Homework #9

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Benchmark results between the drift difusion solver and the poisson solver

- environment: pn-junction

- dopping rate(n,p region): 10^{16}
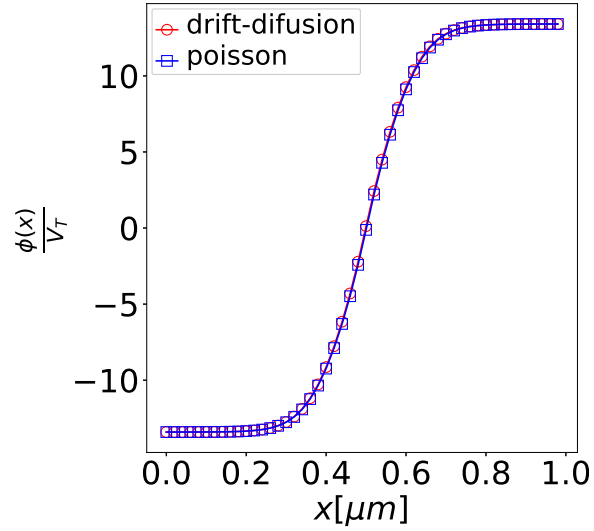
- n_i: intrinsic electron density in the silicon

Figure 1: The benchmark result for the electric potential $\phi\left(x\right)/V_T$ with respect of the x.
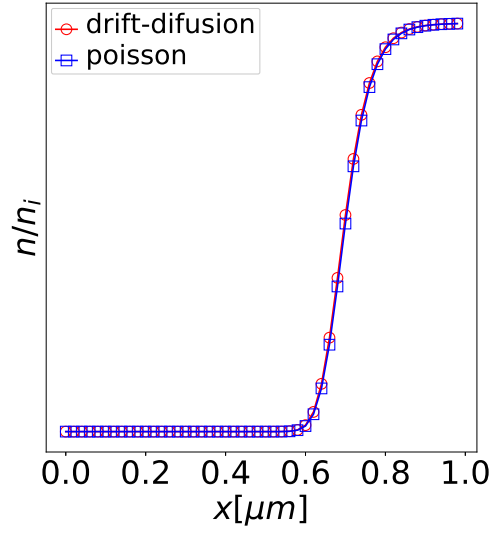
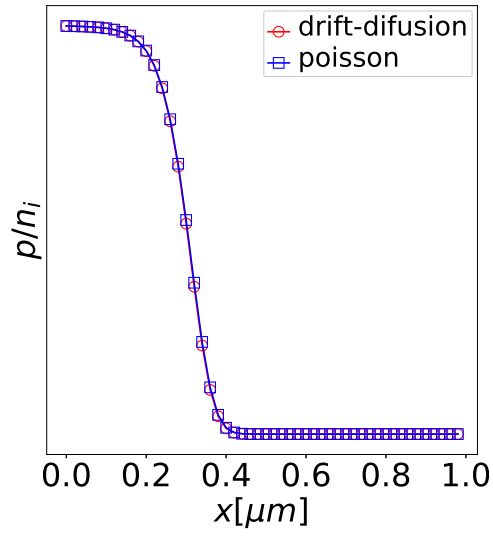Figure 2: The benchmark result for the electron density $n(x)/n_i$ with respect of the x.

Figure 3: The benchmark result for the hole density $p(x)/n_i$ with respect of the x.