

The following sections contain plots generated using MATLAB program

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ELEC 4700 Assignment 3

ELEC 4700 Assignment-2 Finite Difference Method

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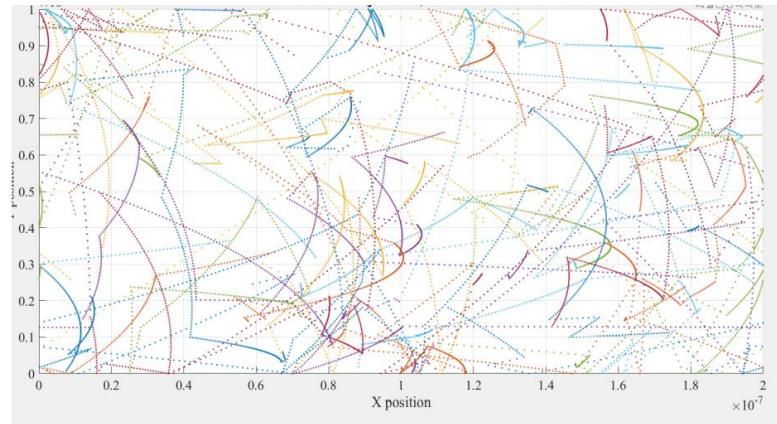
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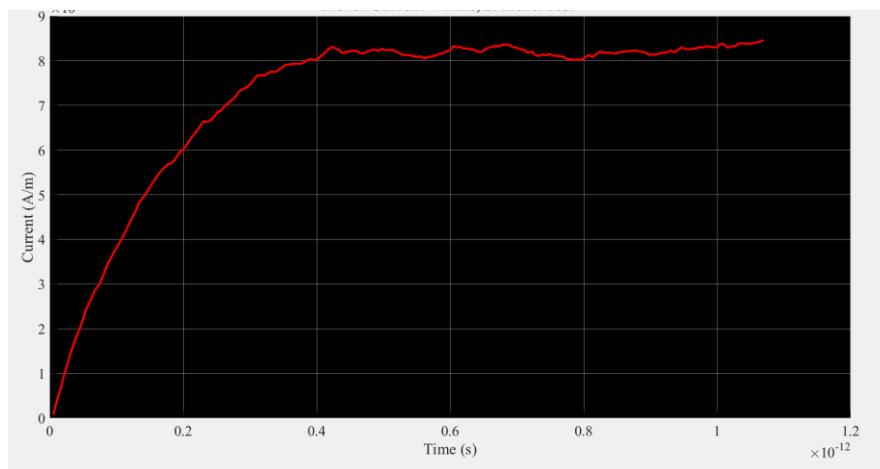
Question 1

Using the Finite Difference Method the following graphs were produced.

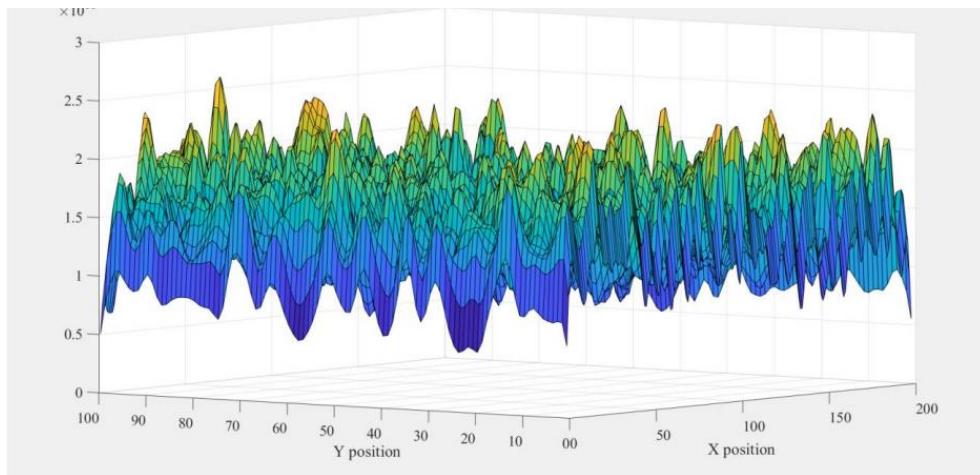
a) Figure 1: Plot of Electron Trajectories



b) Figure 2: Plot of Variation of Current Over Time



c) Figure 3: Electron Density Map with $V_x = 0.1V$.

