Curriculum Vitæ

Gilles Brassard FRS, O.C., O.Q.

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April 2026

Education

- Ph.D., Theoretical computer science, Cornell University, 1979.
- M.Sc., Computer science, Université de Montréal, 1975.
- B.Sc., Computer science, Université de Montréal, 1972.

Professional Experience

- Canada Research Chair in Quantum Information Science, 2001–2021.
- Senior Fellow, Institute for Theoretical Studies, ETH Zürich, 2014, 2019 and 2024.
- Professor, Université de Montréal, since June 1988.
- Visiting Professorial Fellow, University of Wollongong, Australia, 1995.
- Directeur de recherche associé du CNRS, École Normale Supérieure, Paris, 1994.
- Invited Professor, École Polytechnique Fédérale de Lausanne, May 1988.
- Invited Researcher, Philips Research Laboratory, Brussels, Spring of 1988.
- Invited Researcher, CWI, Amsterdam, summer and fall of 1987.
- Visiting Associate Professor, University of California, Berkeley, 1984 – 1985.
- Associate Professor, Université de Montréal, 1983 – 1988.
- Assistant Professor, Université de Montréal, 1979 – 1983.

Prizes and Distinctions

- Doctor Honoris Causa: ETH Zürich (Eidgenössische Technische Hochschule), 2010; University of Ottawa, 2014; Università della Svizzera italiana, Lugano, 2015; University of Waterloo, 2026.
- ACM A. M. Turing Award, 2026.
- Inauguration of "Laboratoire Gilles Brassard de cryptographie quantique" in Transinne, Belgium, 7 February 2025.
- Technology Award, Eduard Rhein Foundation, 2023.
- Breakthrough Prize in Fundamental Physics, 2023.
- NEC C&C Prize, 2022.
- International Member, National Academy of Sciences, United States, elected in 2021.
- Inaugural Turing Chair, QuSoft, CWI, Amsterdam, The Netherlands, December 2020.
- BBVA Foundation Frontiers of Knowledge Award in Basic Sciences, 2019.
- Micius Quantum Prize, 2019.
- Inaugural Chaire du Québec, Académie royale de Belgique, February 2019.
- Wolf Prize in Physics, 2018.
- Officer of the Ordre national du Québec, appointed in 2017.
- Lifetime Achievement Award in Computer Science, CS-Can/Info-Can, 2016.
- Officer of the Order of Canada, appointed in 2013.
- Fellow of the Royal Society of London, elected in 2013.
- Prix d'excellence, FRQNT, 2013.
- Creation of NSERC Gilles Brassard Doctoral Prize for Interdisciplinary Research, 2012.
- Thomson Reuters Citation Laureate (their "picks" for the Nobel Prize), 2012.
- Foreign Member, Academia Europaea, 2011.
- Killam Prize in Natural Sciences, Canada Council, 2011.
- Gerhard Herzberg Canada Gold Medal for Science and Engineering, NSERC, 2009.
- Distinguished Lecturer, International Association for Cryptologic Research, 2008.
- Personality of the year 2007 in information technology (OCTAS), Réseau Action TI, 2008.
- Award of Excellence, NSERC, 2006.
- Fellow, International Association for Cryptologic Research, 2006.
- Rank Prize in Opto-Electronics (United Kingdom), 2006.
- Senior Fellow, Canadian Institute for Advanced Research (CIFAR), 2002–2019.
- Prix Marie–Victorin (highest scientific recognition by Government of Québec), 2000.
- Foreign Member, Latvian Academy of Sciences, 1998.
- Killam Research Fellow, Canada Council, 1997.
- Fellow, Royal Society of Canada, Academy of Science, elected in 1996.
- Scientist of the Year, *La Presse*, 1995.
- Steacie Prize, National Research Council of Canada, 1994.
- Université de Montréal Teaching Prize, 1993.
- "Grand Débrouillard", *Les Débrouillards* (science magazine for children), May 1993.
- Prix Urgel–Archambault, ACFAS, 1992.
- E.W.R. Steacie Memorial Fellowship, NSERC, 1992.

