

Indian Institute of Technology, Delhi
EEL 204: Analog Electronic Circuits
Tutorial 9, April 5, 2011

Assume all the MOS devices have $C_{gs}=200$ fF, $C_{sb}=150$ fF, $C_{db}=100$ fF, and $C_{gd}=50$ fF. Further assume that the devices are biased such that $g_m = 1$ mS, and $g_m r_{ds} = 20$.

Find the locations of the poles and the zeros in the circuits. If the circuit is placed within a feedback loop, will the new circuit be stable or not? As an estimate of how stable the new circuit will be, compute the phase margin.

