference on Computational Complexity*, pp. 260–269. IEEE Computer Society Press, 1996.
- [48] R. V. Book, H. Vollmer, K. W. Wagner. Probabilistic type 2 operators and ALMOST-classes. *Computational Complexity*, 7:265–289, 1998.
A preliminary version appeared as: R. V. Book, H. Vollmer, K. W. Wagner. On type-2 probabilistic quantifiers. In *Proceedings 23rd International Colloquium on Automata, Languages and Programming*, Volume 1099 of *Lecture Notes in Computer Science*, pp. 369–380. Springer Verlag, 1996.
- [49] H. Caussinus, P. McKenzie, D. Thérien, H. Vollmer. Nondeterministic NC^1 computation. *Journal of Computer and System Sciences*, 57:200–212, 1998.
A preliminary version appeared in: *Proceedings 11th Conference on Computational Complexity*, pp. 12–21. IEEE Computer Society Press, 1996.

- [50] H. Vollmer. Relating polynomial time to constant depth. *Theoretical Computer Science*, 207:159-170, 1998.
- [51] H.-J. Burtschick, H. Vollmer. Lindström quantifiers and leaf language definability. *International Journal of Foundations of Computer Science*, 9:277-294, 1998.
- [52] K. Cronauer, U. Hertrampf, H. Vollmer, K. W. Wagner. The chain method to separate counting classes. *Theory of Computing Systems (formerly Mathematical Systems Theory)*, 31:93-108, 1998.
- [53] K. Regan, H. Vollmer. Gap-languages and log-time complexity classes. *Theoretical Computer Science*, 188:101–116, 1997.
- [54] H. Vollmer, K. W. Wagner. Recursion theoretic characterizations of complexity classes of counting functions. *Theoretical Computer Science*, 163:245–258, 1996.
- [55] U. Hertrampf, H. Vollmer, K. W. Wagner. On balanced vs. unbalanced computation trees. *Mathematical Systems Theory*, 29:411–421, 1996.
- [56] H. Vollmer, K. W. Wagner. Complexity classes of optimization functions. *Information and Computation*, 120:198–219, 1995.
- [57] H. Vollmer, K. W. Wagner. The complexity of finding middle elements. *International Journal of Foundations of Computer Science*, 4:293–307, 1993.

Contributions to conference proceedings

(only if not subsequently published in refereed journals, see above)

- [58] J. Kontinen, J.-S. Müller, H. Schnoor, H. Vollmer. A Van Benthem Theorem for Modal Team Semantics. *Proceedings 24th Computer Science Logic*, Volume 41 of Leibniz International Proceedings in Informatics, pp. 277-291, Dagstuhl Publishing, 2015.
- [59] M. Hannula, J. Kontinen, J. Virtema, H. Vollmer. Complexity of Propositional Independence and Inclusion Logic. In *Proceedings 40th Mathematical Foundations of Computer Science*, Volume 9234 of *Lecture Notes in Computer Science*, pp. 269-280, Springer Verlag, 2015.
- [60] L. Hella, A. Kuusisto, A. Meier, H. Vollmer. Modal Inclusion Logic: Being Lax is Simpler than Being Strict. In *Proceedings 40th Mathematical Foundations of Computer Science*, Volume 9234 of *Lecture Notes in Computer Science*, pp. 281-292, Springer Verlag, 2015.

