

Spencer Tigere 101001717

PART 1. Electron Modelling

1. The Thermal velocity was found to be 1.3224×10^5 m/s
2. The mean free path was found to be 1.1172×10^{-11}

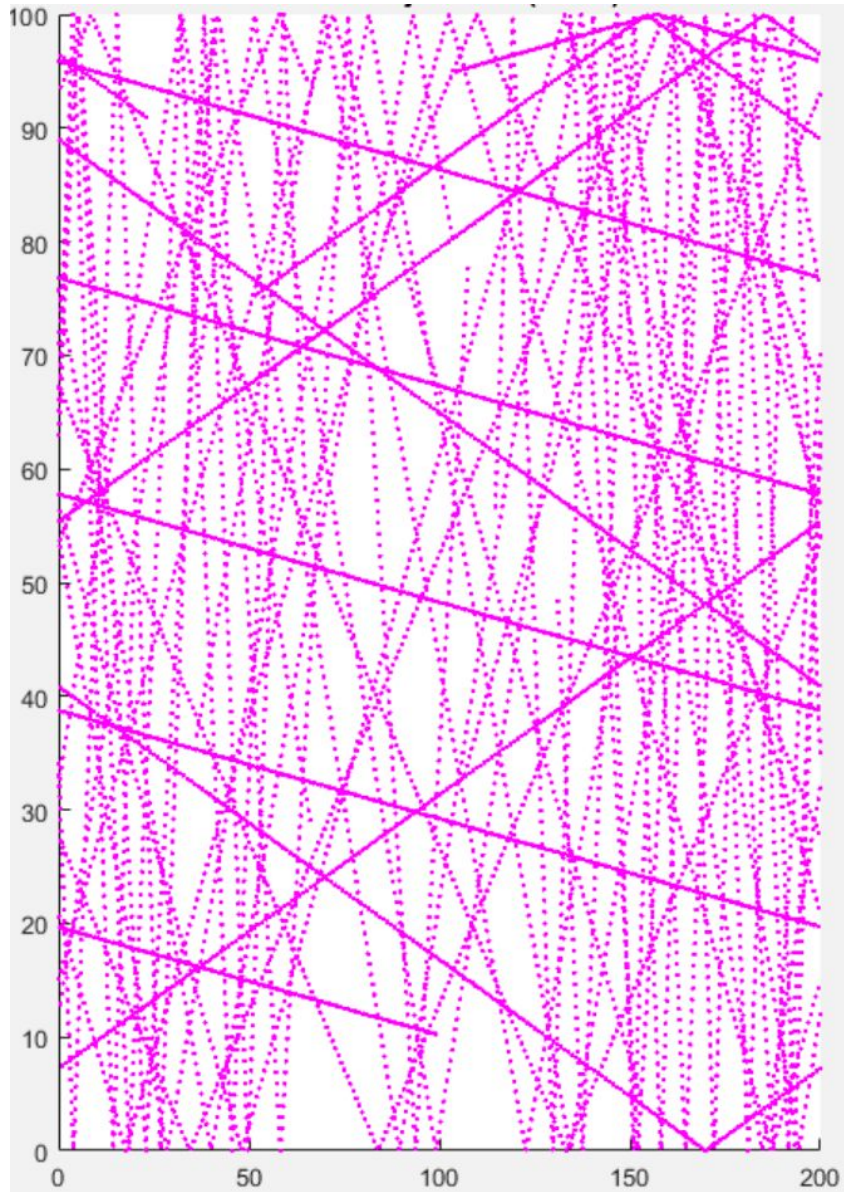


Figure 1. Particle Trajectories

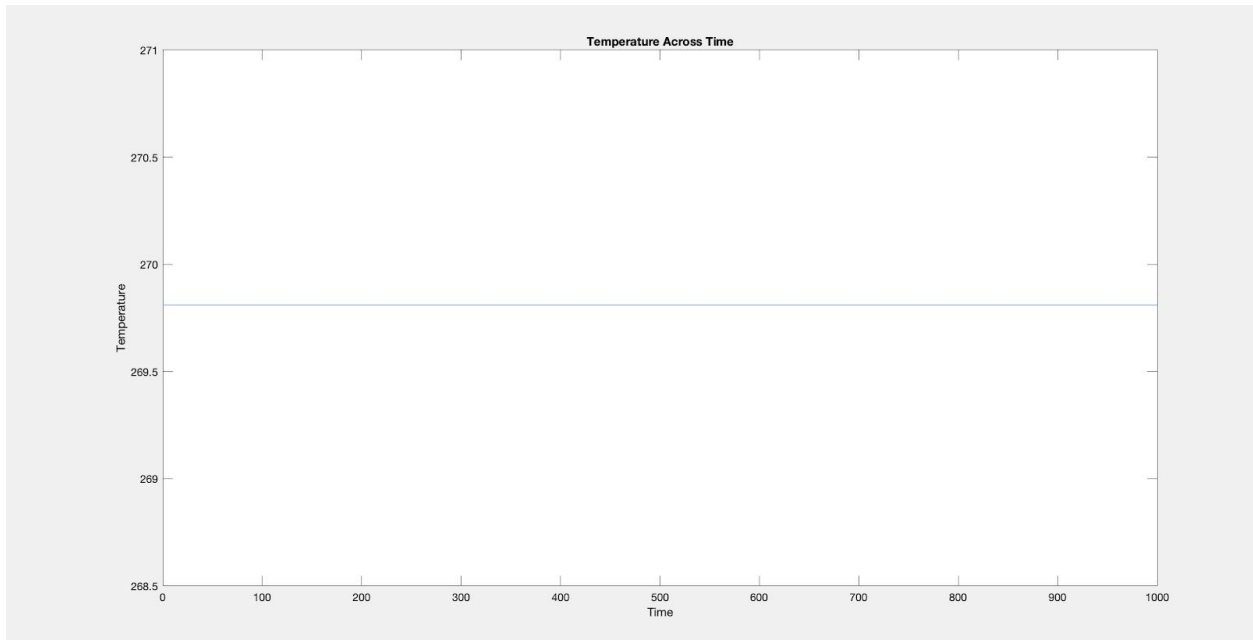


Figure 2. Temperature Across Time

PART 2 Collisions with Mean Free Path

