Abstract Submitted for the TSF06 Meeting of The American Physical Society

Computer Simulation of N-Body Interactions CURTIS MCCULLY,

NATHANIEL TROUTMAN, Southern Nazarene University — We set up a model universe consisting of N particles, whose interactions we can specify. With the equations of motion and the Euler-Cromer method to predict the next time step, so far we have simulated the dynamics of the present solar system on a millennial time scale. A work in progress, we have taken steps to create a simulation of Saturnian rings, solar system formation, and other systems.

> Curtis McCully Southern Nazarene University

Date submitted: 21 Sep 2006

Electronic form version 1.4