- [61] N. Creignou, R. Ktari, A. Meier, J.-S. Müller, F. Olive, H. Vollmer. Parameterized Enumeration for Modification Problems. In *Proceedings 6th Languages and Automata Theory and Applications*, Volume 8977 of *Lecture Notes in Computer Science*, pp. 524-536, Springer Verlag, 2015.
- [62] J. Kontinen, J.-S. Müller, H. Schnoor, H. Vollmer. Modal Independence Logic. In *Advances in Modal Logic*, pp. 353–372, Groningen, 2014.
- [63] J.-S. Müller, H. Vollmer. Model Checking for Modal Dependence Logic: An Approach through Post’s Lattice. In *Proceedings Workshop on Logic, Language, Information, and Computation*, Volume 8071 of *Lecture Notes in Computer Science*, pp. 238–250, Springer Verlag, 2013.
- [64] J. Ebbing, L. Hella, A. Meier, J.-S. Müller, J. Virtema, H. Vollmer. Extended Modal Dependence Logic. In *Proceedings Workshop on Logic, Language, Information, and Computation*, Volume 8071 of *Lecture Notes in Computer Science*, pp. 126–137, Springer Verlag, 2013.
- [65] N. Creignou, A. Meier, J.-S. Müller, J. Schmidt, H. Vollmer. Paradigms for Parameterized Enumeration. In *Proceedings 38th Mathematical Foundations of Computer Science*, Volume 8087 of *Lecture Notes in Computer Science*, pp. 290–301, Springer Verlag, 2013.
- [66] M. Aschinger, C. Drescher, H. Vollmer. LoCo – A Logic for Configuration Problems. In *Proceedings 20th European Conference on Artificial Intelligence*, *Frontiers in Artificial Intelligence and Applications* 242, pp. 73–78, IOS Press, 2012.
- [67] A. Meier, J. Schmidt, M. Thomas, H. Vollmer. On the parameterized complexity of default logic and autoepistemic logic. In *Proceedings 6th Languages and Automata Theory and Applications*, Volume 7183 of *Lecture Notes in Computer Science*, pp. 404–415, Springer Verlag, 2012.
- [68] H. Vollmer, Computational complexity of constraint satisfaction. In *Proceedings 3rd Computability in Europe*, Volume 4497 of *Lecture Notes in Computer Science*, pp. 748–757, Springer Verlag, 2007.
- [69] M. Bauland, P. Chapdelaine, N. Creignou, M. Hermann, H. Vollmer. An algebraic approach to the complexity of generalized conjunctive queries. In *Proceedings 7th International Conference on Theory and Applications of Satisfiability Testing*, *Revised Selected Papers*, Volume 3542 of *Lecture Notes in Computer Science*, pp. 30–45, Springer Verlag, 2005.

- [70] E. Böhler, E. Hemaspaandra, S. Reith, H. Vollmer. The complexity of Boolean constraint isomorphism. In *Proceedings 21st Symposium on Theoretical Aspects of Computer Science*, Volume 2996 of *Lecture Notes in Computer Science*, pp. 164–175. Springer Verlag, 2004.
- [71] H. Vollmer. Complexity theory made easy: the formal language approach to the definition of complexity classes; In *Proceedings 7th Developments in Language Theory*, Volume 2710 of *Springer Lecture Notes in Computer Science*, pp. 95–110. Springer Verlag, 2003.
- [72] E. Böhler, E. Hemaspaandra, S. Reith, H. Vollmer. Equivalence and isomorphism for Boolean constraint satisfaction. In *Proceedings 16th Computer Science Logic*, Volume 2471 of *Lecture Notes in Computer Science*, pp. 412–426. Springer Verlag, 2002.
- [73] T. Schwentick, D. Thérien, H. Vollmer. Partially-ordered two-way automata: a new characterization of DA. In *Proceedings 5th Developments in Language Theory*, Volume 2295 of *Lecture Notes in Computer Science*, pp. 239–250. Springer Verlag, 2002.
- [74] M. Galota, H. Vollmer. A generalization of the Büchi-Elgot-Trakhtenbrot-Theorem. In *Proceedings 15th Computer Science Logic 2001*, Volume 2142 of *Lecture Notes in Computer Science*, pp. 355–368. Springer Verlag, 2001.
- [75] M. Galota, C. Glaßer, S. Reith, H. Vollmer. A polynomial-time approximation scheme for base station positioning in UMTS networks. In *Proceedings 5th Discrete Algorithms and Methods for Mobile Computing and Communications*, pp. 52–59. ACM Press, 2001.
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- [77] H. Vollmer. Relations among parallel and sequential computation models. In J. Jaffar and R. H. C. Yap (Eds.), *Concurrency and Parallelism, Programming, Networking, and Security; Proceedings 2nd Asian Computing Science Conference*, Volume 1179 of *Lecture Notes in Computer Science*, pp. 23–32. Springer Verlag, 1996.
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Surveys and expository articles (not peer-reviewed)

