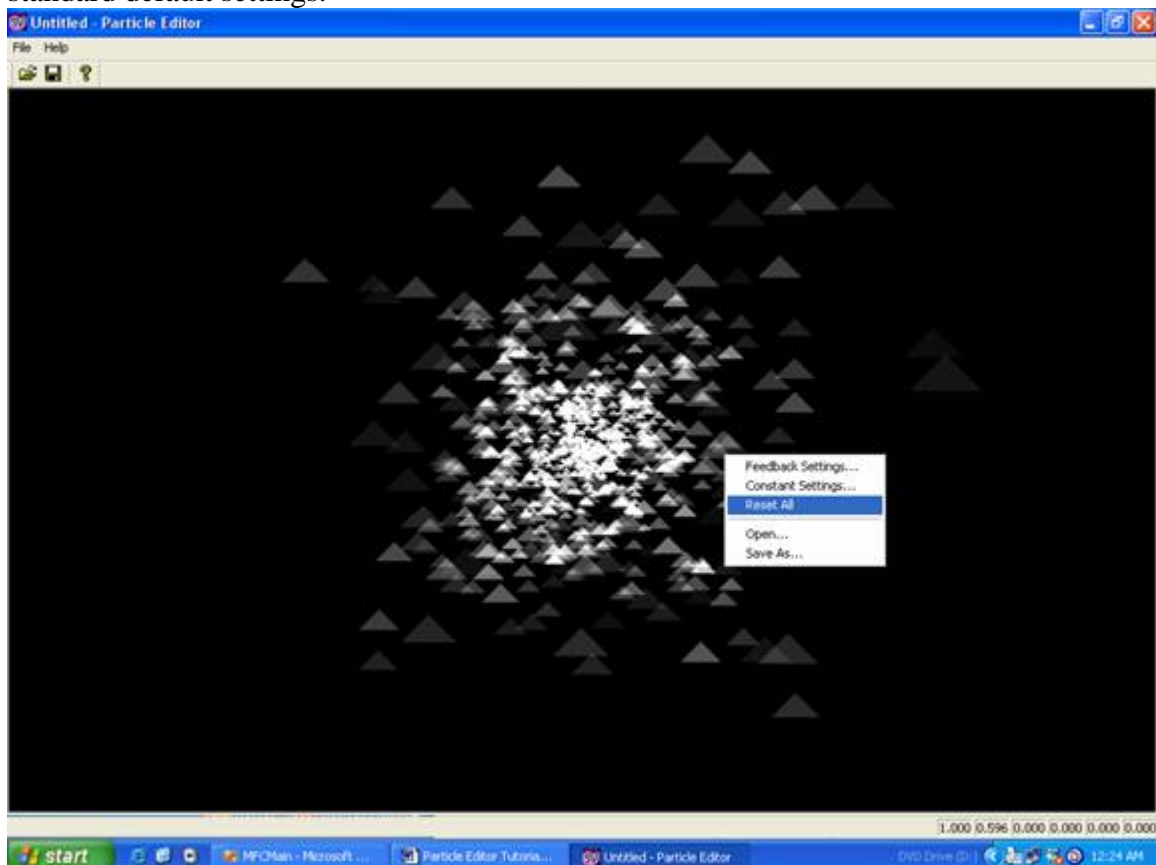


Particle Editor 2 - Tutorial

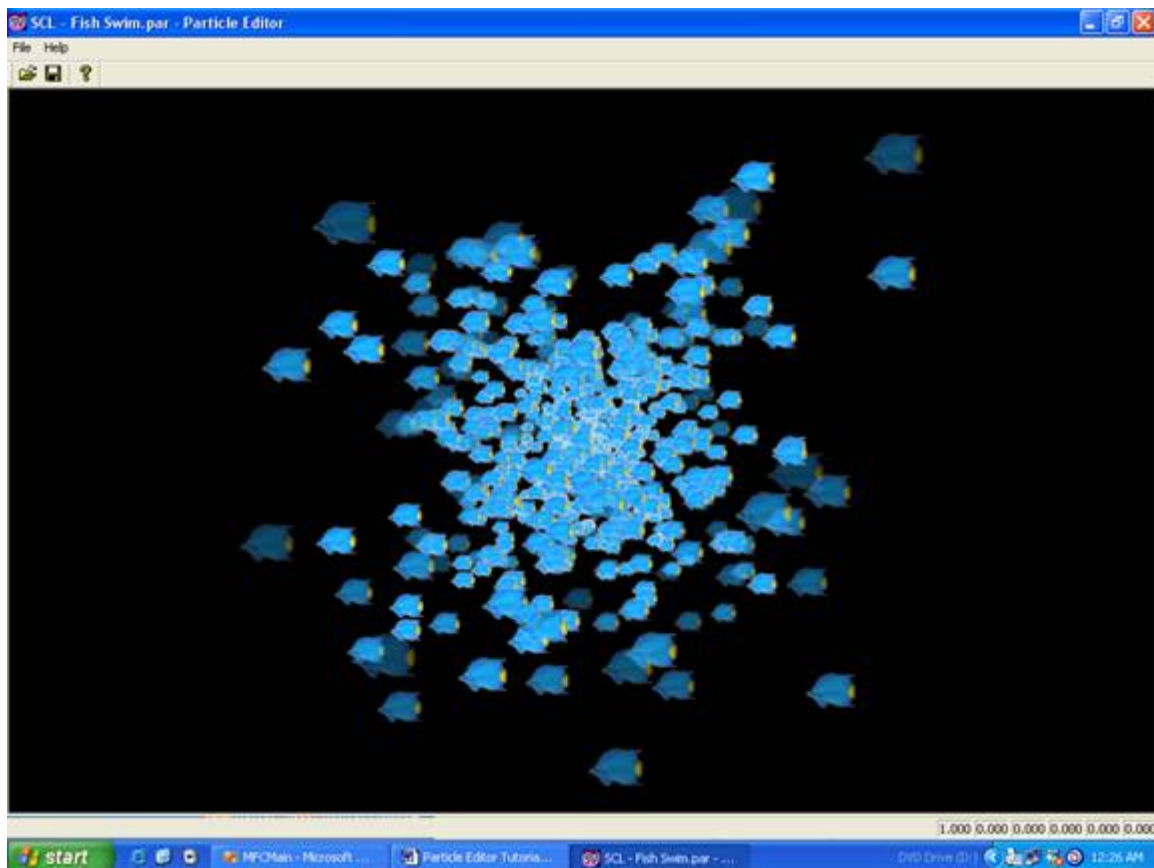
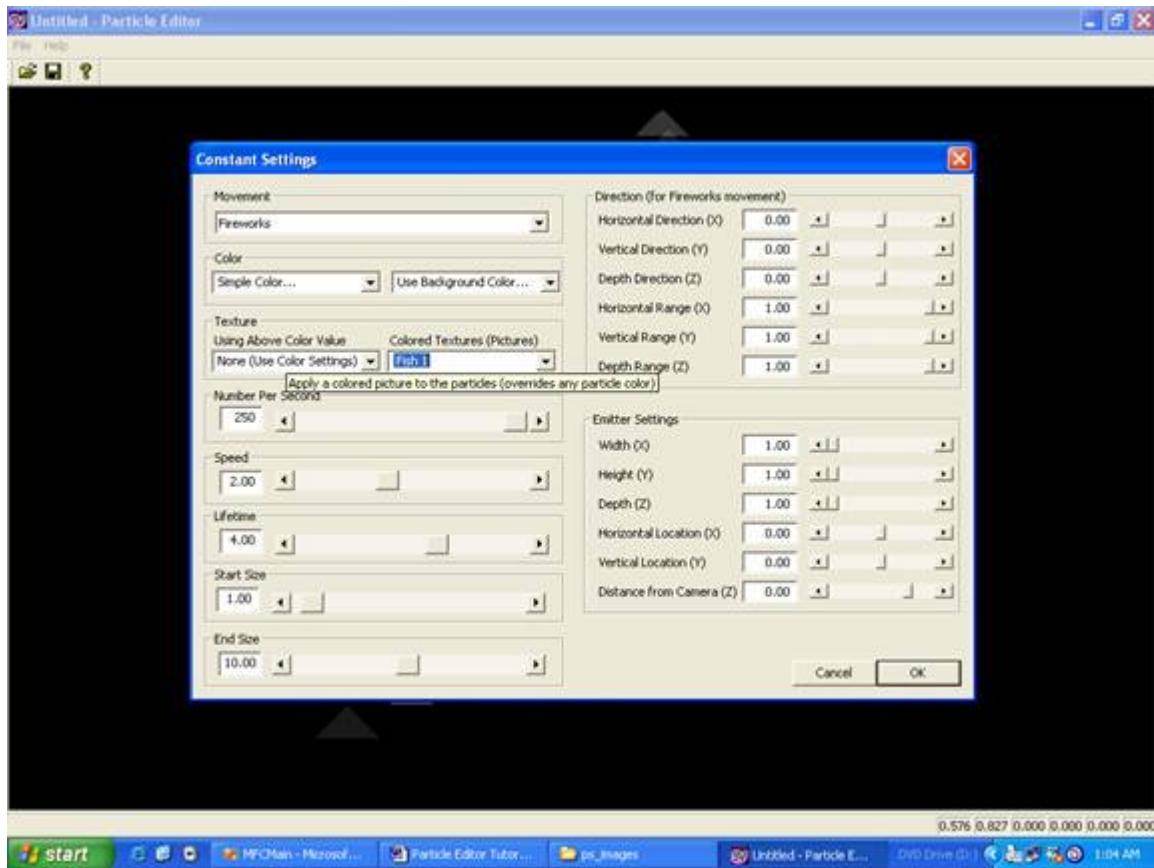
- How to create own Biofeedbackmodules -

Goal 1: Create a representation where fish swim from one side of the screen to the other when the user relaxes.

