

bla

## References

Aug. 15, 2020. URL: <https://opencurve.info/nl/kwantumverstrengeling-non-lokaliteit-en-de-toestand-van-een-systeem-met-twee-deeltjes/>.

URL: [https://en.wikipedia.org/wiki/Hong%E2%80%9393u%E2%80%9393Mandel\\_effect](https://en.wikipedia.org/wiki/Hong%E2%80%9393u%E2%80%9393Mandel_effect).

.

URL: <https://quantumdelta.nl/>.

URL: <https://qt.eu/>.

URL: [https://www.hpl.hp.com/brewweb/quiprocone/Protected/DD\\_lectures.htm](https://www.hpl.hp.com/brewweb/quiprocone/Protected/DD_lectures.htm).

URL: <https://indico.cern.ch/event/970903/>.

URL: <https://www.rijksoverheid.nl/binaries/rijksoverheid/documenten/brochures/2020/02/17/nationale-agenda-quantumtechnologie/Nationale+Agenda+Quantumtechnologie.pdf>.

URL: [https://en.wikipedia.org/wiki/Timeline\\_of\\_quantum\\_computing\\_and\\_communication](https://en.wikipedia.org/wiki/Timeline_of_quantum_computing_and_communication).

URL: <https://ahelwer.ca/post/2018-12-07-chsh/>.

Scott Aaronson. URL: <https://www.scottaaronson.com/blog/?p=208>.

Scott Aaronson. “Quantum Copy-Protection and Quantum Money”. In: *2009 24th Annual IEEE Conference on Computational Complexity* (July 2009). DOI: 10.1109/ccc.2009.42. URL: <http://dx.doi.org/10.1109/CCC.2009.42>.

abe afshaw. *Introduction to Quantum Computing and Quantum Hardware*. 2020. URL: <https://qiskit.org/learn/intro-qc-qh/>.

Alain Aspect, Jean Dalibard, and Gérard Roger. “Experimental Test of Bell’s Inequalities Using Time-Varying Analyzers”. In: *Phys. Rev. Lett.* 49 (25 Dec. 1982), pp. 1804–1807. DOI: 10.1103/PhysRevLett.49.1804. URL: <https://link.aps.org/doi/10.1103/PhysRevLett.49.1804>.

Giuliano Benenti. *Principles of Quantum Computation and Information Vol. 1: Basic Concepts*. 2004. ISBN: 9789812794796.

Giuliano Benenti. *Principles of quantum computation and information. Vol. 2: Basic tools and special topics*. World Scientific Publishing Company, 2007.

Charles H. Bennett and Gilles Brassard. “Quantum cryptography: Public key distribution and coin tossing”. In: *Theoretical Computer Science* 560 (2014). Theoretical Aspects of Quantum Cryptography - celebrating 30 years of BB84, pp. 7–11. ISSN: 0304-3975. DOI: <https://doi.org/10.1016/j.tcs.2014.05.025>. URL: <http://www.sciencedirect.com/science/article/pii/S0304397514004241>.

Gennady P Berman. *Introduction to quantum computers*. World Scientific, 1998.

Chris Bernhardt. *Quantum computing for everyone*. Mit Press, 2019.

Manuel Blum. “Coin Flipping by Telephone”. In: *Advances in Cryptology: A Report on CRYPTO 81*. 1981, pp. 11–15. URL: [/archive/crypto81/11\\_blum.pdf](/archive/crypto81/11_blum.pdf).

Katherine Bourzac. “4 tough chemistry problems that quantum computers will solve [News]”. In: *IEEE Spectrum* 54 (Nov. 2017), pp. 7–9. DOI: 10.1109/MSPEC.2017.8093785.

Brilliant. *What is The Quantum Wave Function, Exactly?* 2019. URL: <https://www.youtube.com/watch?v=EmNQuK-E0kI>.

Luc van den Broeck. *Handleiding voor RSA krakers*. 2017. URL: <https://docplayer.nl/56851512-Handleiding-voor-rsa-krakers.html>.

Ranee K Brylinski and Goong Chen. *Mathematics of quantum computation*. CRC Press, 2002.

D. Candela. “Undergraduate computational physics projects on quantum computing”. In: *American Journal of Physics* 83 (Aug. 2015), pp. 688–702. DOI: 10.1119/1.4922296.