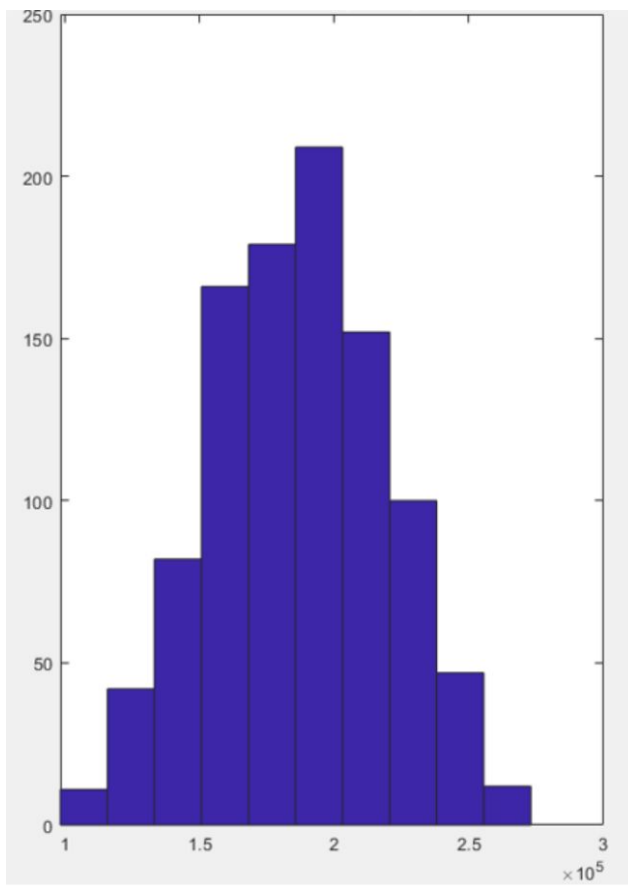


Figure 3. Histogram of Thermal Velocities

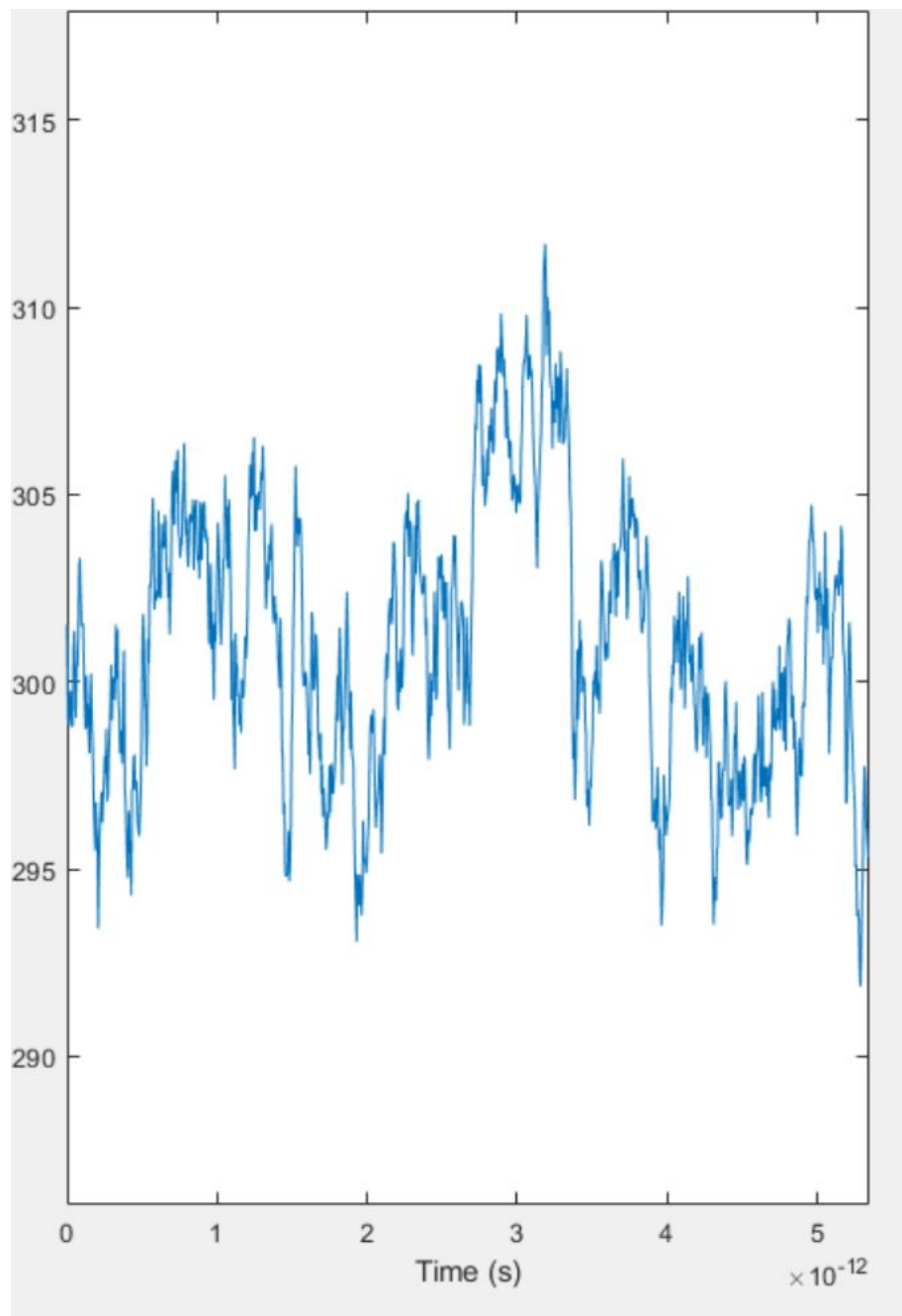


Figure 4. Temperature with scattering

