

Problem set 7

Computational Complexity.

Note the special due date. This exercise is a bonus.

1.  $Max - 3 - occ - 3SAT$  is a variant of the problem  $max - 3 - SAT$  where each variable appears at most 3 times. Prove that there exists a constant  $c > 1$  such that approximating  $Max - 3 - occ - 3SAT$  to within  $c$  is NP-hard.