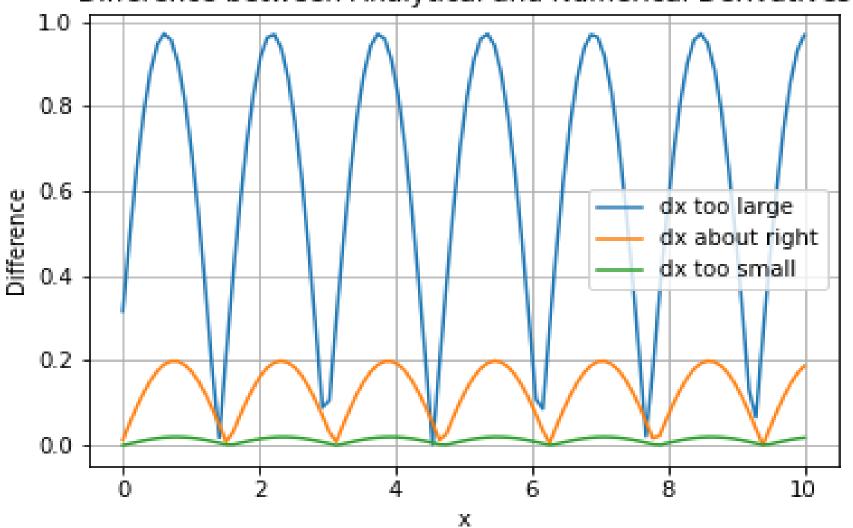
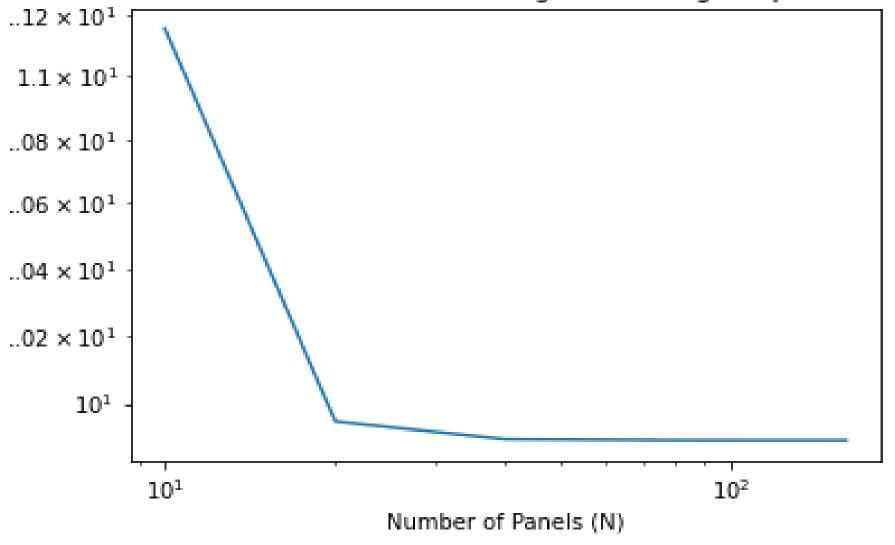


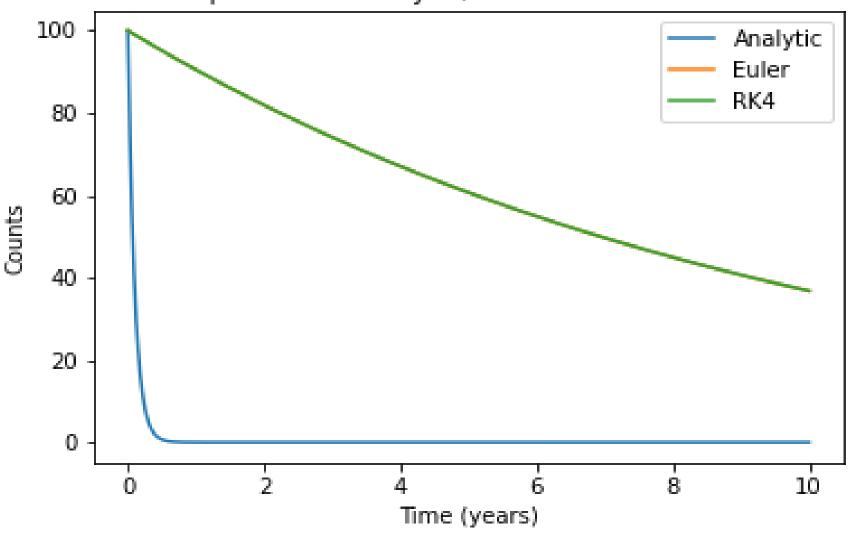
Difference between Analytical and Numerical Derivatives