PART 3 Enhancements

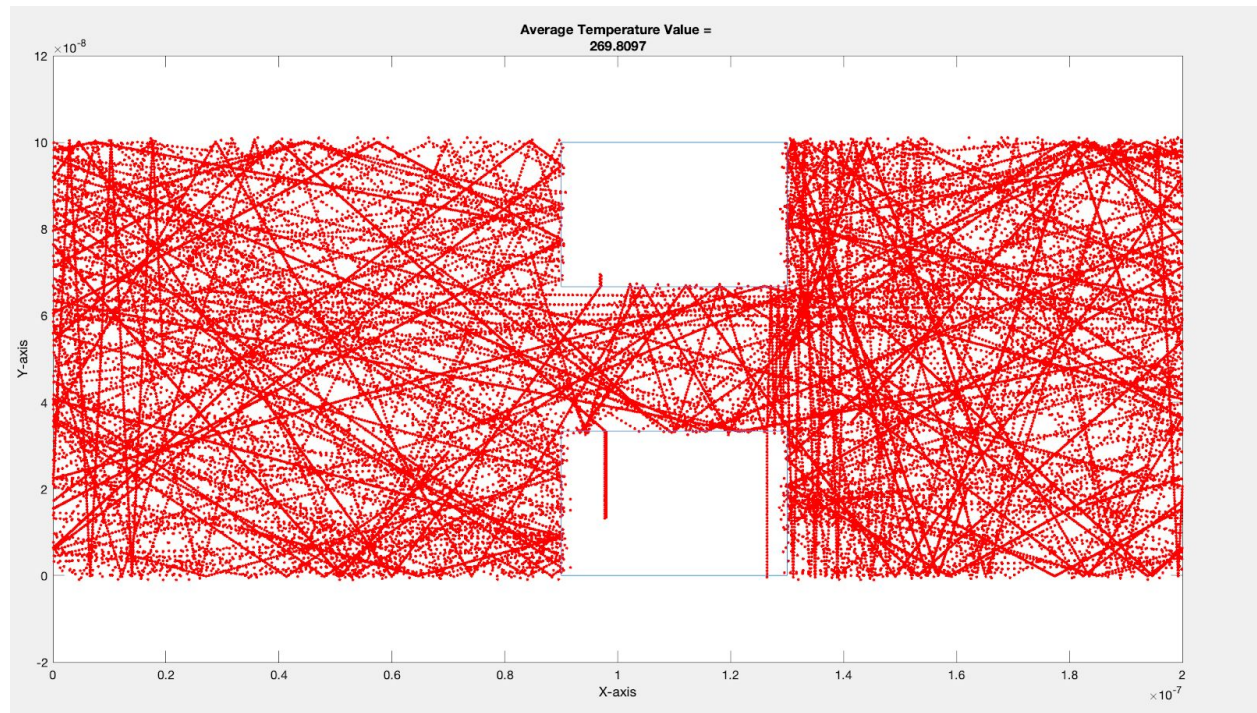


Figure 5. Particle Trajectories with bottle neck

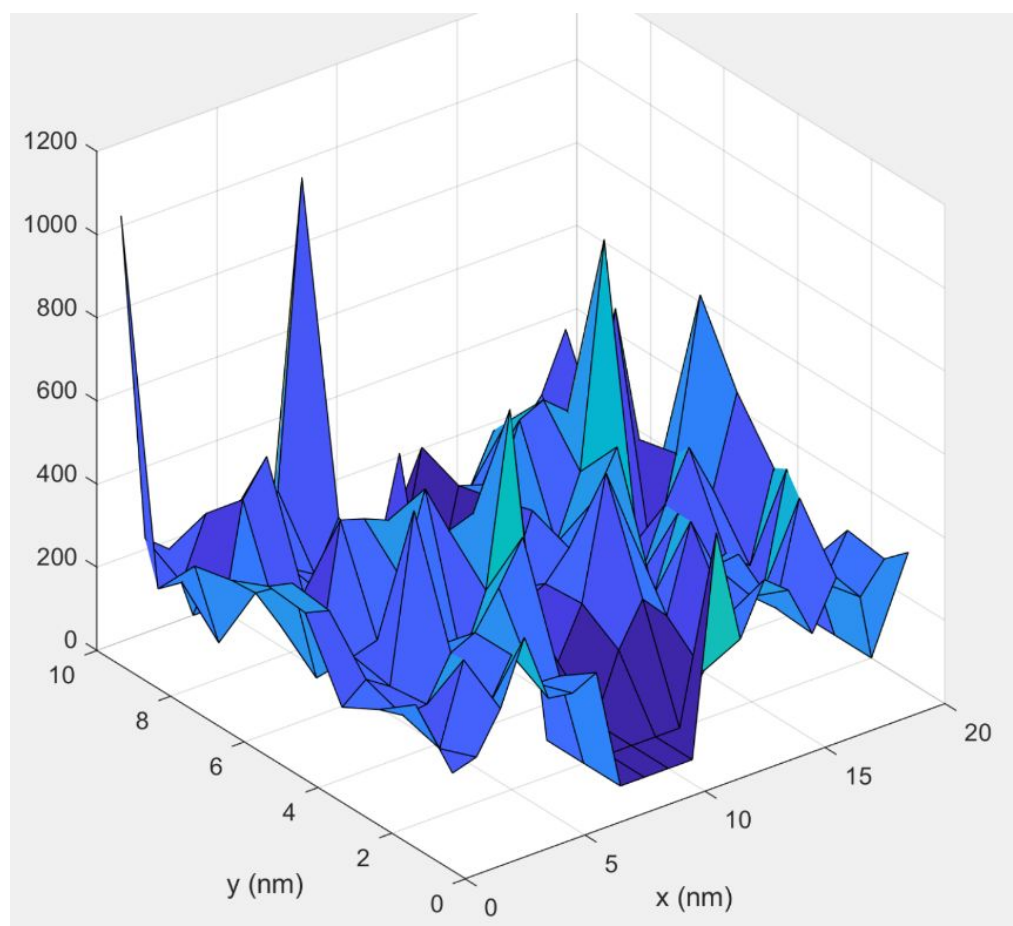


Figure 6. Temperature Map