



References

- [AA15] Scott Aaronson and Andris Ambainis. Forrelation: A problem that optimally separates quantum from classical computing. In *Proceedings of the forty-seventh annual ACM symposium on Theory of computing*, pages 307–316, 2015.
- [AAI⁺15] Scott Aaronson, Andris Ambainis, Jānis Iraids, Martins Kokainis, and Juris Smotrovs. Polynomials, quantum query complexity, and grothendieck’s inequality. *arXiv preprint arXiv:1511.08682*, 2015.
- [ABB⁺17] Andris Ambainis, Kaspars Balodis, Aleksandrs Belovs, Troy Lee, Miklos Santha, and Juris Smotrovs. Separations in query complexity based on pointer functions. *Journal of the ACM (JACM)*, 64(5):1–24, 2017.
- [ABK16] Scott Aaronson, Shalev Ben-David, and Robin Kothari. Separations in query complexity using cheat sheets. In *Proceedings of the forty-eighth annual ACM symposium on Theory of Computing*, pages 863–876, 2016.
- [ABK20] Anurag Anshu, Shalev Ben-David, and Srijita Kundu. On query-to-communication lifting for adversary bounds. *arXiv preprint arXiv:2012.03415*, 2020.
- [ABK⁺21] Scott Aaronson, Shalev Ben-David, Robin Kothari, Shravas Rao, and Avishay Tal. Degree vs. approximate degree and quantum implications of huang’s sensitivity theorem. In *Proceedings of the 53rd Annual ACM SIGACT Symposium on Theory of Computing*, pages 1330–1342, 2021.
- [AdW14] Andris Ambainis and Ronald de Wolf. How low can approximate degree and quantum query complexity be for total boolean functions? *computational complexity*, 23:305–322, 2014.
- [Amb06] Andris Ambainis. Polynomial degree vs. quantum query complexity. *Journal of Computer and System Sciences*, 72(2):220–238, 2006.
- [Amb13] Andris Ambainis. Superlinear advantage for exact quantum algorithms. In *Proceedings of the forty-fifth annual ACM symposium on Theory of Computing*, pages 891–900, 2013.
- [BHT17] Shalev Ben-David, Pooya Hatami, and Avishay Tal. Low-sensitivity functions from unambiguous certificates. In *8th Innovations in Theoretical Computer Science Conference (ITCS 2017)*. Schloss Dagstuhl-Leibniz-Zentrum fuer Informatik, 2017.
- [BK19] Shalev Ben-David and Robin Kothari. Quantum distinguishing complexity, zero-error algorithms, and statistical zero knowledge. *arXiv preprint arXiv:1902.03660*, 2019.
- [BS21] Nikhil Bansal and Makrand Sinha. k-forrelation optimally separates quantum and classical query complexity. In *Proceedings of the 53rd Annual ACM SIGACT Symposium on Theory of Computing*, pages 1303–1316, 2021.
- [BT19] Mark Bun and Justin Thaler. A nearly optimal lower bound on the approximate degree of $ac^{\wedge}0$. *SIAM Journal on Computing*, 49(4):FOCS17–59, 2019.
- [CGL⁺22] Sourav Chakraborty, Anna Gál, Sophie Laplante, Rajat Mittal, and Anupa Sunny. Certificate games. *arXiv preprint arXiv:2211.03396*, 2022.
- [CMP24] Arjan Cornelissen, Nikhil S Mande, and Subhasree Patro. Quantum sabotage complexity. *arXiv preprint arXiv:2408.12595*, 2024.
- [dW00] Ronald de Wolf. Characterization of non-deterministic quantum query and quantum communication complexity. In *Proceedings 15th Annual IEEE Conference on Computational Complexity*, pages 271–278. IEEE, 2000.
- [GSS16] Justin Gilmer, Michael Saks, and Srikanth Srinivasan. Composition limits and separating examples for some boolean function complexity measures. *Combinatorica*, 36(3):265–311, 2016.

- [Hua19] Hao Huang. Induced subgraphs of hypercubes and a proof of the sensitivity conjecture. *Annals of Mathematics*, 190(3):949–955, 2019.
- [JKK⁺20] Rahul Jain, Hartmut Klauck, Srijita Kundu, Troy Lee, Miklos Santha, Swagato Sanyal, and Jevgēnijs Vihrovs. Quadratically tight relations for randomized query complexity. *Theory of Computing Systems*, 64(1):101–119, 2020.
- [KT16] Raghav Kulkarni and Avishay Tal. On fractional block sensitivity. *Chicago J. Theor. Comput. Sci*, 8:1–16, 2016.
- [Mid04] Gatis Midrijanis. Exact quantum query complexity for total boolean functions. *arXiv preprint quant-ph/0403168*, 2004.
- [Nis89] Noam Nisan. Crew prams and decision trees. In *Proceedings of the twenty-first annual ACM symposium on Theory of computing*, pages 327–335, 1989.
- [NS94] Noam Nisan and Mario Szegedy. On the degree of boolean functions as real polynomials. *Computational complexity*, 4:301–313, 1994.
- [NW95] Noam Nisan and Avi Wigderson. On rank vs. communication complexity. *Combinatorica*, 15(4):557–565, 1995.
- [Rub95] David Rubinfeld. Sensitivity vs. block sensitivity of boolean functions. *Combinatorica*, 15(2):297–299, 1995.
- [SSW21] Alexander A Sherstov, Andrey A Storozhenko, and Pei Wu. An optimal separation of randomized and quantum query complexity. In *Proceedings of the 53rd Annual ACM SIGACT Symposium on Theory of Computing*, pages 1289–1302, 2021.