

Project 1: The Gap Hamming lower bound and applications

* Joshua Brody and Amit Chakrabarti. A Multi-Round Communication Lower Bound for Gap Hamming and Some Consequences

* Amit Chakrabarti and Oded Regev. An optimal lower bound on the communication complexity of Gap-Hamming-distance. arXiv:1009.3460

* Eric Blais, Joshua Brody, and Kevin Matulef. Property Testing Lower Bounds via Communication Complexity. (<http://cs.au.dk/~jbrody/papers/PTviaCC-conference.pdf>)

Andrew McGregor, Ilya Mironov, Toniann Pitassi, Omer Reingold, Kunal Talwar, and Salil Vadhan. The Limits of Two-Party Differential Privacy. (<https://www.cs.toronto.edu/~toni/Papers/2dplimits.pdf>)

Project 2: Exponential Separation of Information and Communication

* Mark Braverman. Interactive information complexity. eccc:TR11-123.

* Anat Ganor, Gillat Kol, and Ran Raz. Exponential Separation of Information and Communication. eccc:TR14-049

* Anat Ganor, Gillat Kol, and Ran Raz. Exponential Separation of Information and Communication for Boolean Functions. (<http://www.wisdom.weizmann.ac.il/~ranraz/publications/PIC-CC-Separation.pdf>)

* Anup Rao and Makrand Sinha. Simplified Separation of Information and Communication. eccc: TR15-057

Project 3: Compression under product distributions

* Balthazar Bauer, Shay Moran, and Amir Yehudayoff. Internal compression of protocols to entropy. eccc: TR14-101

* Prahladh Harsha, Rahul Jain, Jaikumar Radhakrishnan. Partition bound is quadratically tight for product distributions. arXiv:1512.01968v4

* Alexander A. Sherstov. Compressing interactive communication under product distributions. eccc:TR16-081

Project 4: Interactive channel coding

* Bernhard Haeupler. Interactive Channel Capacity Revisited. arXiv: 1408.1467

* Bernhard Haeupler and Ameya Velingker. Bridging the Capacity Gap

Between Interactive and One-Way Communication. arXiv:1605.08792

* Ran Gelles. Coding for Interactive Communication: A Survey. (<http://www.eng.biu.ac.il/~gellesr/survey.pdf>)

Project 5: Memory and communication tradeoff in distributed learning

* Ohad Shamir. Fundamental Limits of Online and Distributed Algorithms for Statistical Learning and Estimation. arXiv:1311.3494

* Jacob Steinhardt, Gregory Valiant, and Stefan Wager. Memory, Communication, and Statistical Queries. (<http://www.jmlr.org/proceedings/papers/v49/steinhardt16.pdf>)

* Vitaly Feldman. A General Characterization of the Statistical Query Complexity. arxiv:1608.02198

* Ran Raz. Fast Learning Requires Good Memory: A Time-Space Lower Bound for Parity Learning. arXiv:1602.05161