

## Topics for Seminar

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- Below are a list of candidate papers for the seminar. You may present papers not in the list, but you would have to check with one of the instructors before doing so.
  - Each presentation is for 30-40 mins.
  - Each presentation must clearly state the problem and the salient points in the proof.
  - The time per presentation being limited, it is advisable to avoid dwelling into the details of the proof.
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## References

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- [CK11] AMIT CHAKRABARTI and RANGANATH KONDAPALLY. *Everywhere-tight information cost tradeoffs for augmented index*. In LESLIE ANN GOLDBERG, KLAUS JANSEN, R. RAVI, and JOSÉ D. P. ROLIM, eds., *Proc. 15th International Workshop on Randomization and Approximation Techniques in Computer Science (RANDOM)*, volume 6845 of *LNCS*, pages 448–459. Springer, 2011. doi:10.1007/978-3-642-22935-0\_38.
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- [JKS03] T. S. JAYRAM, RAVI KUMAR, and D. SIVAKUMAR. *Two applications of information complexity*. In *Proc. 35th ACM Symp. on Theory of Computing (STOC)*, pages 673–682. 2003. doi:10.1145/780542.780640.

- [JKZ10] RAHUL JAIN, HARTMUT KLAUCK, and SHENGYU ZHANG. *Depth-independent lower bounds on the communication complexity of read-once boolean formulas*. In MY T. THAI and SARTAJ SAHNI, eds., *Proc. of 16th Annual International Conference on Computing and Combinatorics (COCOON)*, volume 6196 of *LNCS*, pages 54–59. Springer, 2010. [arXiv:0908.4453](#), [doi:10.1007/978-3-642-14031-0\\_8](#).
- [LZ10] TROY LEE and SHENGYU ZHANG. *Composition theorems in communication complexity*. In SAMSON ABRAMSKY, CYRIL GAVOILLE, CLAUDE KIRCHNER, FRIEDHELM MEYER AUF DER HEIDE, and PAUL G. SPIRAKIS, eds., *Proc. 37th International Colloquium of Automata, Languages and Programming (ICALP), Part I*, volume 6198 of *LNCS*, pages 475–489. Springer, 2010. [arXiv:1003.1443](#), [doi:10.1007/978-3-642-14165-2\\_41](#).
- [Pat11] MIHAI PATRASCU. *Unifying the landscape of cell-probe lower bounds*. *SIAM J. Computing*, 40(3):827–847, 2011. (Preliminary version in *49th FOCS*, 2008). [arXiv:1010.3783](#), [doi:10.1137/09075336X](#).
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