John F. Clauser et al. “Proposed Experiment to Test Local Hidden-Variable Theories”. In: *Phys. Rev. Lett.* 23 (15 Oct. 1969), pp. 880–884. DOI: 10.1103/PhysRevLett.23.880. URL: <https://link.aps.org/doi/10.1103/PhysRevLett.23.880>.

Ronald De Wolf. “The potential impact of quantum computers on society”. In: *Ethics and Information Technology* 19.4 (2017), pp. 271–276.

Vittorio Degiorgio. “Phase shift between the transmitted and the reflected optical fields of a semireflecting lossless mirror is  $\pi/2$ ”. In: *American Journal of Physics* 48.1 (1980), pp. 81–81. DOI: 10.1119/1.12238. eprint: <https://doi.org/10.1119/1.12238>. URL: <https://doi.org/10.1119/1.12238>.

David P DiVincenzo. “The physical implementation of quantum computation”. In: *Fortschritte der Physik: Progress of Physics* 48.9-11 (2000), pp. 771–783.

*Double-Slit Experiment with Polarized Light*. [Online; accessed 2021-07-24]. Aug. 15, 2020. URL: <https://chem.libretexts.org/@go/page/144006>.

DrPhysicsA. *Quantum physics playlist*. 2020. URL: <https://www.youtube.com/watch?v=IsX5iUKNT2k&list=PL04722FAFB07E38E1>.

A. Einstein. “Über einen die Erzeugung und Verwandlung des Lichtes betreffenden heuristischen Gesichtspunkt”. In: *Annalen der Physik* 322.6 (1905), pp. 132–148. DOI: 10.1002/andp.19053220607. eprint: <https://onlinelibrary.wiley.com/doi/pdf/10.1002/andp.19053220607>. URL: <https://onlinelibrary.wiley.com/doi/abs/10.1002/andp.19053220607>.

A. Einstein, B. Podolsky, and N. Rosen. “Can Quantum-Mechanical Description of Physical Reality Be Considered Complete?” In: *Phys. Rev.* 47 (10 May 1935), pp. 777–780. DOI: 10.1103/PhysRev.47.777. URL: <https://link.aps.org/doi/10.1103/PhysRev.47.777>.

Albert Einstein. “The photoelectric effect”. In: *Ann. Phys* 17.132 (1905), p. 4.

Artur K. Ekert. “Quantum cryptography based on Bell’s theorem”. In: *Phys. Rev. Lett.* 67 (6 Aug. 1991), pp. 661–663. DOI: 10.1103/PhysRevLett.67.661. URL: <https://link.aps.org/doi/10.1103/PhysRevLett.67.661>.

Guido Fano and SM Blinder. *Twenty-First Century Quantum Mechanics: Hilbert Space to Quantum Computers*. Springer, 2017.

E. Farhi and A. Harrow. *Quantum cloning, quantum money and quantum monogamy*. 2013. URL: [http://physics.mit.edu/OldFiles/news/physicsatmit/physicsatmit\\_13\\_farhiharrow.pdf](http://physics.mit.edu/OldFiles/news/physicsatmit/physicsatmit_13_farhiharrow.pdf).

Richard Feynman. *Quantum Mechanical View of Reality - Richard Feynman*. URL: [https://www.youtube.com/playlist?list=PLW\\_HsOU6YZRkdhFFznHNEfua9NK3deBQy](https://www.youtube.com/playlist?list=PLW_HsOU6YZRkdhFFznHNEfua9NK3deBQy).

Richard P Feynman. *Feynman lectures on computation*. CRC Press, 2018.

Richard P Feynman. “Simulating physics with computers”. In: *Int. J. Theor. Phys* 21.6/7 (1982).

Juan Carlos Garcia-Escartin and Pedro Chamorro-Posada. “Equivalent quantum circuits”. In: *arXiv preprint arXiv:1110.2998* (2011).

I. M. Georgescu, S. Ashhab, and Franco Nori. “Quantum simulation”. In: *Reviews of Modern Physics* 86.1 (Mar. 2014), pp. 153–185. ISSN: 1539-0756. DOI: 10.1103/revmodphys.86.153. URL: <http://dx.doi.org/10.1103/RevModPhys.86.153>.