Scientific Board Memberships

◇ Member of Advisory Board, QIS program, CIFAR, 2019–2025.
◇ Founder and Scientific Director, Institut transdisciplinaire d'information quantique (INTRIQ).
◇ Member of Scientific Advisory Committee, QuSoft, Amsterdam, since 2017.
◇ Membre du Conseil scientifique, Université Interdisciplinaire de Paris, since 2006.
◇ Member of Scientific Advisory Board, Centre for Applied Cryptographic Research (CACR), University of Waterloo.
◇ Membre du Bureau de direction, Centre de recherches mathématiques (CRM), 1998–2003.
◇ Membre du Conseil d'administration, Association francophone pour le savoir (ACFAS), 1998–2000.
◇ Director, International Association for Cryptologic Research (IACR), 1997–1999.

Editorial Duties

◇ Editor-in-Chief of the *Journal of Cryptology*, 1991 – 1998; editor, 1999 – 2001.
◇ Editorial Board Member of *Communications of the ACM* (2008 – 2017), *Natural Computing* and *Theoretical Computer Science*.
◇ Advisory Board Member, *Handbook of Natural Computing*, Springer–Verlag.
◇ Advisory Board Member of a book series on Natural Computing, Springer–Verlag.

Program Committees

◇ Sixth International Conference on the Theory and Practice of Natural Computing (TPNC), Prague, Czech Republic, 2017.
◇ Eleventh Conference on the Theory of Quantum Computation, Communication and Cryptography (TQC), Berlin, 2016.
◇ Thirteenth Asian Conference on Quantum Information Science (AQIS), **Program Co-Chair**, Chennai, India, August 2013.
◇ Sixteenth Workshop on Quantum Information Processing (QIP), Beijing, January 2013.
◇ Twelft AQIS, Suzhou, China, August 2012.
◇ Fifth International Conference on Risks and Security of Internet and Systems (CRiSIS), Montréal, October 2010.
◇ Third International Workshop on Post-Quantum Cryptography, Darmstadt, May 2010.
◇ Fourth CRiSIS, Toulouse, October 2009.
◇ Second International Conference on Quantum, Nano, and Micro Technologies, Sainte-Luce, Martinique, February 2008.
◇ International Conference on Information Theoretic Security, Madrid, May 2007.
◇ IASTED International Conference on Communication, Network and Information Security, MIT, October 2006.
◇ Ninth QIP, Paris, January 2006.
◇ Eighth Workshop on Algorithms and Data Structures, Waterloo, August 2005.
◇ Fifth International Conference on Quantum Communication, Measurement & Computing, Capri, Italy, July 2000.
◇ Third QIP, **Program Co-Chair** and Co-Organizer, Montréal, December 1999.
◇ Second Workshop on Algorithms in Quantum Information Processing (AQIP), Chicago, January 1999.
◇ First NASA International Conference in Quantum Computing and Quantum Communications, Palm Springs, February 1998.
◇ First AQIP, Aarhus, Denmark, January 1998.
◇ Crypto '97, Santa Barbara, August 1997.
◇ In charge of a mini-symposium on cryptology at the Winter Meeting of the Canadian Mathematical Society, Montréal, December 1992.
◇ Seventh Annual IEEE Structure in Complexity Theory Conference, Boston, June 1992.
◇ Crypto '89, **Program Chair**, Santa Barbara, August 1989.
◇ Crypto '88, Santa Barbara, August 1988.