1 – Open the Particle Editor program. Right click on the main animation area, and the left click on “Reset All”. This will reset the particle system attributes to the minimum standard default settings.

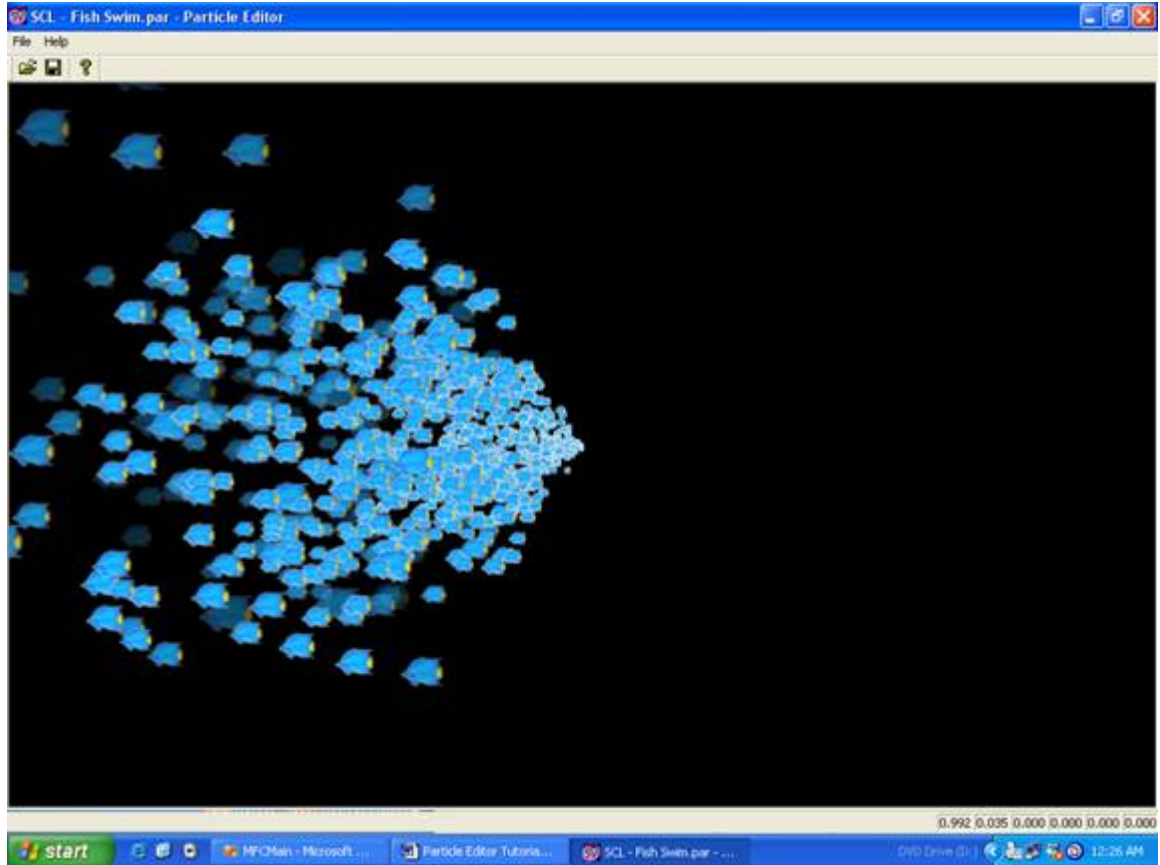