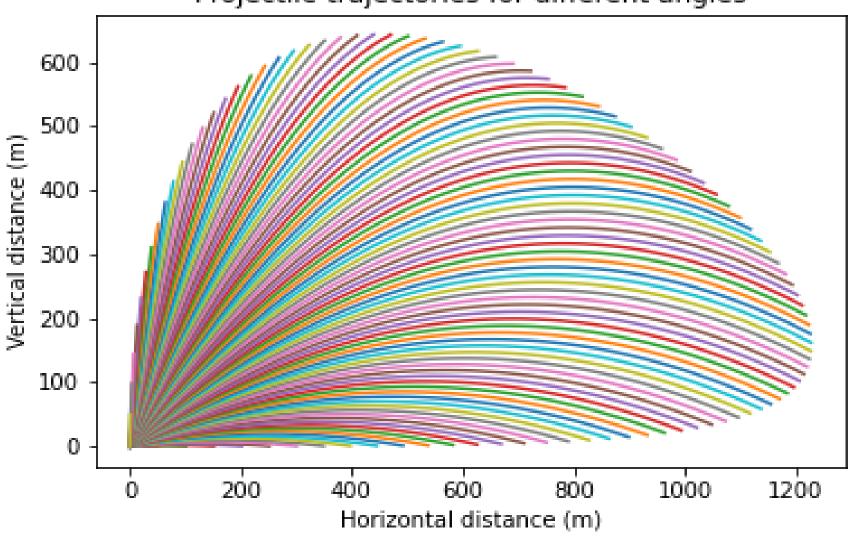
Fractional Error in Numerical Integration using Simpson's Rule



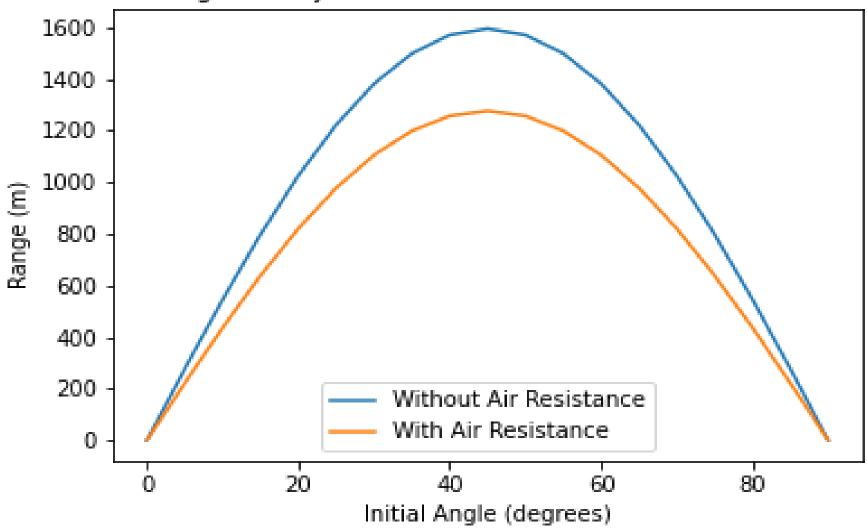
Comparison of Analytic, Euler and RK4 Methods



