Lecture 1 Introduction, restriction method and lower bound for Resolution proofs of PHP.


Lecture 2 Hastad’s Switching Lemma and the lower bound for PARITY.


Lecture 3 Applications of the AC0 lower bound.

3. Impagliazzo, Matthews, and Paturi. A Satisfiability Algorithm for AC0.

Lecture 4 Formula size lower bounds and Average-case Formula size bounds.

1. Hastad. The Shrinkage exponent is 2.