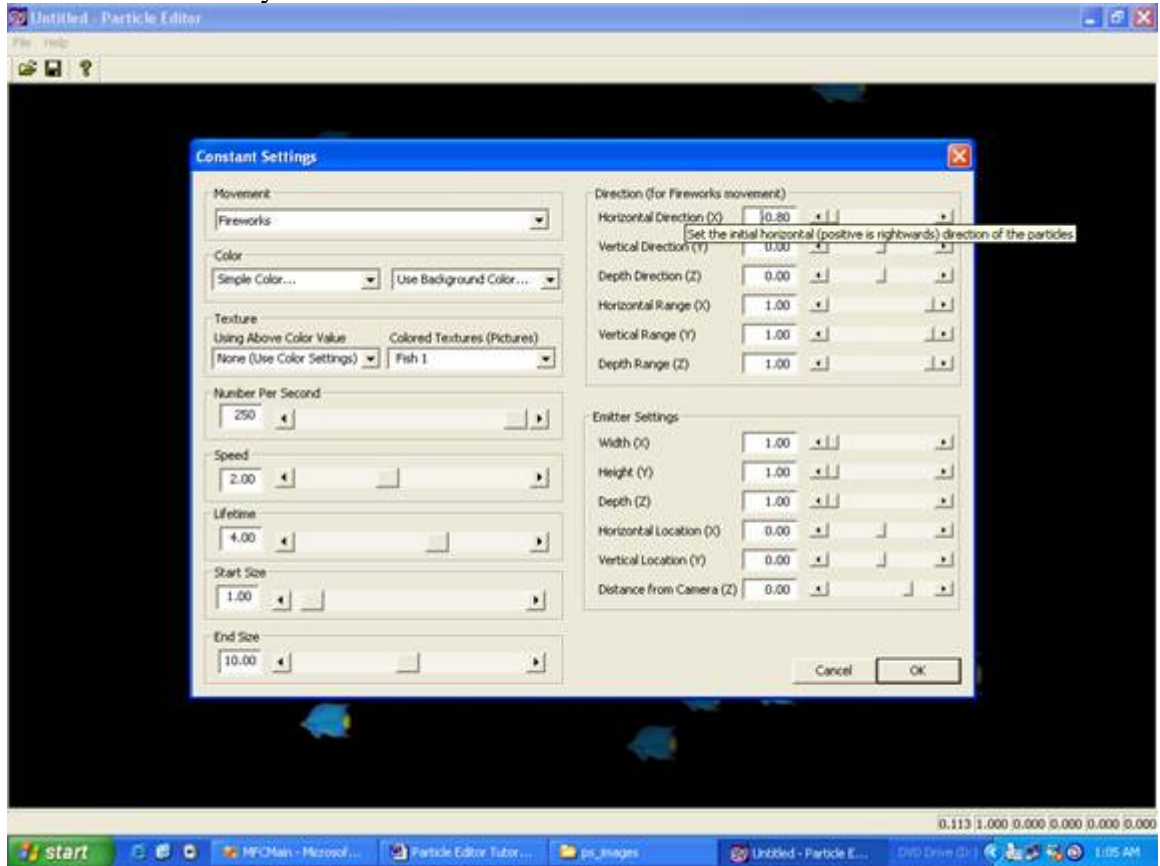


2 – Right click on the main animation area, and then left click on “Constant Settings” to open the constant settings dialog box. Under the “Colored Textures” drop-down, choose “Fish 1”.