Other Services to the Community / Public Exposure

- ◇ Member of Weyl Prize Selection Committee, 2020.
- ◇ Co-organizer of 9th Annual *QCrypt* Conference, Montréal, 2019.
- ◇ Grand ambassadeur, *Créer l'étincelle*, Conseil du loisir scientifique de Montréal.
- ◇ Member of IACR Fellow Selection Committee, 2014-2018; Chair in 2016.
- ◇ Member of Selection Committee, Vanier Canada Graduate Scholarships Program.
- ◇ Member of Selection Committee, John Stuart Bell Prize for Research on Fundamental Issues in Quantum Mechanics and their Applications, 2009.
- ◇ Founding Director, Institut transdisciplinaire d'informatique quantique (INTRIQ).
- ◇ Theme Leader for quantum cryptography, Quantum*Works*, 2006–2011.
- ◇ Member of Synge Committee, Royal Society of Canada, 2006–2008.
- ◇ Member of panel to draft a *Roadmap* for Quantum Cryptography, Advanced Research and Development Activity (ARDA), 2004.
- ◇ Member of Canada Research Chairs College of Reviewers.
- ◇ Organizer of three Workshops on Quantum Foundations in the Light of Quantum Information, Montréal, 2000, 2002 and 2011.
- ◇ Jury member for Super Expo-Sciences Bell, Montréal, 2001.
- ◇ Jury member for Prix Urgel–Archambault (ACFAS) in 1999; Chair in 2000.
- ◇ Member of selection committee panel for the Canadian Networks of Centres of Excellence, 2000.
- ◇ Co-organizer of international Workshops in Schloß Dagstuhl, Germany (1993 and 1998) and in Monte Verita, Switzerland (1998).
- ◇ Member of NSERC selection panel for the E.W.R. Steacie Memorial Fellowship, 1997.
- ◇ Organizer of a workshop on "What are the pros and cons of cryptography?", International Conference on Privacy, Montréal, September 1997.
- ◇ Organizer of several workshops on quantum information processing in Montréal, 1992, 1993, 1997, 1999.
- ◇ Local arrangement chair, *26th Annual ACM Symposium on Theory of Computing*, Montréal, May 1994.
- ◇ Member of *ad hoc* NSERC committee for redrafting the mission statement for strategic grants on information systems, 1991.
- ◇ Treasurer, *9th Annual ACM Symposium on Principles of Distributed Computing*, Québec, August 1990.
- ◇ Member of NSERC grant selection panel for strategic grants, information systems and manufacturing systems, 1989 – 1992.
- ◇ Cryptology columnist for *Sigact News*, 1989 – 1997.
- ◇ Opponent on a thesis submitted at the University of Leiden (Netherlands) and external examiner on theses submitted at the University of Waterloo (Canada), Orsay (France, twice), Århus (Denmark), the University of Wollongong (Australia), Masaryk University (Czech Republic, twice) and the Technion (Israel).
- ◇ External consultant for a modification of the computer science program, Université du Québec à Montréal.
- ◇ Featured on television in *Découverte*, Radio-Canada, 11 December 1994; *C'est mathématique!*, Z-Channel, 2 March 2000; *Changer le monde* (Prix du Québec), Télé-Québec, 5 February 2001, *La téléportation quantique*, Canal Savoir, 8 March 2017. Interviewed on the radio for *Aujourd'hui la science*, now *Les années lumière* (four times); *Les Actualités*, January 1992; *L'heure de pointe* (Saguenay-Lac-St.-Jean), 19 November 2008; *Quirks and Quarks*, 5 June 2010; *Voyage North* (Thunder Bay), 17 February 2011; *CBC Radio Noon*, 20 September 2012; *La grande équation*, 5 October 2012; *La sphère*, 13 février 2016; *Les années lumière*, 12 May 2019; *Le 21e*, 13 April 2020; *Moteur de recherche*, 17 June 2020.
- ◇ Featured in "Entrevue du lundi", *Le Devoir*, 1st March 1993; "Sciences et techniques", *La Presse*, 6 December 1993; *L'Actualité*, 15 September 1997; *The Montreal Gazette*, 11 February 2005; *Time Magazine* (Canadian Edition), 8 August 2005; *Report on Business Magazine*, 26 August 2005; *innovationCANADA.ca* **24**, Sept.-Oct. 2006; *The Vancouver Sun*, *The Calgary Herald* and *The StarPhoenix*, 21 February 2008; *Jobboom*, January 2012; *montrealgazette.com* ("Quantum teleportation, Montrealer tipped for Nobel Prize"), 19 September 2012; *Le Devoir*, 28 September 2012; *La Presse*, 12 July 2014; *Science et Avenir*, October 2015; *Le Devoir*, 28 May 2018; *La Presse+*, 9 December 2018; *Le Soir* (Belgium), 6 February 2019; *Daily Science* (Belgium), 6 February 2019; Phys arXiv Blog of *Discover Magazine*, 28 August 2020. **And many many more after winning the Turing Award in 2026!**