- [82] A. Meier, J.-S. Müller, M. Mundhenk, H. Vollmer. Complexity of model checking for logics over Kripke models. *Bulletin of the European Association for Theoretical Computer Science* 108:49–89, 2010.
- [83] M. Thomas, H. Vollmer. Complexity of non-monotonic logics. *Bulletin of the European Association for Theoretical Computer Science* 102:53–82, 2010.
- [84] E. Böhler, N. Creignou, S. Reith, H. Vollmer. Playing with Boolean blocks, Part II: Constraint satisfaction problems. *ACM SIGACT-Newsletter*, 35(1):22–35, 2004.
- [85] E. Böhler, N. Creignou, S. Reith, H. Vollmer. Playing with Boolean blocks, Part I: Post’s lattice with applications to complexity theory. *ACM SIGACT-Newsletter*, 34(4):38–52, 2003.
- [86] H. Vollmer. Uniform characterizations of complexity classes. *ACM SIGACT-Newsletter*, 30(1):17-27, 1999.
- [87] L. A. Hemaspaandra, H. Vollmer. The satanic notations: counting classes beyond #P and other definitional adventures. *ACM SIGACT-Newsletter*, 26(1):2–13, 1995.

Further publications

(Technical reports only if not (yet) published in journals or conference proceedings, see above)

- [88] E. Böhler, H. Vollmer. Boolean functions and Post’s lattice with applications to complexity theory. Lecture Notes for *Logic et Interaction 2002*, École thématique: Complexité et Calcul, Centre International de Rencontres Mathématiques, Marseille, 2002.

- [89] S. Reith, H. Vollmer. Wer wird Millionär? Komplexitätstheorie: Konzepte und Herausforderungen. *c't*, 7:240–251, 2001.
- [90] M. Galota, C. Glaßer, K. Leibnitz, S. Reith, P. Tran-Gia, H. Vollmer, K. W. Wagner. Base station positioning in UMTS networks: an optimization framework. *Center of Network Optimization*, Activity Report 1999–2000, Würzburg, 2000.
- [91] H. Vollmer. Some Aspects of the Computational Power of Boolean Circuits of Small Depth. Habilitationsschrift (Habilitation thesis), Universität Würzburg, Fachbereich Mathematik und Informatik, 2000.
- [92] H. Vollmer. Succinct inputs, Lindström quantifiers, and a general complexity theoretic operator concept. In *Readers 9th European Summer School in Logic, Language and Information*, chapter CL7/2. CNRS Aix-en-Provence and The European Association for Logic, Language and Information, 1997.
- [93] H. Vollmer (Ed.). *Komplexitätstheorie: Maschinen und Operatoren – Klaus Wagner zum 50. Geburtstag*. Cuvillier-Verlag, Göttingen, 1997.
- [94] H. Vollmer. Optimierungsfunktionen. In [93].
- [95] H. Vollmer. *Komplexitätsklassen von Funktionen*. Dissertation (Ph.D. thesis), Universität Würzburg, Fachbereich Mathematik und Informatik, 1994.
- [96] H. Vollmer. Beiträge zur Komplexitätstheorie von Logikprogrammen. Diplomarbeit (Master thesis), EWH Koblenz, Institut für Informatik, 1989.
- [97] H. Vollmer. A characterization of NC in terms of logic programs. Technical Report No. 89-4, EWH Koblenz, Institut für Informatik, 1989.
- [98] H. Vollmer. Uniforme Schaltkreisfamilien und ihre Komplexitätsklassen. Technical Report No. 89-1, EWH Koblenz, Institut für Informatik, 1989.

Ph. D. Students:

1. Julian-Steffen Müller, Satisfiability and Model Checking in Team Based Logics, Dissertation, Universität Hannover, Fakultät für Elektrotechnik und Informatik, 2014.
2. Johannes Ebbing, Complexity and Expressivity of Dependence Logic Extensions, Dissertation, Universität Hannover, Fakultät für Elektrotechnik und Informatik, 2014.
3. Radosław Cymer, Applications of Matching Theory in Constraint Programming, Dissertation, Universität Hannover, Fakultät für Elektrotechnik und Informatik, 2013.
4. Peter Lohmann, Computational Aspects of Dependence Logic, Dissertation, Universität Hannover, Fakultät für Elektrotechnik und Informatik, 2012.
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