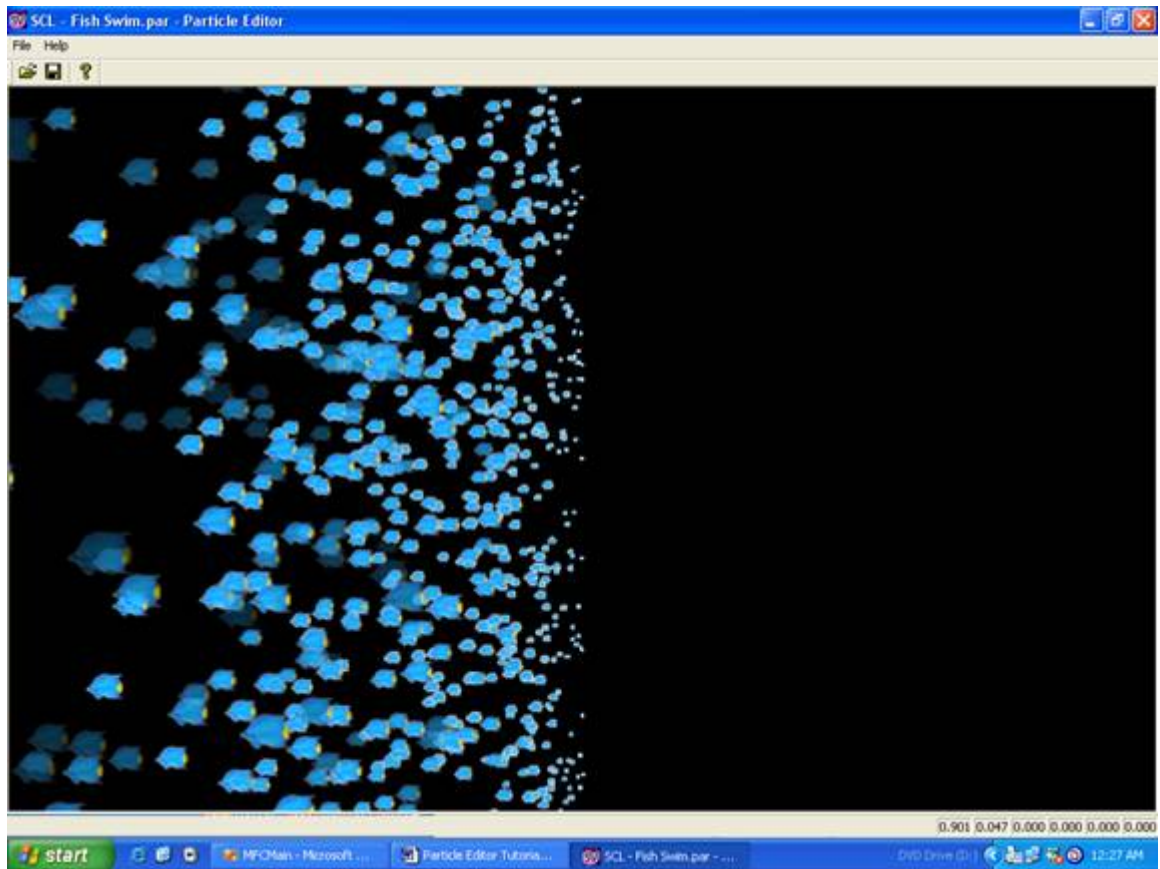
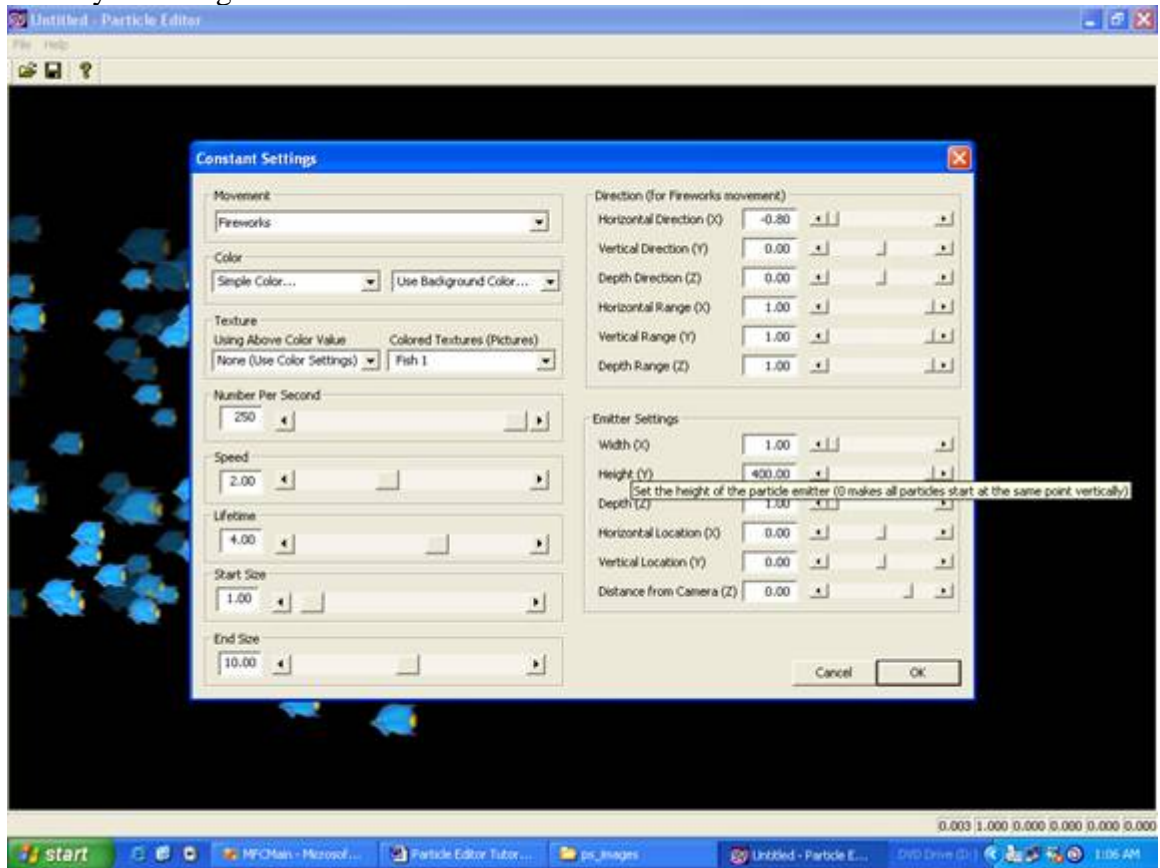
the triangles have been replaced by fish

3 – Change the “Horizontal Direction” to -0.80 by dragging the horizontal direction slider bar all the way to the left.



