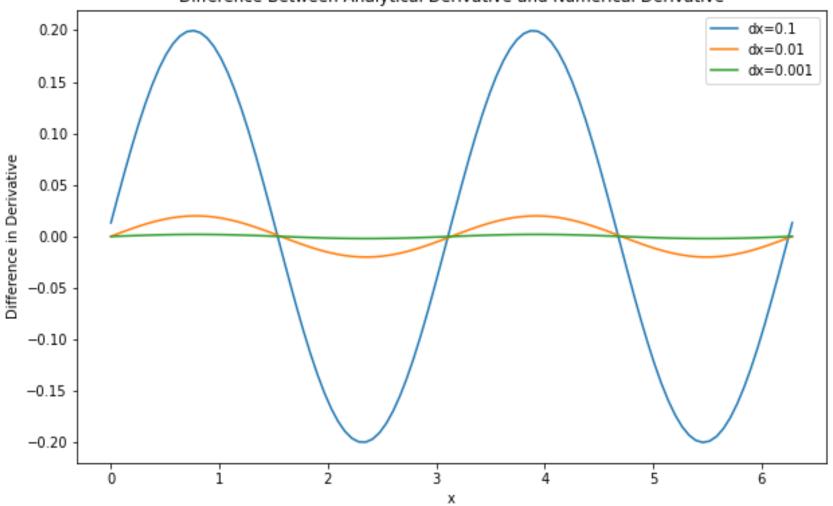
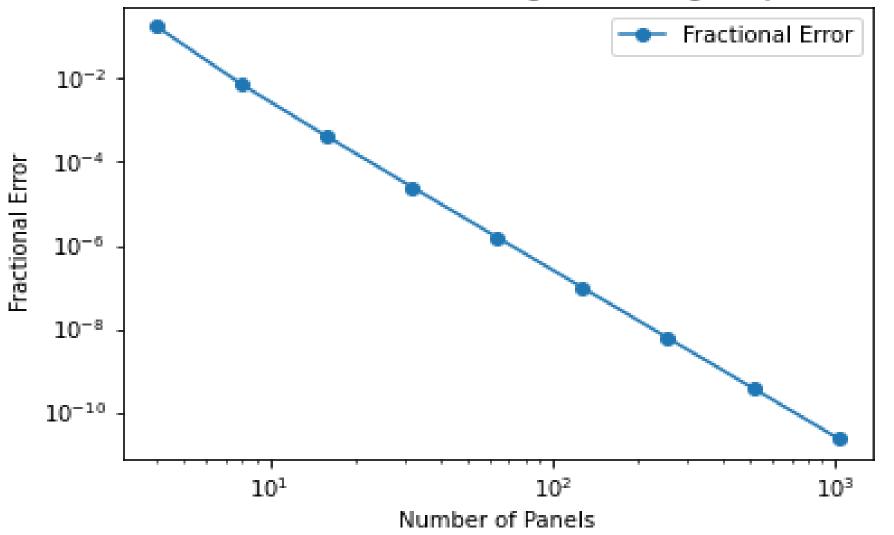
# 

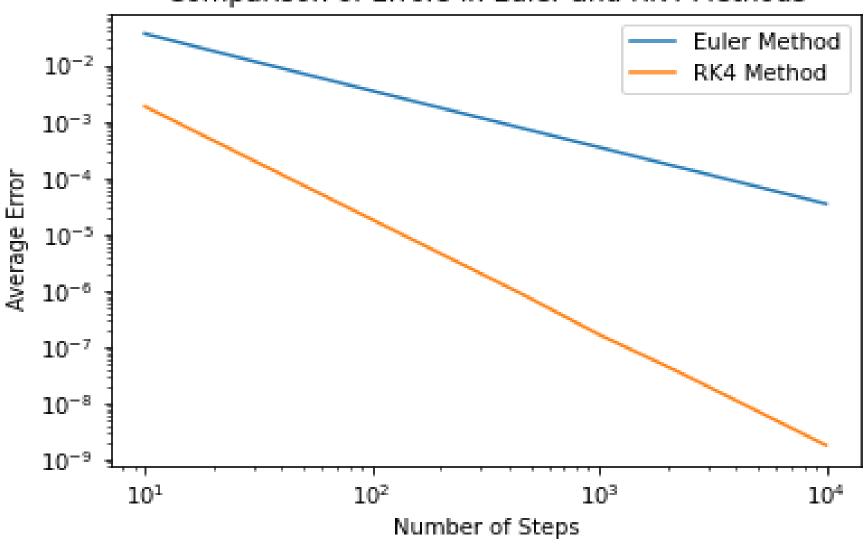
#### Difference Between Analytical Derivative and Numerical Derivative