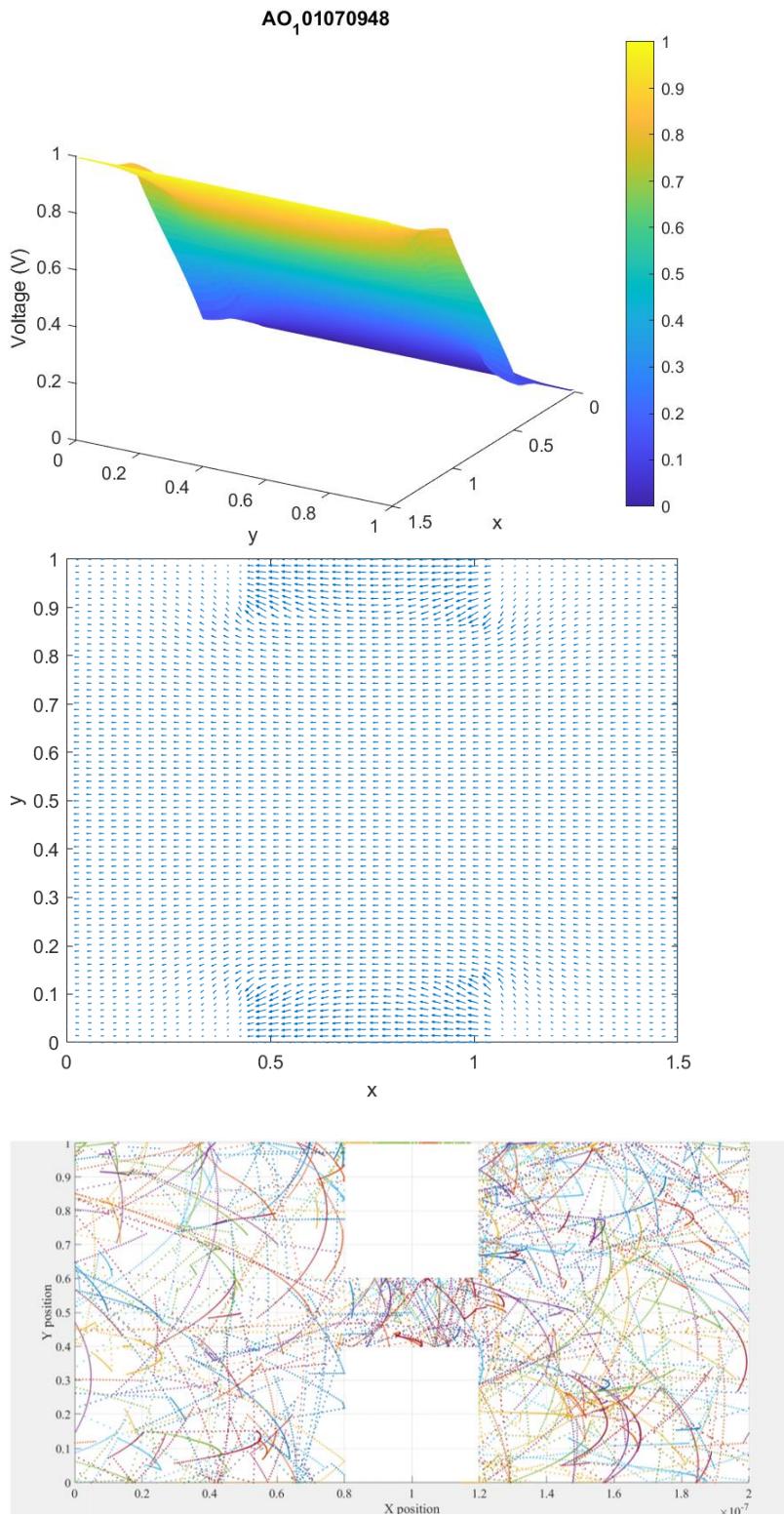


Question 2

Current flow solved using Finite Difference Method

The following graphs were produced when finding the current flow and show the effect of the “bottle neck” against the current.

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Question 3

Coupling of simulators

Plot below displays the desnity map at 0.8 V

