There are 8 videos in this directory. The number in front of the description corresponds to the name of the video. Each animation was made with PSM.

1. a. Newton 50 Body Problem – 50 equal mass bodies randomly distributed on sphere surface,

angular momentum conserved to 15 digits

b. Newton 50 Body Problem – 50 equal mass bodies randomly distributed on sphere, center

of sphere has a body with mass 10 times of other bodies, angular momentum conserved to

15 digits

2. Advection Diffusion – advection constant (c=1), diffusion changes (left none, right 0.33), backward difference advection derivative

3. Advection Diffusion – advection changes (cL=1, cR=5), diffusion changes (left none, right 0.33), backward difference advection derivative

4. Advection Diffusion – advection constant (c=1), diffusion changes (left none, right 0.33), centered difference advection derivative

5. Advection Diffusion – advection changes (cL=1, cR=5), diffusion changes (left none, right 0.33), centered difference advection derivative

6. 1d Wave Propagation - speed change (cL=1,cR=2)

7. 2d Wave Propagation - speed change (vertical interface (cL=1,cR=2)