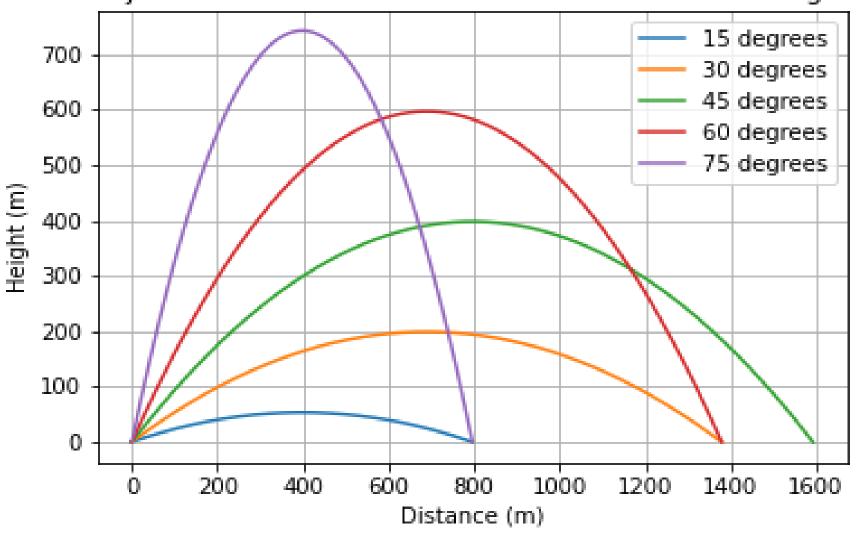
#### Fractional Error in Numerical Integration using Simpson's Rule



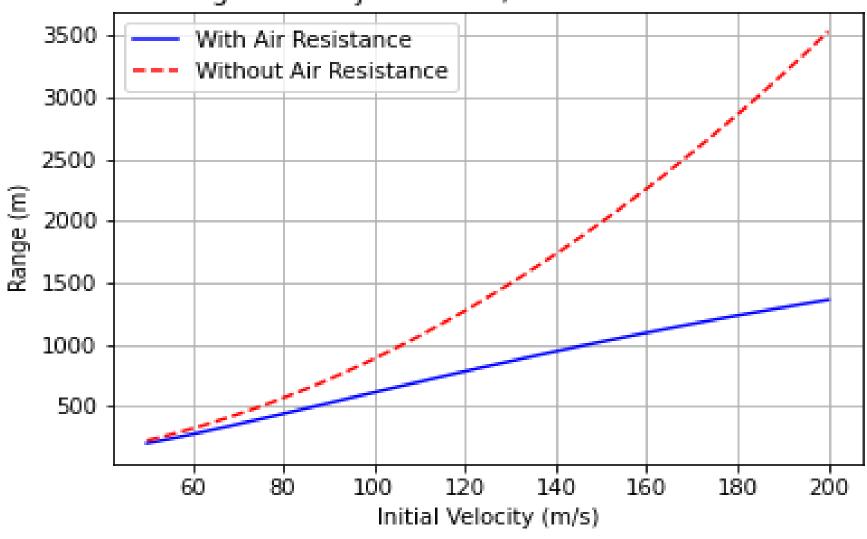
#### Comparison of Errors in Euler and RK4 Methods



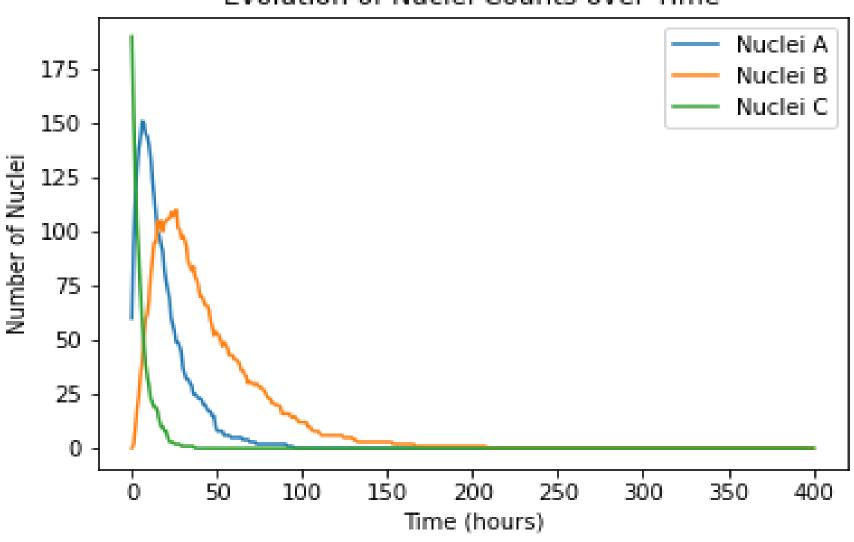
### Projectile motion of a cannonball for various initial angles



