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Literatúra

- [1] Scott Aaronson and Andris Ambainis. Quantum search of spatial regions. In *44th Annual IEEE Symposium on Foundations of Computer Science, 2003. Proceedings.*, pages 200–209. IEEE, 2003.
- [2] Scott Aaronson and Yaoyun Shi. Quantum lower bounds for the collision and the element distinctness problems. *Journal of the ACM (JACM)*, 51(4):595–605, 2004.
- [3] Dorit Aharonov and Michael Ben-Or. Fault-tolerant quantum computation with constant error rate. *arXiv preprint quant-ph/9906129*, 1999.
- [4] Andris Ambainis. Communication complexity in a 3-computer model. *Algorithmica*, 16(3):298–301, 1996.
- [5] Andris Ambainis. Quantum lower bounds by quantum arguments. *Journal of Computer and System Sciences*, 64(4):750–767, 2002.
- [6] Andris Ambainis. Polynomial degree vs. quantum query complexity. *Journal of Computer and System Sciences*, 72(2):220–238, 2006.
- [7] Andris Ambainis. Quantum walk algorithm for element distinctness. *SIAM Journal on Computing*, 37(1):210–239, 2007.
- [8] PK Aravind. A simple demonstration of bell’s theorem involving two observers and no probabilities or inequalities. *arXiv preprint quant-ph/0206070*, 2002.
- [9] Alain Aspect, Philippe Grangier, and Gérard Roger. Experimental tests of realistic local theories via bell’s theorem. *Physical review letters*, 47(7):460, 1981.

- [10] László Babai. Graph isomorphism in quasipolynomial time. In *Proceedings of the forty-eighth annual ACM symposium on Theory of Computing*, pages 684–697. ACM, 2016.
- [11] László Babai and Eugene M Luks. Canonical labeling of graphs. In *Proceedings of the fifteenth annual ACM symposium on Theory of computing*, pages 171–183. ACM, 1983.
- [12] Ziv Bar-Yossef, Thathachar S Jayram, and Iordanis Kerenidis. Exponential separation of quantum and classical one-way communication complexity. In *Proceedings of the thirty-sixth annual ACM symposium on Theory of computing*, pages 128–137. ACM, 2004.
- [13] Robert Beals. Quantum computation of fourier transforms over symmetric groups. In *Proceedings of the twenty-ninth annual ACM symposium on Theory of computing*, pages 48–53. Citeseer, 1997.
- [14] Robert Beals, Harry Buhrman, Richard Cleve, Michele Mosca, and Ronald De Wolf. Quantum lower bounds by polynomials. *Journal of the ACM (JACM)*, 48(4):778–797, 2001.
- [15] John S Bell. On the einstein podolsky rosen paradox. *Physics Physique Fizika*, 1(3):195, 1964.
- [16] Aleksandrs Belovs. Span programs for functions with constant-sized 1-certificates. In *Proceedings of the forty-fourth annual ACM symposium on Theory of computing*, pages 77–84. ACM, 2012.
- [17] Paul Benioff. Quantum mechanical hamiltonian models of turing machines. *Journal of Statistical Physics*, 29(3):515–546, 1982.
- [18] Charles H Bennett and Gilles Brassard. Quantum cryptography: public key distribution and coin tossing. *Theor. Comput. Sci.*, 560(12):7–11, 2014.
- [19] Charles H Bennett, Gilles Brassard, Claude Crépeau, Richard Jozsa, Asher Peres, and William K Wootters. Teleporting an unknown quantum state via dual classical and einstein-podolsky-rosen channels. *Physical review letters*, 70(13):1895, 1993.
- [20] Charles H Bennett and Stephen J Wiesner. Communication via one- and two-particle operators on einstein-podolsky-rosen states. *Physical review letters*, 69(20):2881, 1992.
- [21] Ethan Bernstein and Umesh Vazirani. Quantum complexity theory. *SIAM Journal on computing*, 26(5):1411–1473, 1997.

