

## Lebenslauf

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### Schul- und Universitätsausbildung:

1971–1974 Grundschule Bödefeld  
1974–1984 August-Macke-Gymnasium, Meschede  
Juli 1984 Abitur  
1984–1989 Studium Informatik mit Anwendungsschwerpunkt Linguistik, Erziehungswissenschaftliche Hochschule Rheinland-Pfalz, Koblenz  
Juli 1989 Diplom, mit Auszeichnung (1,0)  
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Fachbereich für Mathematik und Informatik der Julius-Maximilians-Universität, Würzburg  
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**Titel der Dissertation:** Komplexitätsklassen von Funktionen, 1994.

**Titel der Habilitationsschrift:** Some Aspects of the Computational Power of Boolean Circuits of Small Depth, 2000.

**Beschäftigung:**

1986–1989	Tutor am Institut für Informatik der Erziehungswissenschaftlichen Hochschule Rheinland-Pfalz, Koblenz
1989–1991	Wissenschaftlicher Mitarbeiter am Fachbereich für Informatik der Johann-Wolfgang-Goethe-Universität, Frankfurt
1991–1994	Wissenschaftlicher Mitarbeiter am Fachbereich für Mathematik und Informatik der Julius-Maximilians-Universität, Würzburg
1994–1995	Visiting Researcher am Department of Mathematics der University of California, Santa Barbara; unterstützt durch ein Feodor-Lynen-Stipendium der Alexander-von-Humboldt-Gesellschaft
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1995–2000	Wissenschaftlicher Assistent am Fachbereich für Mathematik und Informatik der Julius-Maximilians-Universität, Würzburg
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## Veröffentlichungen

### Bücher

- [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 (Hrsg.). *Algorithms Unplugged*. Springer Verlag, 2011.  
Englische Übersetzung von [4].
- [3] N. Creignou, Ph. Kolaitis, H. Vollmer (Hrsg.). *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 (Hrsg.). *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.

### Beiträge zu Büchern

- [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 (Hrsg.), *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 (Hrsg.), *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 (Hrsg.), *Advances in Algorithms, Languages, and Complexity*, pp. 285–312. Kluwer Academic Publishers, 1997.

### Referierte Journalartikel

- [10] N. Creignou, H. Vollmer. Parameterized complexity of weighted satisfiability problems: decision, enumeration, counting. *Fundamenta Informaticae*, 136:297–316, 2015.  
Eine frühere Version erschien 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.  
Eine frühere Version erschien 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. Vgl. auch [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. Sreenivasaiyah, M. Thomas, H. Vollmer. Verifying proofs in constant depth. *ACM Transactions on Computation Theory*, 5(1):2, 2013.  
Eine frühere Version erschien 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.  
Eine frühere Version erschien 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.

- Eine frühere Version erschien 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.  
Eine frühere Version erschien 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.  
Eine frühere Version erschien 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.  
Eine frühere Version erschien 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.  
Eine frühere Version erschien 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.  
Eine frühere Version erschien 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.  
Eine frühere Version erschien 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.  
Eine frühere Version erschien 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.  
Eine frühere Version erschien 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.  
Eine frühere Version erschien 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.  
Eine frühere Version erschien 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. Böhrer, 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.  
Eine frühere Version erschien 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.  
Eine frühere Version erschien 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.  
Eine frühere Version erschien als: 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.  
Eine frühere Version erschien 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.  
Eine frühere Version erschien 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.  
 Eine frühere Version erschien 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.  
 Eine frühere Version erschien 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.  
 Englische Übersetzung: “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.  
 Eine frühere Version erschien 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.  
 Eine frühere Version erschien als: 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.  
 Eine frühere Version erschien 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.

#### Beiträge in Tagungsbänden

(nur falls nicht auch in referierten Journalen erschienen, s.o.)

- [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.
- [76] H. Vollmer, K. W. Wagner. On operators of higher types. In *Proceedings 12th Conference on Computational Complexity*, S. 174–184. IEEE Computer Society Press, 1997.
- [77] H. Vollmer. Relations among parallel and sequential computation models. In J. Jaffar and R. H. C. Yap (Hrsg.), *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.
- [78] U. Hertrampf, H. Vollmer, K. W. Wagner. On the power of number-theoretic operations with respect to counting. In *Proceedings 10th Structure in Complexity Theory Conference*, pp. 299–314. IEEE Computer Society Press, 1995.

- [79] H. Vollmer. On different reducibility notions for function classes. In *Proceedings 11th Symposium on Theoretical Aspects of Computer Science*, Volume 775 of *Lecture Notes in Computer Science*, pp. 449–460. Springer Verlag, 1994.
- [80] U. Hertrampf, C. Lautemann, T. Schwentick, H. Vollmer, K. W. Wagner. On the power of polynomial time bit-reductions. In *Proceedings 8th Structure in Complexity Theory Conference*, pp. 200–207. IEEE Computer Society Press, 1993.
- [81] H. Vollmer. The gap-language technique revisited. In *Computer Science Logic, Refereed Papers from CSL'90*, Volume 533 of *Lecture Notes in Computer Science*, pp. 389–399. Springer Verlag, 1991.

#### Nicht-referierte Überblicksartikel

- [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.

#### Weitere Veröffentlichungen

- [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, 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*, Kapitel CL7/2. CNRS Aix-en-Provence and The European Association for Logic, Language and Information, 1997.
- [93] H. Vollmer (Hrsg.). *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, Universität Würzburg, Fachbereich Mathematik und Informatik, 1994.
- [96] H. Vollmer. Beiträge zur Komplexitätstheorie von Logikprogrammen. Diplomarbeit, EWH Koblenz, Institut für Informatik, 1989.
- [97] H. Vollmer. A characterization of NC in terms of logic programs. Technischer Bericht Nr. 89-4, EWH Koblenz, Institut für Informatik, 1989.
- [98] H. Vollmer. Uniforme Schaltkreisfamilien und ihre Komplexitätsklassen. Technischer Bericht Nr. 89-1, EWH Koblenz, Institut für Informatik, 1989.