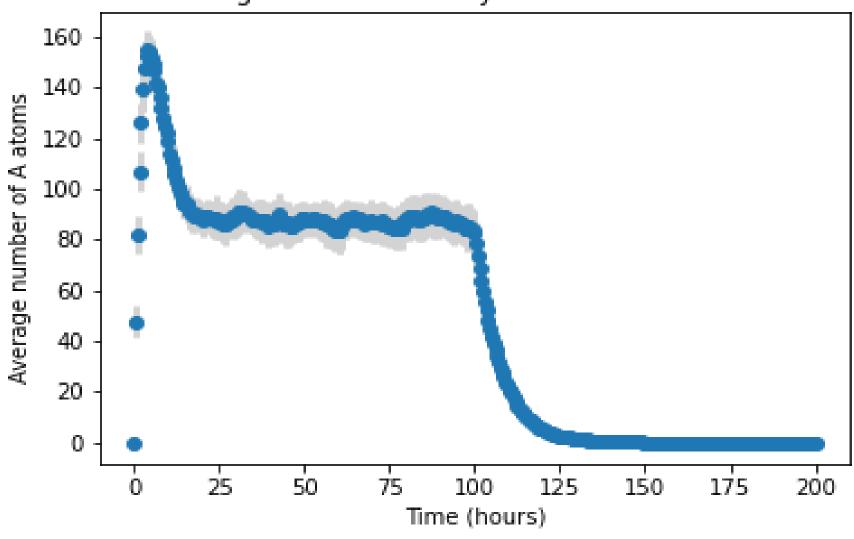
#### Range of a Projectile with/without Air Resistance



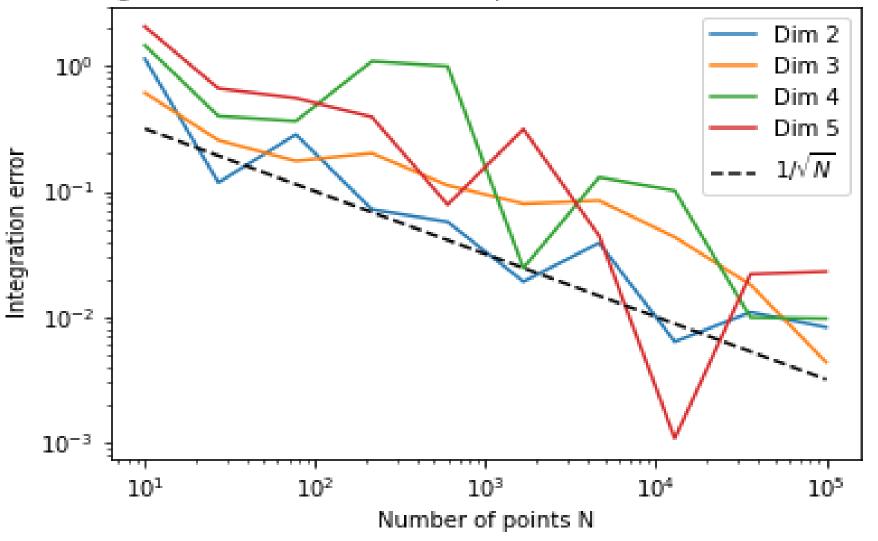
#### Evolution of Nuclei Counts over Time