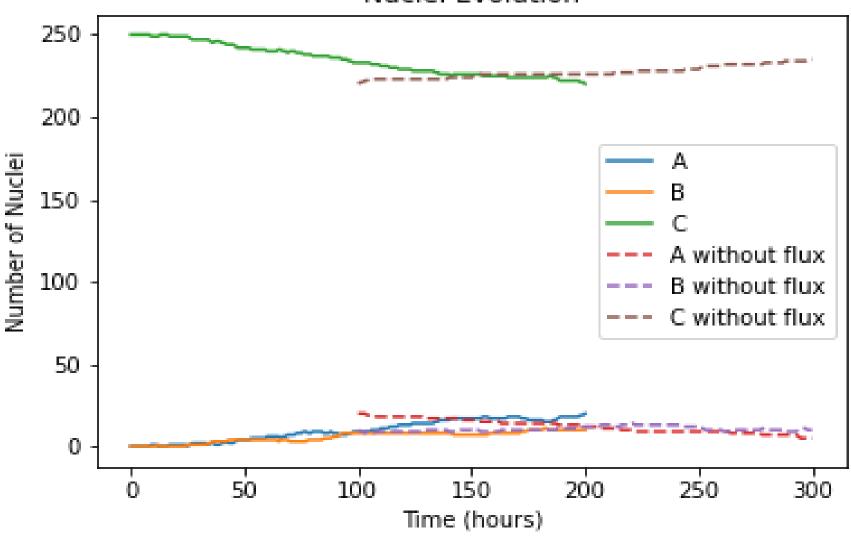
Projectile trajectories for different angles



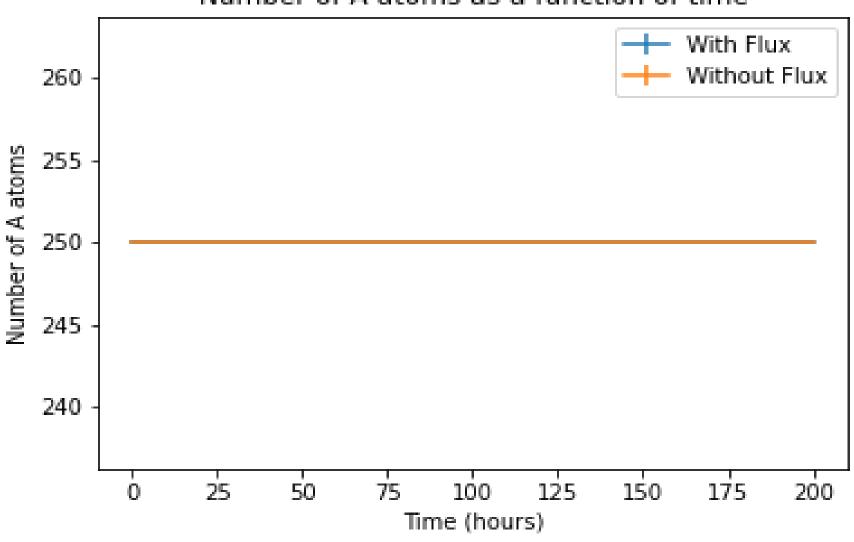
Range of Projectile with and without Air Resistance