Publications

Notes: (1) All hyperlinks (`http`) and cross references (such as "[177]") are clickable if viewed with Acrobat. (2) According to the general practice in Theoretical Computer Science and Theoretical Quantum Information Science, *all* my papers in career list authors in alphabetical order. (3) For papers that had been cited at least 100 times according to Clarivate's Web of Science (WoS—formerly owned by Thomson Reuters and ISI) as of 5 December 2025, the number of citations is indicated in square brackets, for a total count of 30 713 citations (of which less than 1% are self-citations) coming from 25 123 different papers; see `https://www.webofscience.com`. (4) *Only* for papers and books *not indexed* by WoS, the number of citations is indicated in parenthesis if it exceeds 100 according to Google Scholar, for a total citation count exceeding 80 000 and an h-index of 71 see `http://scholar.google.ca/citations?hl=en&user=Rh7_srgAAAAJ&view_op=list_works&pagesize=100`.

Refereed Journals

1. G. Brassard, R. Ligez and X. Coiteux-Roy, "On the power of multipartite entanglement for pseudotelepathy", *Proceedings of the National Academy of Sciences*, to appear, 2026.

2. G. Brassard, "Who told you that Nature is nonlocal?", *Physics in Canada* **81**(2): 114–116, 2025. (Also the French version "Qui vous a dit que la nature est nonlocale ?", *La Physique au Canada* **81**(2):111–113, 2025.)

3. S. Berthelette, G. Brassard, X. Coiteux-Roy, "On computable numbers, with an application to the Druckproblem", *Theoretical Computer Science* **1002**:114573, 29 June 2024. Open access at `http://dx.doi.org/10.1016/j.tcs.2024.114573`.

4. G. Brassard, "Profile of John Clauser, Alain Aspect and Anton Zeilinger: 2022 Nobel laureates in Physics", *Proceedings of the National Academy of Sciences* **120**(23):e2304809120, 30 May 2023. Open access at `http://dx.doi.org/10.1073/pnas.2304809120`.

5. E. Aïmeur, S. Amri and G. Brassard, "Fake news, disinformation and misinformation in social media: A review", *Social Network Analysis and Mining* **13**(1):30, February 2023. Open access at `http://dx.doi.org/10.1007/s13278-023-01028-5`. [364 citations] [364]

6. M. Boyer, G. Brassard, N. Godbout, R. Liss and S. Virally, "Simple and rigorous proof method for the security of practical quantum key distribution in the single-qubit regime using mismatched basis measurements", *Quantum Reports* **5**(1):52–77, January 2023. Open access at `http://dx.doi.org/10.3390/quantum5010005`.

7. E. Aïmeur, G. Brassard and M. Guo, "How data brokers endanger privacy", *Transactions on Data Privacy* **15**(1):41–85, April 2022. Open access at `http://www.tdp.cat/issues21/tdp.a448a21.pdf`.

8. G. Brassard, "Relativity could ensure security for cash machines" (invited *News & Views*), *Nature* **599**(7883):36–37, 4 November 2021. Available at `http://dx.doi.org/10.1038/d41586-021-02950-4`. Read-only open access at `https://rdcu.be/cA5Bz`.

9. Alexandre Bibeau-Delisle and G. Brassard, "Probability and consequences of living inside a computer simulation", *Proceedings of the Royal Society A* **477**(2247), March 2021. Open access at `http://dx.doi.org/10.1098/rspa.2020.0658`.

10. G. Brassard, A. Nayak, A. Tapp, D. Touchette and F. Unger, "Noisy interactive quantum communication", *SIAM Journal on Computing* **48**(4):1147–1195, 2019. Available at `http://dx.doi.org/10.1137/16M109867X`. Preliminary version available at `http://arXiv.org/abs/1309.2643`.

11. G. Brassard, P. Høyer, K. Kalach, M. Kaplan, S. Laplante and L. Salvail, "Key establishment à la Merkle in a quantum world", *Journal of Cryptology* **32**(3):601–634, 2019. Open access at `http://dx.doi.org/10.1007/s00145-019-09317-z`.

12. G. Brassard, "Was Edgar Allan Poe wrong after all?" (Invited Technical Perspective), *Communications of the ACM* **62**(4):132, April 2019. Available at `http://dx.doi.org/10.1145/3310976`.

13. G. Brassard, L. Devroye and C. Gravel, "Remote sampling with applications to general entanglement simulation", *Entropy* **21**(1):92, January 2019. Open access at `http://dx.doi.org/10.3390/e21010092`.