- [22] Jean-François Biasse and Fang Song. Efficient quantum algorithms for computing class groups and solving the principal ideal problem in arbitrary degree number fields. In *Proceedings of the twenty-seventh annual ACM-SIAM symposium on Discrete algorithms*, pages 893–902. Society for Industrial and Applied Mathematics, 2016.
- [23] P Van Emde Boas. Machine models and simulations. *Handbook of Theoretical Computer Science, volume A*, pages 1–66, 2014.
- [24] Michel Boyer, Gilles Brassard, Peter Høyer, and Alain Tapp. Tight bounds on quantum searching. *Fortschritte der Physik: Progress of Physics*, 46(4-5):493–505, 1998.
- [25] Gilles Brassard, Richard Cleve, and Alain Tapp. Cost of exactly simulating quantum entanglement with classical communication. *Physical Review Letters*, 83(9):1874, 1999.
- [26] Gilles Brassard, Peter Hoyer, and Alain Tapp. Quantum algorithm for the collision problem. *arXiv preprint quant-ph/9705002*, 1997.
- [27] Harry Buhrman, Richard Cleve, Serge Massar, and Ronald De Wolf. Nonlocality and communication complexity. *Reviews of modern physics*, 82(1):665, 2010.
- [28] Harry Buhrman, Richard Cleve, John Watrous, and Ronald De Wolf. Quantum fingerprinting. *Physical Review Letters*, 87(16):167902, 2001.
- [29] Harry Buhrman, Richard Cleve, and Avi Wigderson. Quantum vs. classical communication and computation. *arXiv preprint quant-ph/9802040*, 1998.
- [30] Harry Buhrman and Robert Špalek. Quantum verification of matrix products. In *Proceedings of the seventeenth annual ACM-SIAM symposium on Discrete algorithm*, pages 880–889. Society for Industrial and Applied Mathematics, 2006.
- [31] Mark Bun and Justin Thaler. Dual lower bounds for approximate degree and markov–bernstein inequalities. *Information and Computation*, 243:2–25, 2015.
- [32] Andrew M Childs. Lecture notes on quantum algorithms. *Lecture notes at University of Maryland*, 2017.
- [33] Boris S Cirel’son. Quantum generalizations of bell’s inequality. *Letters in Mathematical Physics*, 4(2):93–100, 1980.
- [34] John F Clauser, Michael A Horne, Abner Shimony, and Richard A Holt. Proposed experiment to test local hidden-variable theories. *Physical review letters*, 23(15):880, 1969.

- [35] Richard Cleve. The query complexity of order-finding. In *Proceedings 15th Annual IEEE Conference on Computational Complexity*, pages 54–59. IEEE, 2000.
- [36] Richard Cleve and Harry Buhrman. Substituting quantum entanglement for communication. *Physical Review A*, 56(2):1201, 1997.
- [37] Richard Cleve, Artur Ekert, Chiara Macchiavello, and Michele Mosca. Quantum algorithms revisited. *Proceedings of the Royal Society of London. Series A: Mathematical, Physical and Engineering Sciences*, 454(1969):339–354, 1998.
- [38] Richard Cleve, Wim Van Dam, Michael Nielsen, and Alain Tapp. Quantum entanglement and the communication complexity of the inner product function. In *Quantum Computing and Quantum Communications*, pages 61–74. Springer, 1999.
- [39] Ronald de Wolf. *Quantum Computing and Communication Complexity*. PhD thesis, 2001.
- [40] D Deutsch. Rapid solution of problems by quantum computation. *Proceedings of the Royal Society A*, 435:563–574, 1991.
- [41] David Deutsch. Quantum theory, the church–turing principle and the universal quantum computer. *Proceedings of the Royal Society of London. A. Mathematical and Physical Sciences*, 400(1818):97–117, 1985.
- [42] David Elieser Deutsch. Quantum computational networks. *Proceedings of the Royal Society of London. A. Mathematical and Physical Sciences*, 425(1868):73–90, 1989.
- [43] Andrew Drucker and Ronald de Wolf. Quantum proofs for classical theorems. *arXiv preprint arXiv:0910.3376*, 2009.
- [44] Christoph Durr and Peter Høyer. A quantum algorithm for finding the minimum. *arXiv preprint quant-ph/9607014*, 1996.
- [45] Albert Einstein, Boris Podolsky, and Nathan Rosen. Can quantum-mechanical description of physical reality be considered complete? *Physical review*, 47(10):777, 1935.
- [46] Mark Ettinger, Peter Høyer, and Emanuel Knill. The quantum query complexity of the hidden subgroup problem is polynomial. *Information Processing Letters*, 91(1):43–48, 2004.
- [47] Lance Fortnow and John Rogers. Complexity limitations on quantum computation. *Journal of Computer and System Sciences*, 59(2):240–252, 1999.

