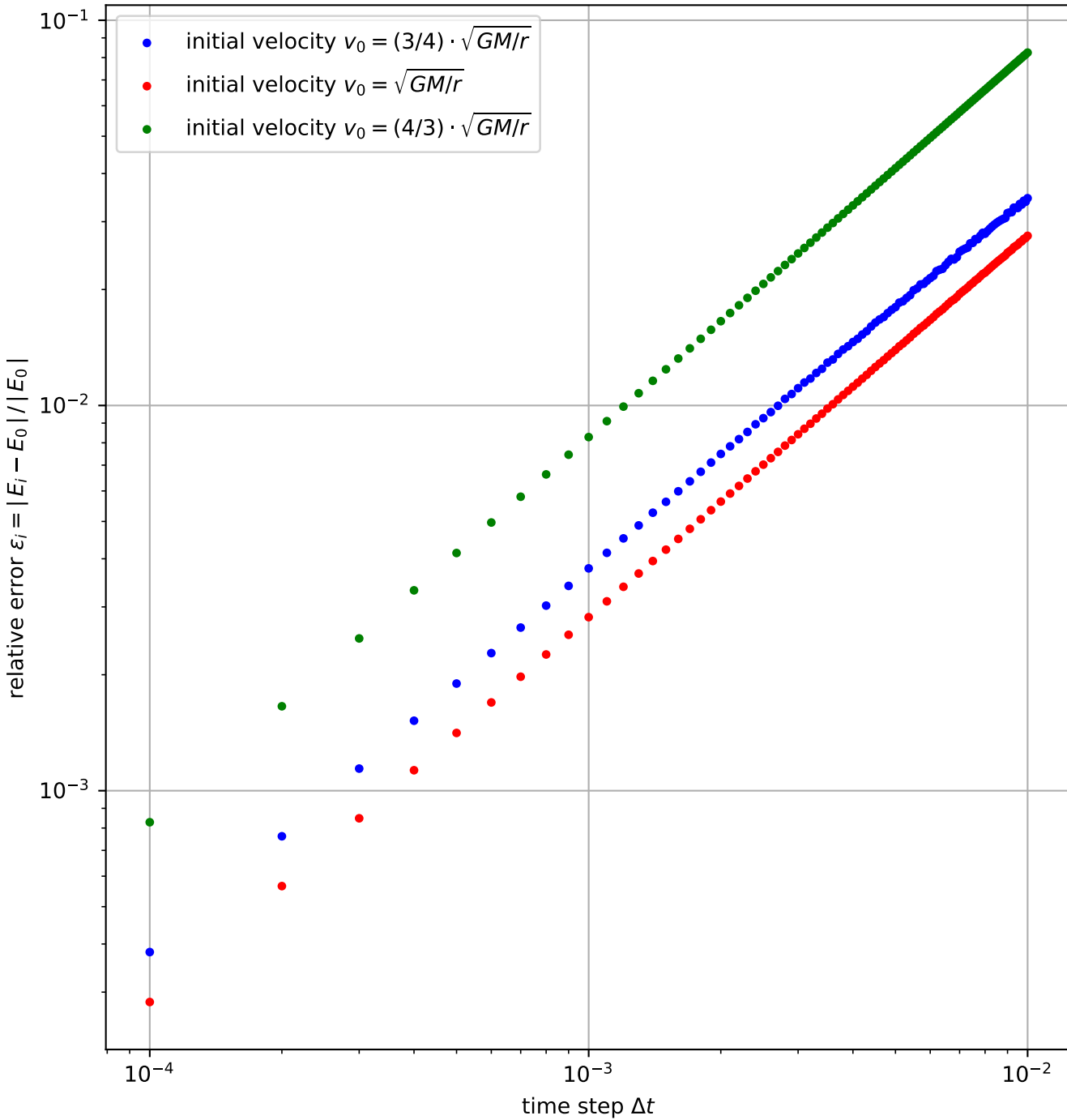


Numerical Simulation of the Two-Body Problem: Error Analysis of the Integration Schemes  
 relative error  $\varepsilon_i = |E_i - E_0| / |E_0|$  in the energy at the end of the second orbit as a function of the time step  $\Delta t$

Error Analysis of the Euler Method



Error Analysis of the Leapfrog Method