14. G. Brassard and P. Raymond-Robichaud, "Parallel Lives: A local-realistic interpretation of 'nonlocal' boxes", *Entropy* **21**(1):87, January 2019. Open access at `http://dx.doi.org/10.3390/e21010087`, but please read Authoritative version available at `http://arXiv.org/abs/arXiv:1709.10016` instead.

15. G. Brassard, L. Devroye and C. Gravel, "Exact classical simulation of the quantum-mechanical GHZ distribution", *IEEE Transactions on Information Theory* **62**(2):876–890, February 2016. Open access at `http://dx.doi.org/10.1109/TIT.2015.2504525`.

16. C. H. Bennett and G. Brassard, "Quantum cryptography: Public key distribution and coin tossing", *Theoretical Computer Science* **560**(Part 1):7–11, December 2014. This is a reproduction of the historical BB84 paper [177] in honour of the 30th anniversary of its original publication. Open access at `http://dx.doi.org/10.1016/j.tcs.2014.05.025`. [3721 citations] [3721]

17. G. Brassard, Y. Elias, J. M. Fernandez, H. Gilboa, J. A. Jones, T. Mor, Y. Weinstein and L. Xiao, "Experimental heat-bath cooling of spins", *European Physical Journal Plus* **129**(12):266, December 2014. Open access at `http://dx.doi.org/10.1140/epjp/i2014-14266-0`.

18. C. H. Bennett, G. Brassard and S. Breidbart, "Quantum cryptography II: How to reuse a one-time pad safely even if $\mathsf{P} = \mathsf{NP}$", *Natural Computing* **13**(4):453–458, December 2014. Open access at `http://dx.doi.org/10.1007/s11047-014-9453-6`.

19. G. Brassard, Y. Elias, T. Mor and Y. Weinstein, "Prospects and limitations of algorithmic cooling", *European Physical Journal Plus* **129**(11):258, November 2014. Preliminary version available at `http://arXiv.org/abs/arXiv:1404.6824`.

20. G. Brassard, A. Broadbent, E. Hänggi, A. A. Méthot and S. Wolf, "Classical, quantum and nonsignalling resources in bipartite games", *Theoretical Computer Science* **486**:61–72, May 2013.

21. G. Brassard and A. A. Méthot, "Strict hierarchy among Bell theorems", *Theoretical Computer Science* **486**:4–10, May 2013.

22. E. Aïmeur, G. Brassard and S. Gambs, "Quantum speed-up for unsupervised learning", *Machine Learning* **90**(2):261–287, February 2013. Available at `http://dx.doi.org/10.1007/s10994-012-5316-5`. Read-only open access at `https://rdcu.be/cA6BF`. [178 citations] [178]

23. E. Aïmeur, G. Brassard, S. Gambs and D. Schőnfeld, "P3ERS: Privacy-Preserving PEer Review System", *Transactions on Data Privacy* **5**(3):553–578, December 2012.

24. G. Berlín, G. Brassard, F. Bussières, N. Godbout, J. A. Slater and W. Tittel, "Experimental loss-tolerant quantum coin flipping", *Nature Communications* **2**(11):561, 29 November 2011. Open access at `http://www.nature.com/ncomms/journal/v2/n11/pdf/ncomms1572.pdf`.

25. G. Brassard, "The conundrum of secure positioning" (invited *News & Views*), *Nature* **479**(7373):307–308, 17 November 2011. Available at `http://dx.doi.org/10.1038/479307a`. Read-only open access at `https://rdcu.be/cA6Bw`.

26. G. Brassard and A. A. Méthot, "Can quantum-mechanical description of physical reality be considered *correct*?", *Foundations of Physics* **40**(4):463–468, April 2010. Available at `http://dx.doi.org/10.1007/s10701-010-9411-9`. Read-only open access at `https://rdcu.be/cA6BO`.

27. G. Berlín, G. Brassard, F. Bussières and N. Godbout, "Fair loss-tolerant quantum coin flipping", *Physical Review A* **80**(6):062321, December 2009. Preliminary version available at `http://arXiv.org/abs/0904.3945`.