- [48] Peter Frankl and Vojtěch Rödl. Forbidden intersections. *Transactions of the American Mathematical Society*, 300(1):259–286, 1987.
- [49] Rusins Freivalds. Probabilistic machines can use less running time. In *IFIP congress*, volume 839, page 842, 1977.
- [50] Martin Fürer. Faster integer multiplication. *SIAM Journal on Computing*, 39(3):979–1005, 2009.
- [51] Daniel Gottesman. An introduction to quantum error correction and fault-tolerant quantum computation. In *Quantum information science and its contributions to mathematics, Proceedings of Symposia in Applied Mathematics*, volume 68, pages 13–58, 2010.
- [52] Michelangelo Grigni, Leonard J Schulman, Monica Vazirani, and Vazirani S. Quantum mechanical algorithms for the nonabelian hidden subgroup problem.
- [53] Lov K Grover. A fast quantum mechanical algorithm for database search. *arXiv preprint quant-ph/9605043*, 1996.
- [54] Lisa Hales and Sean Hallgren. An improved quantum fourier transform algorithm and applications. In *Proceedings 41st Annual Symposium on Foundations of Computer Science*, pages 515–525. IEEE, 2000.
- [55] Sean Hallgren. Polynomial-time quantum algorithms for pell’s equation and the principal ideal problem. *Journal of the ACM (JACM)*, 54(1):4, 2007.
- [56] Sean Hallgren, Alexander Russell, and Amon Ta-Shma. The hidden subgroup problem and quantum computation using group representations. *SIAM Journal on Computing*, 32(4):916–934, 2003. Earlier version in STOC’00.
- [57] G. H. Hardy and E. M. Wrigh. *An Introduction to the Theory of Numbers*. Oxford University Press, New York, fifth edition, 1979.
- [58] B. Hensen, H. Bernien, A. E. Dréau, A. Reiserer, N. Kalb, M. S. Blok, J. Ruitenbergh, R. F. L. Vermeulen, R. N. Schouten, C. Abellán, W. Amaya, V. Pruneri, M. W. Mitchell, M. Markham, D. J. Twitchen, D. Elkouss, S. Wehner, T. H. Taminiau, and R. Hanson. Experimental loophole-free violation of a bell inequality using entangled electron spins separated by 1.3 km. *Nature*, 526, 29 October 2015.
- [59] A. S. Holevo. Bounds for the quantity of information transmitted by a quantum communication channel. *Problemy Peredachi Informatsii*, 9(3):3–11, 1973. English translation in *Problems of Information Transmission*, 9:177-183, 1973.

