

# References

- [1] Michael Brooks. *Quantum Computing and Communications*. Springer, New York, 1999. 152 pp.
- [2] Jozef Gruska. *Quantum computing*. McGraw-Hill, London, 2000. 439 pp.
- [3] Michael A. Nielsen and Isaac L. Chuang. *Quantum computation and quantum information*. Cambridge Univ. Press, Cambridge, 2001. 676 pp.
- [4] Colin P. Williams and Scott H. Clearwater. *Explorations in quantum computing*. Springer, New York, 1998. 307 pp, CD-ROM, DM 98.00.
- [5] A. Steane. Quantum computing. *Rep. Prog. Phys.*, 61:117–173, 1998.
- [6] Dorit Aharonov. Quantum computation. In Dietrich Stauffer, editor, *Annual Reviews of Computational Physics VI*, pages 259–346. World Scientific, 1999. Preprint quant-ph/9812037.
- [7] John Preskill. Quantum computation. <http://theory.caltech.edu/~preskill/ph229/>, 1997. 413 pp.
- [8] Paul Benioff. Quantum mechanical Hamiltonian models of Turing machines. *J. Stat. Phys.*, 29:515, 1982.
- [9] Richard P. Feynman. Simulating physics with computers. *Int. J. Theor. Phys.*, 21:467–488, 1982.
- [10] Peter Shor. Polynomial-time algorithms for prime factorization and discrete logarithms on a quantum computer. In *Proceedings, 35th Annual Symposium on Foundations of Computer Science*, Piscataway, NJ, 1994. IEEE Press.
- [11] Stephan Mertens. Computational complexity for physicists. Lecture given at the DPG school on “Quantum Computing”, 2000. Preprint cond-mat/0012185.
- [12] Alonzo Church. An unsolvable problem of elementary number theory. *Am. J. Math.*, 58:345–363, 1936.
- [13] Alan M. Turing. On computable numbers, with an application to the Entscheidungsproblem. *Proc. Lond. Math. Soc. Ser.*, 42:230, 1936. See also *ibidem* 43, 544.
- [14] Douglas R. Hofstadter. *Gödel, Escher, Bach: An Eternal Golden Braid*. Basic Books, New York, 1979. 777 pp.
- [15] Leo Szilard. Über die Entropieverminderung in einem thermodynamischen System bei Eingriffen intelligenter Wesen. *Z. Physik*, 53:840–856, 1929.
- [16] R. Landauer. Irreversibility and heat generation in the computing process. *IBM Journal Res Dev*, 5:183–191, 1961.
- [17] Seth Lloyd. Ultimate physical limits to computation. *Nature*, 406:1047–1054, 2000.
- [18] N. Margolus and L.B. Levitin. title. In T. Toffoli, M. Biafore, and J. Le?o, editors, *Proceedings of the Fourth Workshop on Physics and Computation PhysComp96 (New England Complex Systems Institute, Boston, MA, 1996)*. North-Holland, 1998. Physica D Vol. 120.
- [19] Richard P. Feynman. *Feynman Lectures on Computing*, chapter 6, Quantum Mechanical Computers. Addison-Wesley, 1996. Originally published in Optics News, February 1985, pp. 11-20; see also Found. Phys. **16**, 507-532 (1986).
- [20] P. Jordan and E. Wigner. Über das Paulische Äquivalenzverbot. *Z. Physik*, 47:631–651, 1928.
- [21] Jian-Wei Pan, Dik Bouwmeester, Matthew Daniell, Harald Weinfurter, and Anton Zeilinger. Experimental test of quantum nonlocality in three-photon Greenberger-Horne-Zeilinger entanglement. *Nature*, 403:515–519, 2000.
- [22] C. A. Sackett, D. Kielpinski, B. E. King, C. Langer, V. Meyer, C. J. Myatt, M. Rowe, Q. A. Turchette, W. M. Itano, D. J. Wineland, and C. Monroe. Experimental entanglement of four particles. *Nature*, 404:256–259, 2001.
- [23] Rainer Blatt. Push-button entanglement. *Nature*, 404:231–232, 2001.
- [24] Eugene S. Polzik Brian Julsgaard, Alexander Kozhekin. Experimental long-lived entanglement of two macroscopic objects. *Nature*, 413:400–403, 2001.
- [25] J. Ignacio Cirac. Quantum physics: Entangled atomic samples. *Nature*, 413:375–377, 2001.