GianCarlo Ghirardi. *Sneaking a Look at God’s Cards: Unraveling the Mysteries of Quantum Mechanics-Revised Edition*. Revised Edition. Princeton University Press, 2007. ISBN: 978-0-691-13037-8.

Giancarlo Ghirardi. *Sneaking A Look At God’s Cards: Unraveling The Mysteries of Quantum Mechanics (translation)*. 2005.

Hong Guo, Juheng Zhang, and Gary J. Koehler. “A survey of quantum games”. In: *Decision Support Systems* 46.1 (2008), pp. 318–332. ISSN: 0167-9236. DOI: <https://doi.org/10.1016/j.dss.2008.07.001>. URL: <http://www.sciencedirect.com/science/article/pii/S0167923608001292>.

Bas Hensen et al. “Loophole-free Bell inequality violation using electron spins separated by 1.3 kilometres”. In: *Nature* 526.7575 (2015), pp. 682–686.

J. Hensen. *Playing the quantum ballgame*. 2017. URL: <http://blog2.qutech.nl/2017/02/23/playing-the-quantum-ballgame/>.

Jack D Hidary. *Quantum Computing: An Applied Approach*. Springer, 2019.

W. E. Hill. *My wife and my moterh-in-law*. 1915. URL: [https://commons.wikimedia.org/wiki/File:My\\_Wife\\_and\\_My\\_Mother-In-Law\\_\(Hill\).png](https://commons.wikimedia.org/wiki/File:My_Wife_and_My_Mother-In-Law_(Hill).png).

Georges Ifrah et al. *The universal history of computing: From the abacus to quantum computing*. John Wiley & Sons, Inc., 2000.

InfiniteSeries. *The Mathematics of Quantum Computers*. 2017. URL: <https://youtu.be/IrbJYsep45E>.

Stephen Jordan. 2021. URL: <https://quantumalgorithmzoo.org/>.

Abhinav Kandala et al. “Hardware-efficient variational quantum eigensolver for small molecules and quantum magnets”. In: *Nature* 549.7671 (2017), pp. 242–246.

p195 Key distribution and the CHSH gameDavid Elkouss. In: ().

Jürgen Kornmeier and Michael Bach. “Ambiguous figures—what happens in the brain when perception changes but not the stimulus”. In: *Frontiers in human neuroscience* 6 (2012), p. 51.

Jürgen Kornmeier and Michael Bach. “The Necker cube - an ambiguous figure disambiguated in early visual processing”. In: *Vision Research* 45.8 (2005), pp. 955–960. ISSN: 0042-6989. DOI: <https://doi.org/10.1016/j.visres.2004.10.006>. URL: <http://www.sciencedirect.com/science/article/pii/S0042698904005152>.

Paul Kwiat, Harald Weinfurter, and Anton Zeilinger. “Quantum seeing in the dark”. In: *Scientific American* 275.5 (1996), pp. 72–78.

Martin Laforest. *The Mathematics Of Quantum Mechanics*. URL: [https://uwaterloo.ca/institute-for-quantum-computing/sites/ca.institute-for-quantum-computing/files/uploads/files/mathematics\\_qm\\_v21.pdf](https://uwaterloo.ca/institute-for-quantum-computing/sites/ca.institute-for-quantum-computing/files/uploads/files/mathematics_qm_v21.pdf).

Hoi-Kwan Lau and Aashish A. Clerk. “Macroscale entanglement and measurement”. In: *Science* 372.6542 (2021), pp. 570–571. ISSN: 0036-8075. DOI: 10.1126/science.abh3419. eprint: <https://science.sciencemag.org/content/372/6542/570.full.pdf>. URL: <https://science.sciencemag.org/content/372/6542/570>.

Charles C Mann. *The wizard and the prophet: Two groundbreaking scientists and their conflicting visions of the future of our planet*. Picador, 2018.

Andy Matuschak and Michael Nielsen. *Quantum Country*. 2019. URL: <https://quantum.country/>.

David McMahon. *Quantum computing explained*. John Wiley & Sons, 2007.