- [60] Peter Høyer, Troy Lee, and Robert Špalek. Negative weights make adversaries stronger. In *Proceedings of 39th ACM STOC*, pages 526–535, 2007.
- [61] Peter Høyer and Robert Špalek. Lower bounds on quantum query complexity. *Bulletin of the EATCS*, 87:78–108, October 2005.
- [62] Gábor Ivanyos, Luc Sanselme, and Miklos Santha. An efficient quantum algorithm for the hidden subgroup problem in nil-2 groups. *Algorithmica*, 62(1–2):480–492, 2012.
- [63] Stacey Jeffery, Robin Kothari, and Frederic Magniez. Nested quantum walks with quantum data structures. In *Proceedings of 24th ACM-SIAM SODA*, pages 1474–1485, 2013.
- [64] Jonathan Katz and Luca Trevisan. On the efficiency of local decoding procedures for error-correcting codes. In *Proceedings of 32nd ACM STOC*, pages 80–86, 2000.
- [65] Iordanis Kerenidis and Ronald de Wolf. Exponential lower bound for 2-query locally decodable codes via a quantum argument. *Journal of Computer and System Sciences*, 69(3):395–420, 2004. Earlier version in STOC’03.
- [66] A. Yu. Kitaev. Quantum measurements and the abelian stabilizer problem, 12 November 1995.
- [67] Boaz Klartag and Oded Regev. Quantum one-way communication is exponentially stronger than classical communication. *Proceedings of 43rd ACM STOC*, 2011.
- [68] Emanuel Knill, Raymond Laflamme, and Wojciech Zurek. Threshold accuracy for quantum computation, 15 October 1996.
- [69] Donald E. Knuth. *The Art of Computer Programming. Volume 2: Seminumerical Algorithms*. Addison-Wesley, third edition, 1997.
- [70] Francois Le Gall. Improved quantum algorithm for triangle finding via combinatorial arguments. In *Proceedings of 55th IEEE FOCS*, pages 216–225, 2014.
- [71] Troy Lee, Frederic Magniez, and Miklos Santha. Improved quantum query algorithms for triangle finding and associativity testing. *Algorithmica*, 77(2):459–486, 2017.
- [72] Arjen K. Lenstra and Hendrik W. Jr. Lenstra. *The Development of the Number Field Sieve*, volume 1554 of *Lecture Notes in Mathematics*. Springer, 1993.

- [73] Hendrik W. Jr. Lenstra and Carl Pomerance. A rigorous time bound for factoring integers. *Journal of the American Mathematical Society*, 5:483–516, 1992.
- [74] Hoi-Kwong Lo and H. F. Chau. Unconditional security of quantum key distribution over arbitrarily long distances, 3 March 1998.
- [75] Frederic Magniez, Miklos Santha, and Mario Szegedy. Quantum algorithms for the triangle problem. In *Proceedings of 16th ACM-SIAM SODA*, pages 1109–1117, 2005.
- [76] Yuri Manin. *Vychislimoe i nevychislimoe (computable and noncomputable)*. Soviet Radio, 1980. In Russian.
- [77] Yuri Manin. Classical computing, quantum computing, and shor’s factoring algorithm, 2 March 1999.
- [78] Dominic Mayers. Unconditional security in quantum cryptography, 10 February 1998.
- [79] Cristopher Moore, Daniel Rockmore, and Alexander Russell. Generic quantum fourier transforms. *ACM Transactions on Algorithms*, 2(4):707–723, 2006.
- [80] Cristopher Moore, Alexander Russell, and Leonard J. Schulman. The symmetric group defies strong fourier sampling. *SIAM Journal on Computing*, 37(6):1842–1864, 2008. Earlier version in FOCS’05.
- [81] Michele Mosca and Artur Ekert. The hidden subgroup problem and eigenvalue estimation on a quantum computer. In *Proceedings of 1st NASA QCQC conference*, volume 1509 of *Lecture Notes in Computer Science*, pages 174–188. Springer, 1998.
- [82] Ashwin Nayak. Optimal lower bounds for quantum automata and random access codes. In *Proceedings of 40th IEEE FOCS*, pages 369–376, 1999.
- [83] Ilan Newman. Private vs. common random bits in communication complexity. *Information Processing Letters*, 39(2):67–71, 1991.
- [84] Ilan Newman and Mario Szegedy. Public vs. private coin ips in one round communication games. In *Proceedings of 28th ACM STOC*, volume 39, pages 561–570, 1996.
- [85] Christos H. Papadimitriou. *Computational Complexity*. Addison-Wesley, 1994.