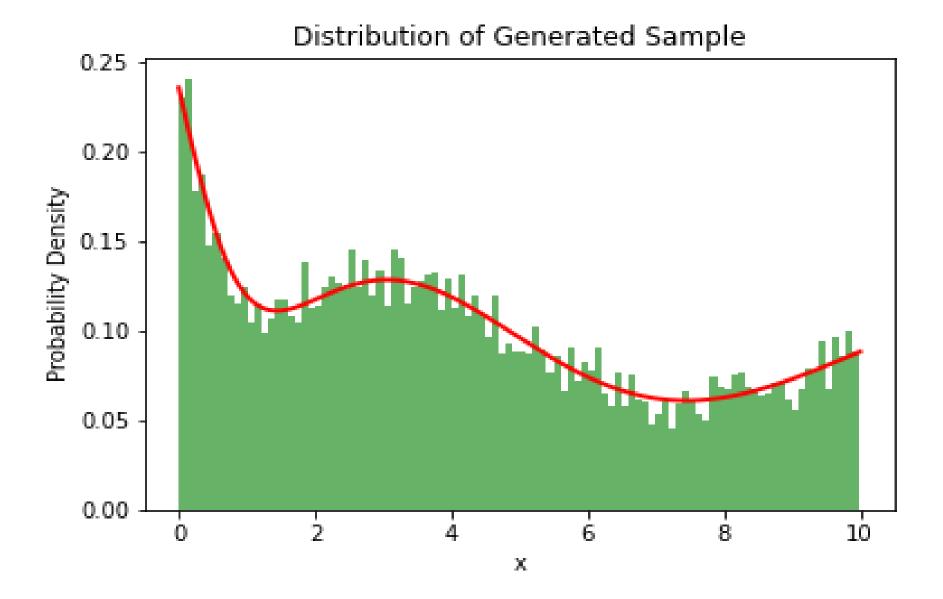


#### Average and Uncertainty of A Atoms over Time

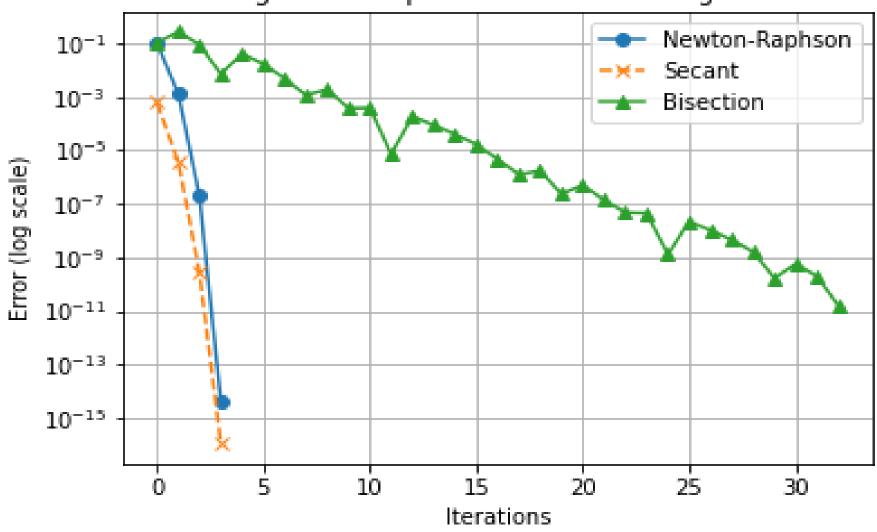


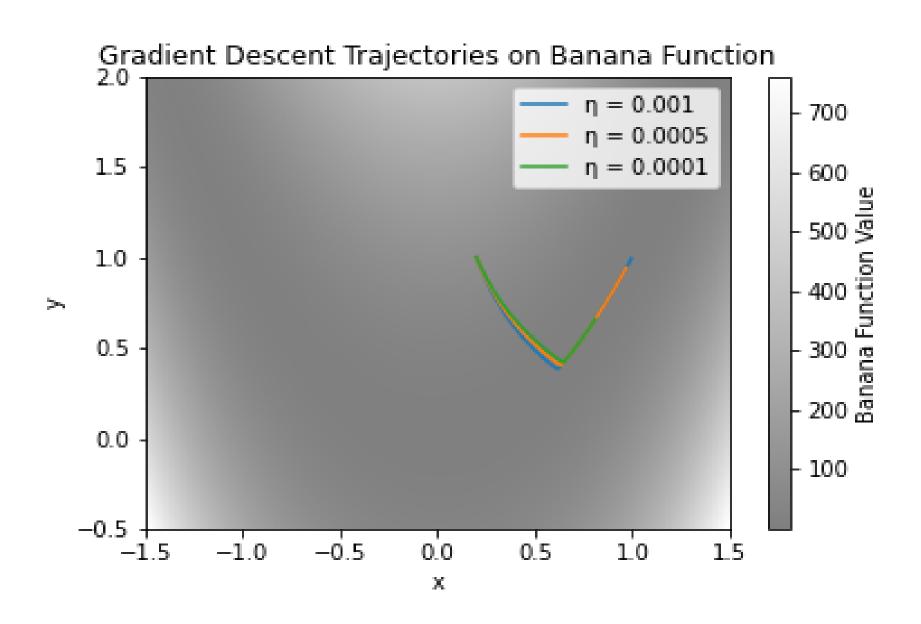
Integration error vs. Number of points for different dimensions