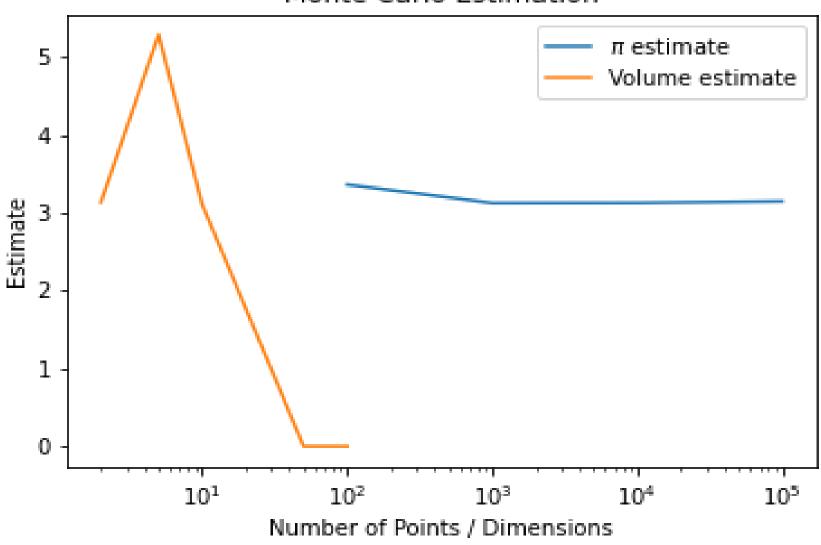




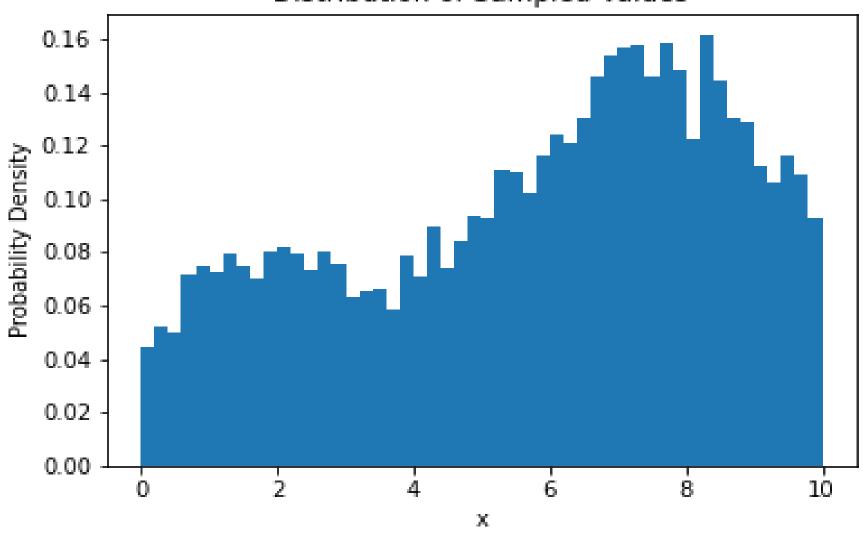
Number of A atoms as a function of time



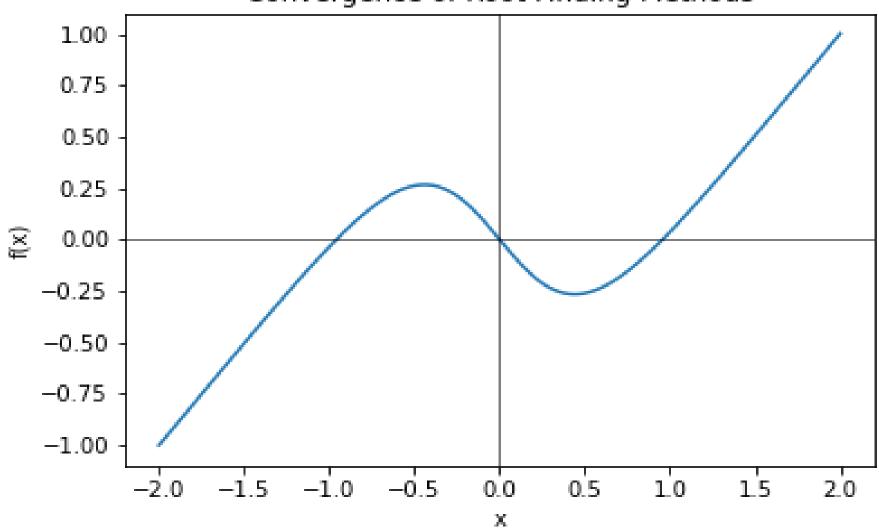
Monte Carlo Estimation



Distribution of Sampled Values



Convergence of Root Finding Methods



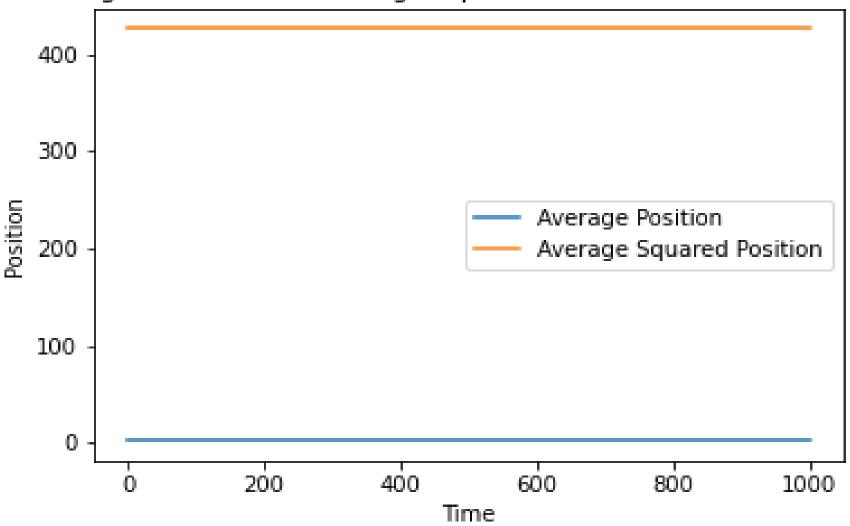
Gradient Descent Optimization on Banana Function le177 Global Minimum 720 - 