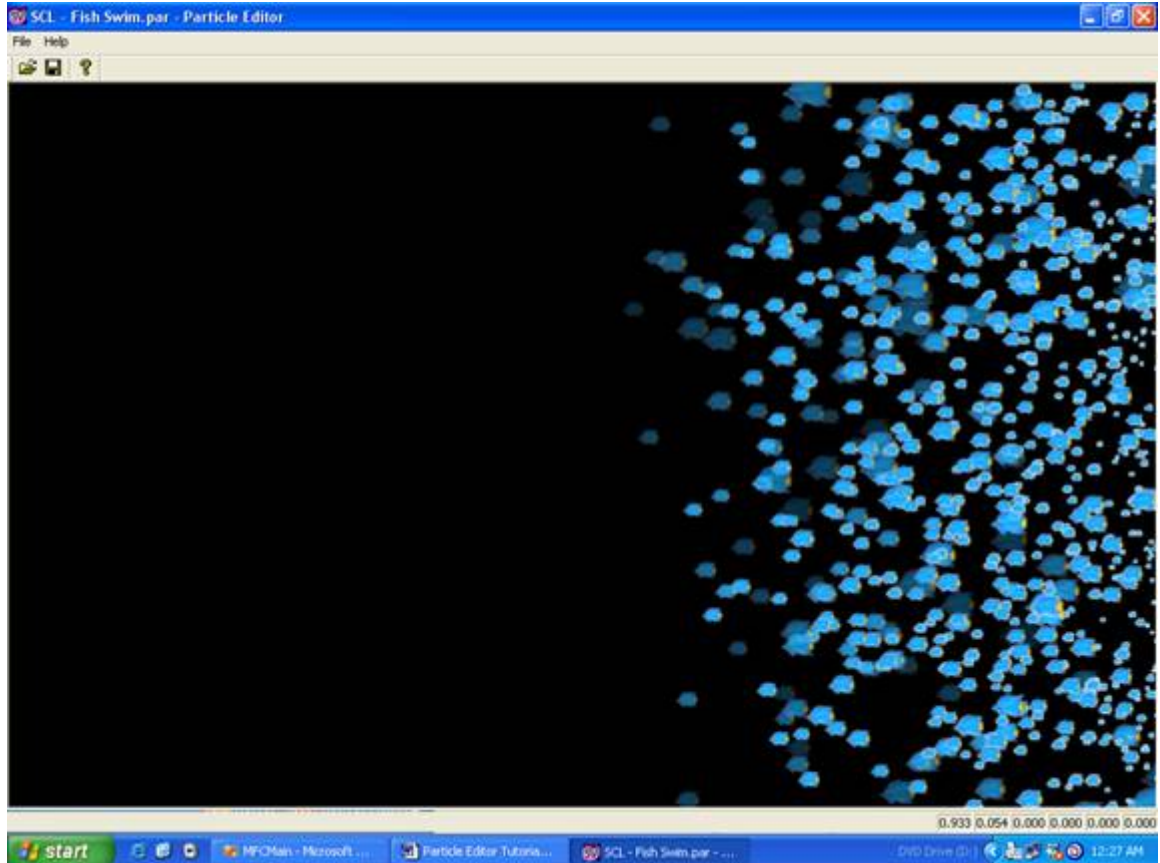
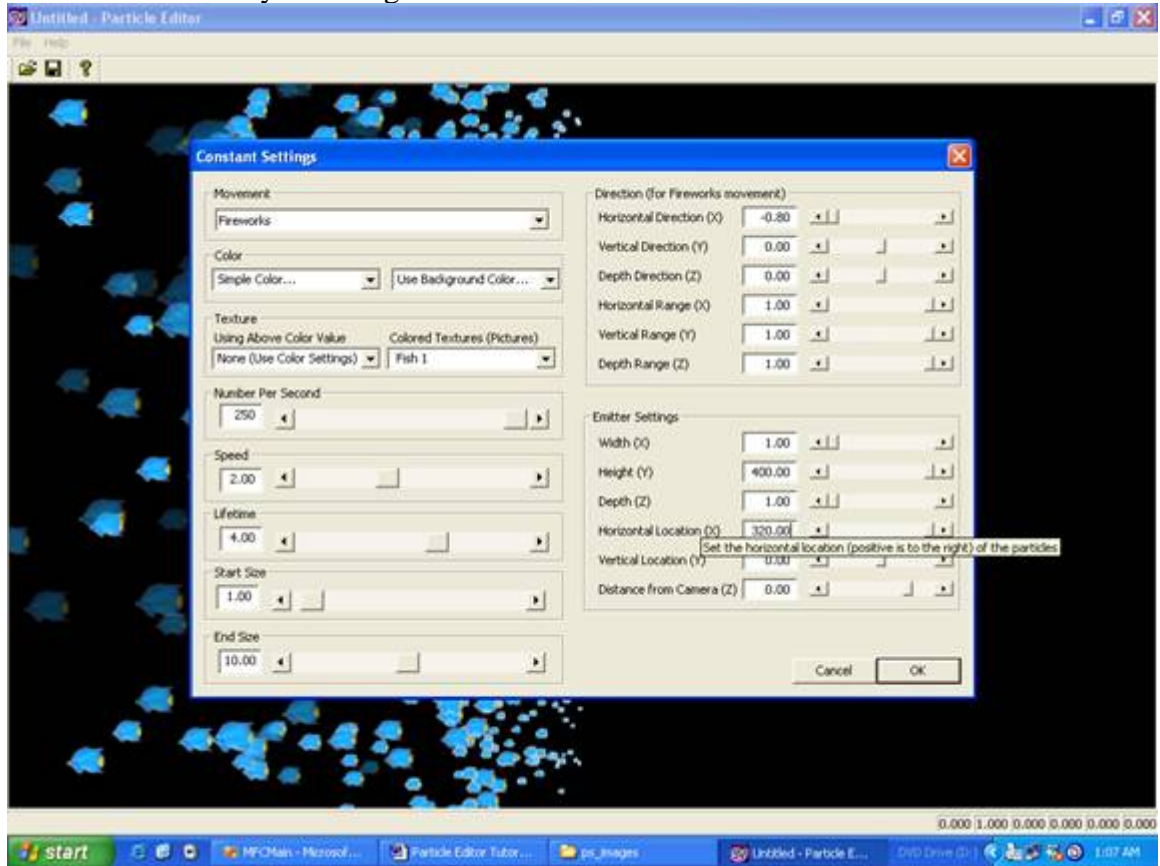
the fish now swim leftwards

4 – Change the “Emitter Height” to 400.0 by dragging