28. S. Bandyopadhyay, G. Brassard, S. Kimmel and W. K. Wootters, "Entanglement cost of nonlocal measurements", *Physical Review A* **80**(1):012313, July 2009. Preliminary version available at `http://arXiv.org/abs/0809.2264`.

29. E. Aïmeur, G. Brassard, J. M. Fernandez and F. S. Mani Onana, "ALAMBIC: A privacy-preserving recommender system for electronic commerce", *International Journal of Information Security* **7**(5):307–334, October 2008. [115 citations] [115]

30. E. Aïmeur, G. Brassard and F. S. Mani Onana, "Blind electronic commerce", *Journal of Computer Security* **14**(6):535–559, 2006.

31. G. Brassard, H. Buhrman, N. Linden, A. A. Méthot, A. Tapp and F. Unger, "Limit on nonlocality in any world in which communication complexity is not trivial", *Physical Review Letters* **96**(25):250401, 30 June 2006. Preliminary version available at `http://arXiv.org/abs/quant-ph/0508042`. [254 citations] [254]

32. E. Aïmeur, G. Brassard and F. S. Mani Onana, "Secure anonymous physical delivery", *IADIS International Journal on WWW/Internet* **4**(1):55–69, June 2006.

33. G. Brassard and A. A. Méthot, "Can quantum-mechanical description of physical reality be considered *in*complete?", *International Journal of Quantum Information* **4**(1):45–54, February 2006. Preliminary version available at `http://arXiv.org/abs/quant-ph/0701001`.

34. G. Brassard, A. Broadbent and A. Tapp, "Quantum pseudo-telepathy", *Foundations of Physics* **35**(11):1877–1907, November 2005. Available at `http://dx.doi.org/10.1007/s10701-005-7353-4`. Read-only open access at `https://rdcu.be/cA6BL`. [153 citations] [153]

35. G. Brassard, A. Broadbent and A. Tapp, "Recasting Mermin's multi-player game into the framework of pseudo-telepathy", *Quantum Information and Computation* **5**(7):538–550, November 2005. Preliminary version available at `http://arXiv.org/abs/quant-ph/0408052`.

36. G. Brassard, "Is information the key?" (Commentary invited to open inaugural issue), *Nature Physics* **1**(1):2–4, October 2005. Available at `http://dx.doi.org/10.1038/nphys134`. Read-only open access at `https://rdcu.be/cA6Bu`.

37. G. Brassard, A. A. Méthot and A. Tapp, "Minimum entangled state dimension required for pseudo-telepathy", *Quantum Information and Computation* **5**(4&5):275–284, July 2005. Preliminary version available at `http://arXiv.org/abs/quant-ph/0412136`.

38. E. Aïmeur, G. Brassard and S. Paquet, "Personal knowledge publishing: Fostering interdisciplinary communication", *IEEE Intelligent Systems* **20**(2):46–53, March–April 2005.

39. G. Berlín, G. Brassard, F. Bussières, N. Godbout, S. Lacroix, S. O'Reilly and D. Summers-Lépine, "Towards an implementation of quantum key distribution in optical fibre telecommunication networks", *Photons: Technical Review of the Canadian Institute for Photonic Innovations* **2**(1):21–23, 2004.

40. E. Biham, G. Brassard, D. Kenigsberg and T. Mor, "Quantum computing without entanglement", *Theoretical Computer Science* **320**(1):15–33, June 2004. Preliminary version available at `http://arXiv.org/abs/quant-ph/0306182`.

41. G. Brassard, P. Horodecki and T. Mor, "TelePOVM—A generalized quantum teleportation scheme", *IBM Journal of Research and Development* **48**(1):87–97, January 2004.

42. G. Brassard, "Quantum communication complexity", *Foundations of Physics* **33**(11):1593–1616, November 2003. Available at `http://dx.doi.org/10.1023/A:1026009100467`. Read-only open access at `https://rdcu.be/cA6BM`.

43. G. Brassard, C. Crépeau and S. Wolf, "Oblivious transfers and privacy amplification", *Journal of Cryptology* **16**(4):219–237, 2003.

44. E. Biham, M. Boyer, G. Brassard, J. van de Graaf and T. Mor, "Security of quantum key distribution against all collective attacks", *Algorithmica* **34**(4):372–388, December 2002. Preliminary version available at `http://arXiv.org/abs/quant-ph/9801022`.