630 5 - 540 - 450 - 450 - 360 - 8anana Function Value 4 > 3 2 - 180 1 - 90 5 3 ż 6

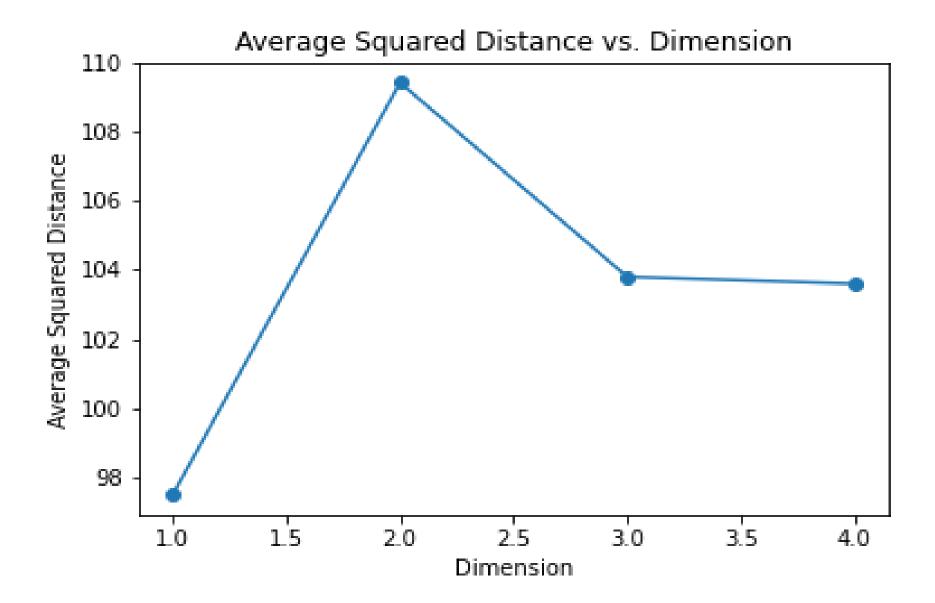
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Average Position and Average Squared Position of 100 1D Walkers





Diffusion of 1000 Walkers in a 2D Square 40 Final Position Initial Position 30 20 10 Χ

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