

## Homework #6

20152052

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1. Calculate the integrated electron density as a function of the gate voltage using self-consistent solution.

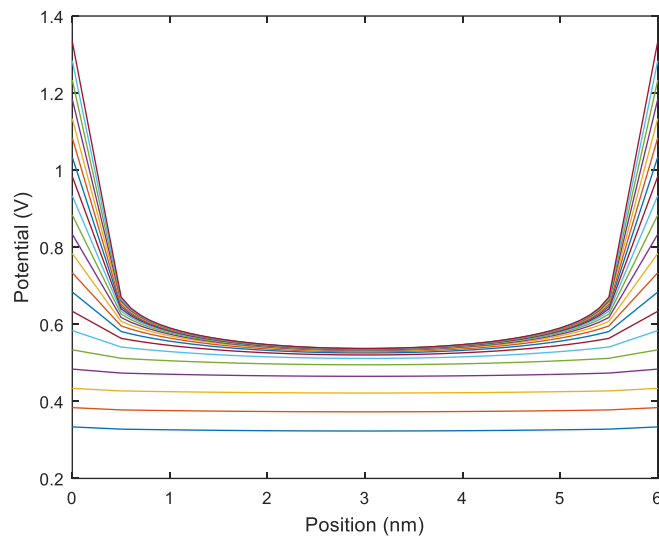


Figure 2. Potential as a function of position with different gate voltage

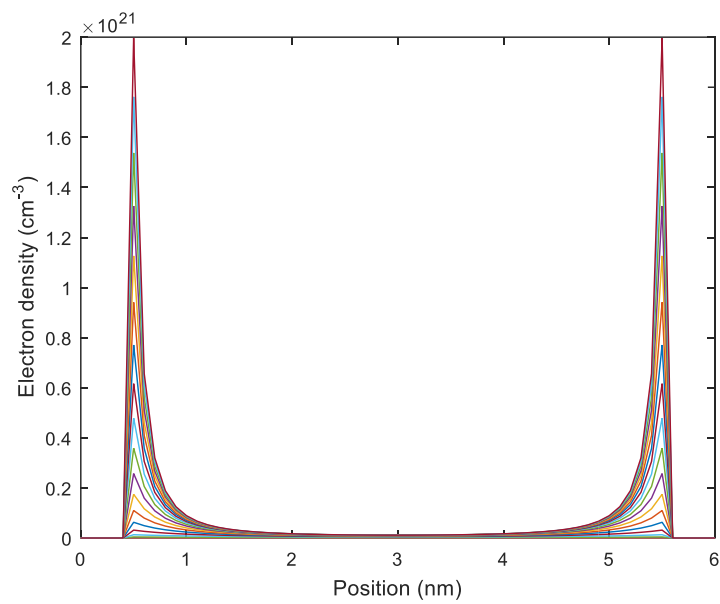
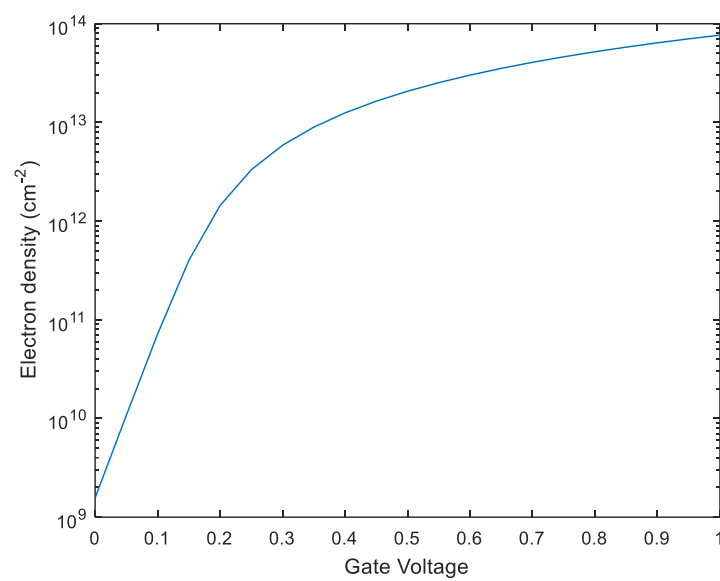


Figure 1. Electron density as a function of position with different gate voltage



**Figure 3. Integrated electron density as a function of gate voltage**