Laure Mercier de Lépinay et al. “Quantum mechanics—free subsystem with mechanical oscillators”. In: *Science* 372.6542 (2021), pp. 625–629. ISSN: 0036-8075. DOI: 10.1126/science.abf5389. eprint: <https://science.sciencemag.org/content/372/6542/625.full.pdf>. URL: <https://science.sciencemag.org/content/372/6542/625>.

N David Mermin. “Bringing home the atomic world: Quantum mysteries for anybody”. In: *American Journal of Physics* 49.10 (1981), pp. 940–943.

N David Mermin. “Is the moon there when nobody looks? Reality and the quantum theory”. In: *Physics today* 38.4 (1985), pp. 38–47.

Jan-Peter Meyn. *quantumlab*. URL: <https://www.quantumlab.nat.fau.de/english/index.html>.

Martín Monteiro et al. “The polarization of light and Malus’ law using smart-phones”. In: *The Physics Teacher* 55.5 (2017), pp. 264–266.

Gordon E Moore et al. *Cramming more components onto integrated circuits*. 1965. URL: [https://www.alejandrobarrros.com/wp-content/uploads/old/Articulo\\_original\\_G\\_Moore.pdf](https://www.alejandrobarrros.com/wp-content/uploads/old/Articulo_original_G_Moore.pdf).

Rainer Müller and Hartmut Wiesner. “Teaching quantum mechanics on an introductory level”. In: *American Journal of physics* 70.3 (2002), pp. 200–209.

John von Neumann. 2021. URL: [https://nl.wikipedia.org/wiki/Von\\_Neumann-architectuur](https://nl.wikipedia.org/wiki/Von_Neumann-architectuur).

Michael A Nielsen and Isaac L Chuang. *Quantum Computation and Quantum Information*. Cambridge University Press, 2010.

NNV, ed. *Ned. tijdschrift voor Natuurkunde* (2014).

Juan Ortigoso. “Twelve years before the quantum no-cloning theorem”. In: *American Journal of Physics* 86.3 (2018), pp. 201–205.

Alexsandro Pereira, Fernanda Ostermann, and Cláudio Cavalcanti. “On the use of a virtual Mach–Zehnder interferometer in the teaching of quantum mechanics”. In: *Physics Education* 44.3 (2009), p. 281.

Pepijn Pinkse. *Demcon*. 2020. URL: <https://nymus3d.nl/portfolio/project/quantum-secure-authentication>.

Max Planck. “Ueber das Gesetz der Energieverteilung im Normalspectrum”. In: *Annalen der Physik* 309.3 (1901), pp. 553–563. DOI: 10.1002/andp.19013090310. eprint: <https://onlinelibrary.wiley.com/doi/pdf/10.1002/andp.19013090310>. URL: <https://onlinelibrary.wiley.com/doi/abs/10.1002/andp.19013090310>.

Gorazd Planinsic and Josip Slisko. “Mechanical model aids understanding of light interference”. In: *Physics education* 40.2 (2005), p. 128.

John Preskill. *Quantum Computing and the Entanglement Frontier*. Youtube. 2013. URL: [https://www.youtube.com/watch?feature=player\\_embedded&v=8-IqQnGYB2M&ab\\_channel=GoogleTechTalks](https://www.youtube.com/watch?feature=player_embedded&v=8-IqQnGYB2M&ab_channel=GoogleTechTalks).

*Quantum Computing for High School Students*. 2002. URL: <https://www.scottaaronson.com/writings/highschool.html>.

“Quantum computing pioneer warns of complacency over Internet security”. In: (). URL: <https://media.nature.com/original/magazine-assets/d41586-020-03068-9/d41586-020-03068-9.pdf>.

*Quantum Frontiers, Report on community input to the nation’s strategy for quantum information science*. Oct. 2020. URL: <https://www.quantum.gov/wp-content/uploads/2020/10/QuantumFrontiers.pdf>.

Ralf Riedinger et al. “Remote quantum entanglement between two micromechanical oscillators”. In: *Nature* 556 (Apr. 2018). DOI: 10.1038/s41586-018-0036-z.

Eleanor Rieffel and Wolfgang Polak. “An introduction to quantum computing for non-physicists”. In: *ACM Computing Surveys (CSUR)* 32.3 (2000), pp. 300–335.