## Convergence Comparison of Root Finding Methods



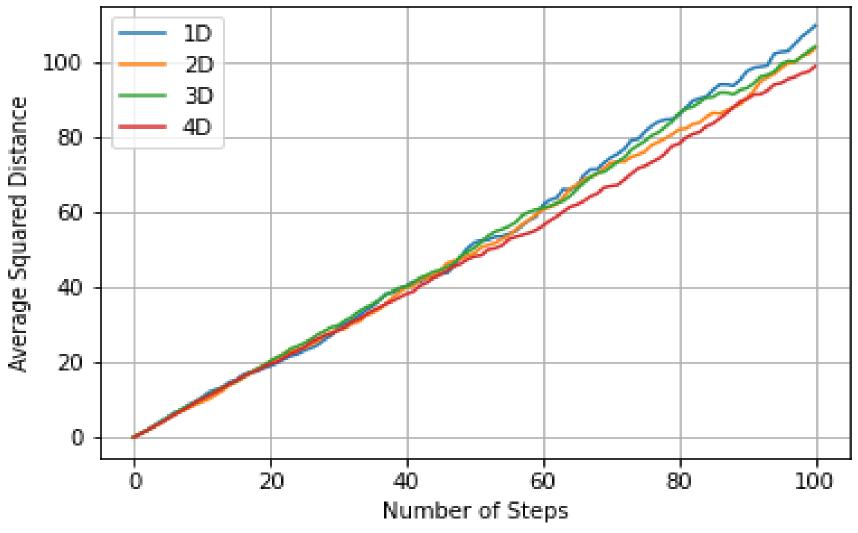


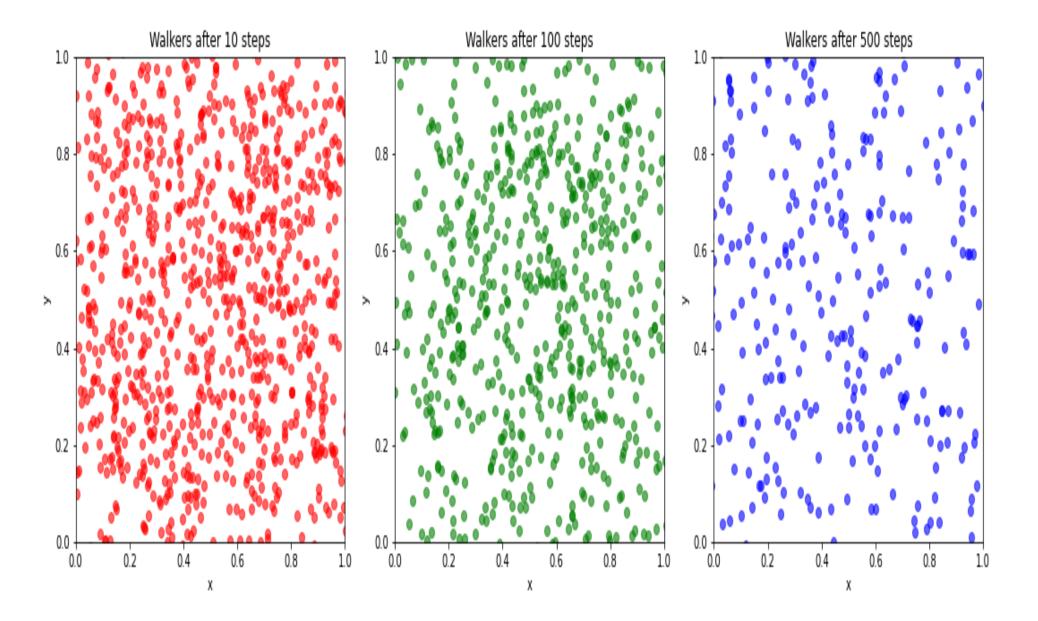
Random Walk: Average Position and Average Squared Position Average Position Average Squared Position Position 0 -

Ó

Step

Average Squared Distance vs. Number of Steps for Different Dimension





# AI?