- [86] Alexander Razborov. Quantum communication complexity of symmetric predicates. *Izvestiya of the Russian Academy of Sciences, mathematics*, 67(1):159–176, 2003.
- [87] Ben Reichardt. Span programs and quantum query complexity: The general adversary bound is nearly tight for every boolean function. In *Proceedings of 50th IEEE FOCS*, pages 544–551, 2009.
- [88] R. Rivest, A. Shamir, and L. Adleman. A method for obtaining digital signatures and public key cryptosystems. *Communications of the ACM*, 21:120–126, 1978.
- [89] R. L. Rivest. *Cryptography*, pages 717–755. In [100], 1990.
- [90] Miklos Santha. Quantum walk based search algorithms. In *Proceedings of 5th TAMC*, pages 31–46, 2008.
- [91] A. Schönhage and V. Strassen. Schnelle multiplikation grosser zahlen. *Computing*, 7:281–292, 1971.
- [92] Uwe Schöningh. A probabilistic algorithm for k-sat and constraint satisfaction problems. In *proceedings of 40th IEEE FOCS*, pages 410–414, 1999.
- [93] Alexander Sherstov. Approximating the and-or tree. *Theory of Computing*, 9(20):653–663, 2013.
- [94] Peter Shor. Scheme for reducing decoherence in quantum memory. *Physical Review A*, 52:2493, 1995.
- [95] Peter Shor. Polynomial-time algorithms for prime factorization and discrete logarithms on a quantum computer. *SIAM Journal on Computing*, 26(5):1484–1509, 1997. Earlier version in FOCS’94.
- [96] Daniel Simon. On the power of quantum computation. *SIAM Journal on Computing*, 26(5):1474–1483, 1997. Earlier version in FOCS’94.
- [97] Barbara M. Terhal. Quantum error correction for quantum memories. *Reviews of Modern Physics*, 87:307, 2015.
- [98] Luca Trevisan. Some applications of coding theory in computational complexity. *Quaderni di Matematica*, 13:347–424, 2004.
- [99] Wim Van Dam. Quantum oracle interrogation: Getting all information for almost half the price. In *Proceedings 39th Annual Symposium on Foundations of Computer Science (Cat. No. 98CB36280)*, pages 362–367. IEEE, 1998.

- [100] Jan van Leeuwen. *Handbook of Theoretical Computer Science. Volume A: Algorithms and Complexity*. MIT Press, Cambridge, MA, 1990.
- [101] Lieven Vandersypen, Matthias Steffen, Gregory Breyta, Constantino Yannoni, Richard Cleve, and Isaac Chuang. Experimental realization of an order-finding algorithm with an nmr quantum computer. *Physical Review Letters*, 85(25):5452–545, 2000.
- [102] John Watrous. Quantum algorithms for solvable groups. In *Proceedings of 33rd ACM STOC*, pages 60–67, 2001.
- [103] John Watrous. Quantum computational complexity. In *Encyclopedia of Complexity and System Science*. Springer, 2009.
- [104] W. K. Wootters and W. H. Zurek. A single quantum cannot be copied. *Nature*, 299:802–803, 1982.
- [105] Andrew Chi-Chih Yao. Some complexity questions related to distributive computing. In *Proceedings of 11th ACM STOC*, pages 209–213, 1979.
- [106] Andrew Chi-Chih Yao. Quantum circuit complexity. In *Proceedings of 34th IEEE FOCS*, pages 352–360, 1993.