Robert Ross. “Computer simulation of Mermin’s quantum device”. In: *American Journal of Physics* 88 (June 2020), pp. 483–489. DOI: 10.1119/10.0000833.

Bruno Rossi. “Method of Registering Multiple Simultaneous Impulses of Several Geiger’s Counters”. In: *Nature* 125.3156 (1930), pp. 636–636.

Valerio Scarani et al. *Quantum physics: a first encounter: interference, entanglement, and reality*. Oxford University Press, 2006.

christian Schaffner op bezoek bij BNR.

Maximilian Schlosshauer. “Decoherence, the measurement problem, and interpretations of quantum mechanics”. In: *Rev. Mod. Phys.* 76 (4 Feb. 2005), pp. 1267–1305. DOI: 10.1103/RevModPhys.76.1267. URL: <https://link.aps.org/doi/10.1103/RevModPhys.76.1267>.

Daniel Schroeder. “Entanglement isn’t just for spin”. In: *American Journal of Physics* 85 (Mar. 2017), pp. 812–820. DOI: 10.1119/1.5003808.

Frederick W Strauch. “Resource letter QI-1: Quantum information”. In: *American Journal of Physics* 84.7 (2016), pp. 495–507.

Annemarije Zwerver op bezoek bij de Technoloog.

Tess. *De invloed van de kwantumcomputer op het RSA-systeem*. 20120. URL: <https://www.scholieren.com/vak/wiskunde-b?query=&order-by=popularity&order-direction=desc&page=5&filters=%7B%7D>.

TNO. *CYBERSECURITY DOOR QUANTUM-SAFE CRYPTO*. 2020. URL: <https://www.tno.nl/nl/aandachtsgebieden/informatie-communicatie->

technologie/roadmaps/trusted-ict/quantum/quantum-safe-crypto/?gclid=Cj0KCQjwvIT5BRCqARIsAAwwD-QCxs\_6\_09DaN96J37--nGWNun4oJgFZx\_4VA69hP8DyJAYgluNJakaAqsJEALw\_wcB.

NG Van Kampen. “The scandal of quantum mechanics”. In: *American Journal of Physics* 76.11 (2008), pp. 989–990.

Sanne Veenstra. *De impact van het kwantumalgoritme van Shor op het RSA-algoritme zoals voorgeschreven door NIST*. 2018. URL: <https://www.math.ru.nl/~bosma/Students/SanneVeenstraBSc.pdf>.

S. P. Walborn et al. “Double-slit quantum eraser”. In: *Phys. Rev. A* 65 (3 Feb. 2002), p. 033818. DOI: 10.1103/PhysRevA.65.033818. URL: <https://link.aps.org/doi/10.1103/PhysRevA.65.033818>.

Stephanie Wehner, David Elkouss, and Ronald Hanson. “Quantum internet: A vision for the road ahead”. In: *Science* 362.6412 (2018). ISSN: 0036-8075. DOI: 10.1126/science.aam9288. eprint: <https://science.sciencemag.org/content/362/6412/eaam9288.full.pdf>. URL: <https://science.sciencemag.org/content/362/6412/eaam9288>.

*What is Quantum Computer.*

Andrew Whitaker. “Richard Feynman and Bell’s theorem”. In: *American Journal of Physics* 84.7 (2016), pp. 493–494.

wikipedia. *Interpretations of quantum mechanics*. 2020. URL: [https://en.wikipedia.org/wiki/Interpretations\\_of\\_quantum\\_mechanics](https://en.wikipedia.org/wiki/Interpretations_of_quantum_mechanics).

Ronald de Wolf. *Quantum Computing: Lecture Notes*. URL: <https://homepages.cwi.nl/~rdewolf/qcnotes.pdf>.

Ronald de Wolf. *The Potential Impact of Quantum Computers on Society*. 2017. arXiv: 1712.05380 [cs.CY]. URL: <https://arxiv.org/pdf/1712.05380.pdf>.

William K Wootters and Wojciech H Zurek. “A single quantum cannot be cloned”. In: *Nature* 299.5886 (1982), pp. 802–803.

KP Zetie, SF Adams, and RM Tocknell. “How does a Mach-Zehnder interferometer work?” In: *Physics Education* 35.1 (2000), p. 46.