45. G. Brassard and T. Mor, "Multi-particle entanglement via two-party entanglement", *Journal of Physics A* **34**(35):6807–6814, 7 September 2001.

46. G. Brassard, N. Lütkenhaus, T. Mor and B. C. Sanders, "Limitations on practical quantum cryptography", *Physical Review Letters* **85**(6):1330–1333, 7 August 2000. Preliminary version available at `http://arXiv.org/abs/quant-ph/9911054`. [1117 citations] [1117]

47. G. Brassard, "Ordinateurs quantiques", *TSI: Technique et Science Informatiques* **19**(1–3):99–105, January–March 2000.

48. G. Brassard, R. Cleve and A. Tapp, "Cost of exactly simulating quantum entanglement with classical communication", *Physical Review Letters* **83**(9):1874–1877, 30 August 1999. Preliminary version available at `http://arXiv.org/abs/quant-ph/9901035`. [193 citations] [193]

49. G. Brassard, I. Chuang, S. Lloyd and C. Monroe, "Quantum computing", *Proceedings of the National Academy of Sciences of the USA* **95**(19):11032–11033, 15 September 1998.

50. G. Brassard, S. Braunstein and R. Cleve, "Teleportation as a quantum computation", *Physica D* **120**(1&2):43–47, September 1998. Available at `http://dx.doi.org/10.1016/S0167-2789(98)00043-8`. Preliminary version with Brassard as single author available at `http://arXiv.org/abs/quant-ph/9605035`. [133 citations] [133]

51. M. Boyer, G. Brassard, P. Høyer and A. Tapp, "Tight bounds on quantum searching", *Fortschritte Der Physik* **46**(4&5):493–505, 1998. Preliminary version available at `http://arXiv.org/abs/quant-ph/9605034`. [811 citations] [811]

52. C. H. Bennett, E. Bernstein, G. Brassard and U. V. Vazirani, "Strengths and weaknesses of quantum computing", *SIAM Journal on Computing* **26**(5):1510–1523, October 1997. Preliminary version available at `http://arXiv.org/abs/quant-ph/9701001`. [941 citations] [941]

53. G. Brassard, "Quantum computing — Searching a quantum phone book", *Science* **275**(5300):627–628, 31 January 1997.

54. G. Brassard, C. Crépeau and M. Sántha, "Oblivious transfers and intersecting codes", *IEEE Transactions on Information Theory* **42**(6):1769–1780, November 1996.

55. C. H. Bennett, G. Brassard, S. Popescu, B. Schumacher, J. A. Smolin and W. K. Wootters, "Purification of noisy entanglement and faithful teleportation via noisy channels", *Physical Review Letters* **76**(5):722–725, 29 January 1996. Errata in *ibid* **78**(10):2031, 10 March 1997. Preliminary version available at `http://arXiv.org/abs/quant-ph/9511027`. [2671 citations for the main paper and 65 for the errata] [2736]

56. J. Boyar, G. Brassard and R. Peralta, "Subquadratic zero-knowledge", *Journal of the ACM* **42**(6):1169–1193, November 1995.

57. C. H. Bennett, G. Brassard, C. Crépeau and U. M. Maurer, "Generalized privacy amplification", *IEEE Transactions on Information Theory* **41**(6):1915–1923, November 1995. [1161 citations] [1161]

58. G. Brassard, "Time for another paradigm shift", *ACM Computing Surveys* **27**(1): 19–21, March 1995.

59. A. Berthiaume and G. Brassard, "Oracle quantum computing", *Journal of Modern Optics* **41**(12):2521–2535, December 1994.

60. C. H. Bennett, G. Brassard, R. Jozsa, D. Mayers, A. Peres, B. Schumacher and W. K. Wootters, "Reduction of quantum entropy by reversible extraction of classical information", *Journal of Modern Optics* **41**(12):2307–2314, December 1994.

61. C. H. Bennett, G. Brassard, C. Crépeau, R. Jozsa, A. Peres and W. K. Wootters, "Teleporting an unknown quantum state via dual classical and Einstein–Podolsky–Rosen channels", *Physical Review Letters* **70**(13):1895–1899, 29 March 1993. *[12684 citations]* [*12684*]

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