the emitter height slider bar all the way to the right.



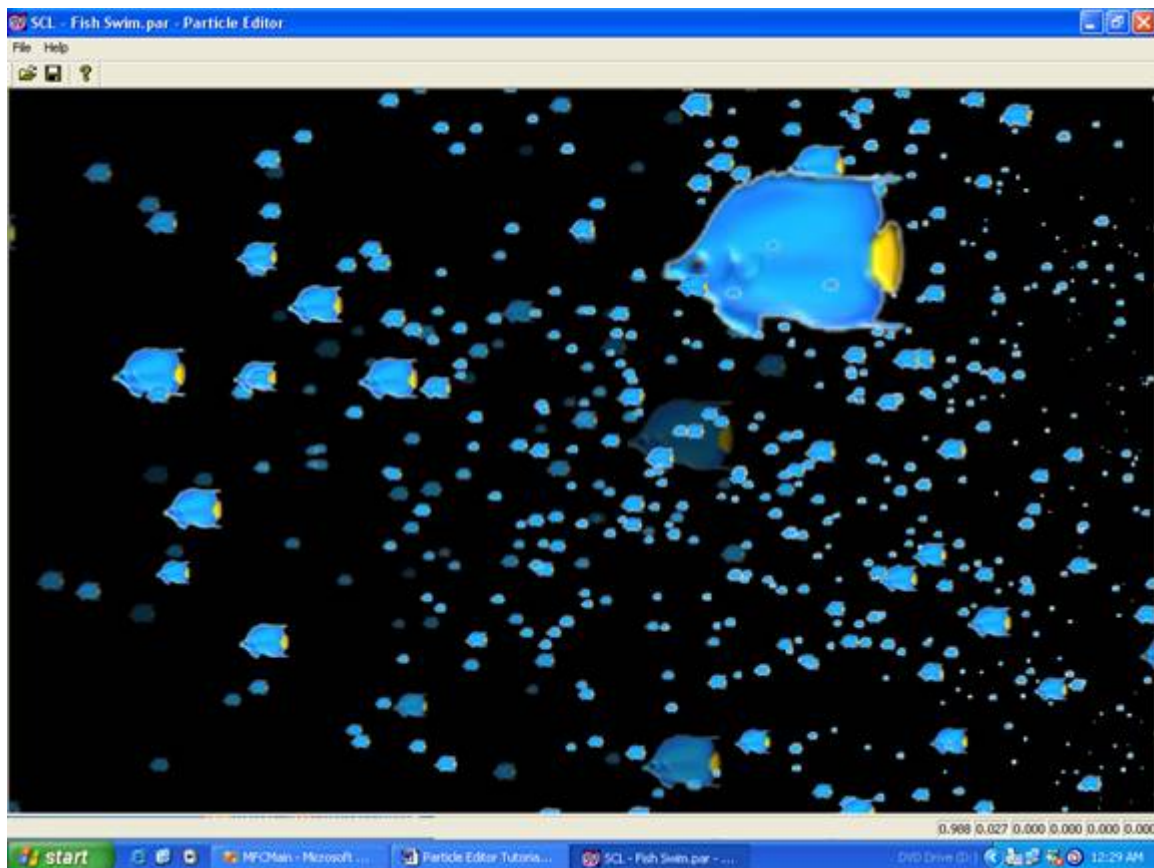
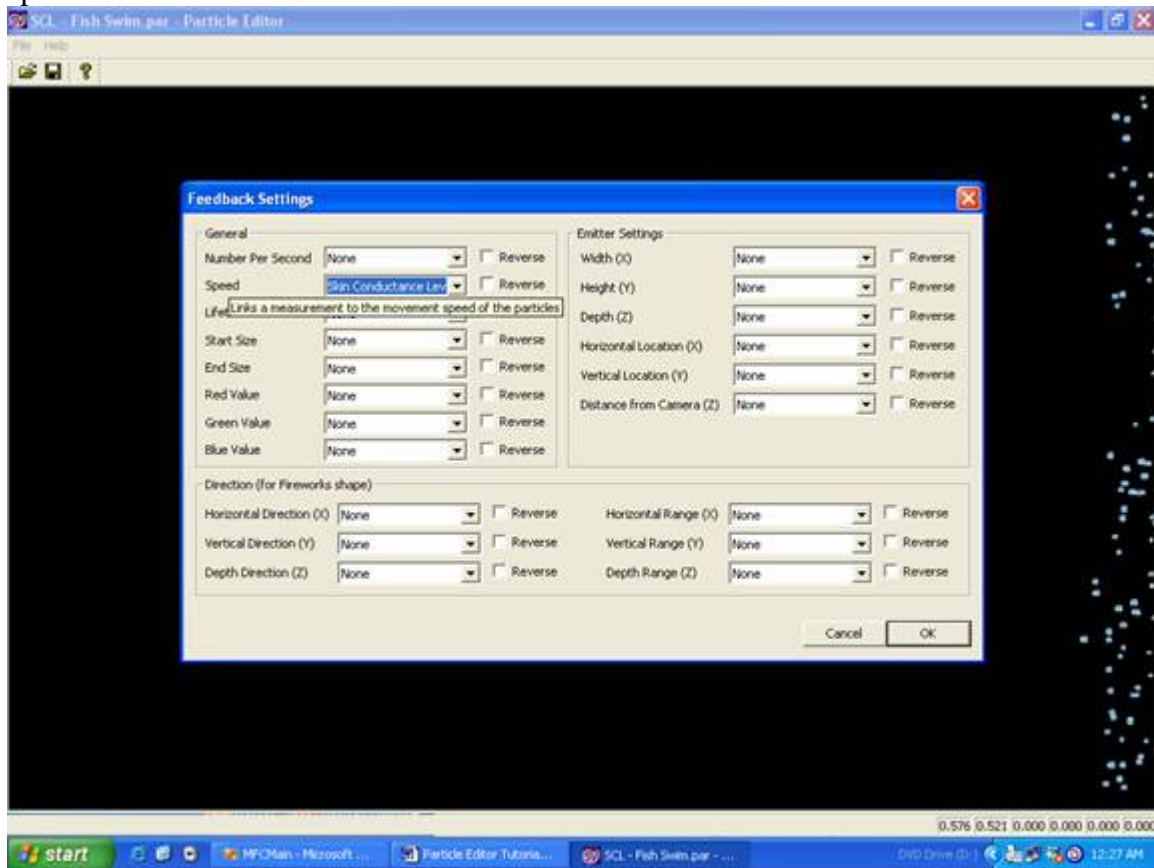
the fish appear from a tall vertical line instead of a point

5 – Change the “Emitter Horizontal Location” to 320.0 by dragging the emitter height slider bar all the way to the right.



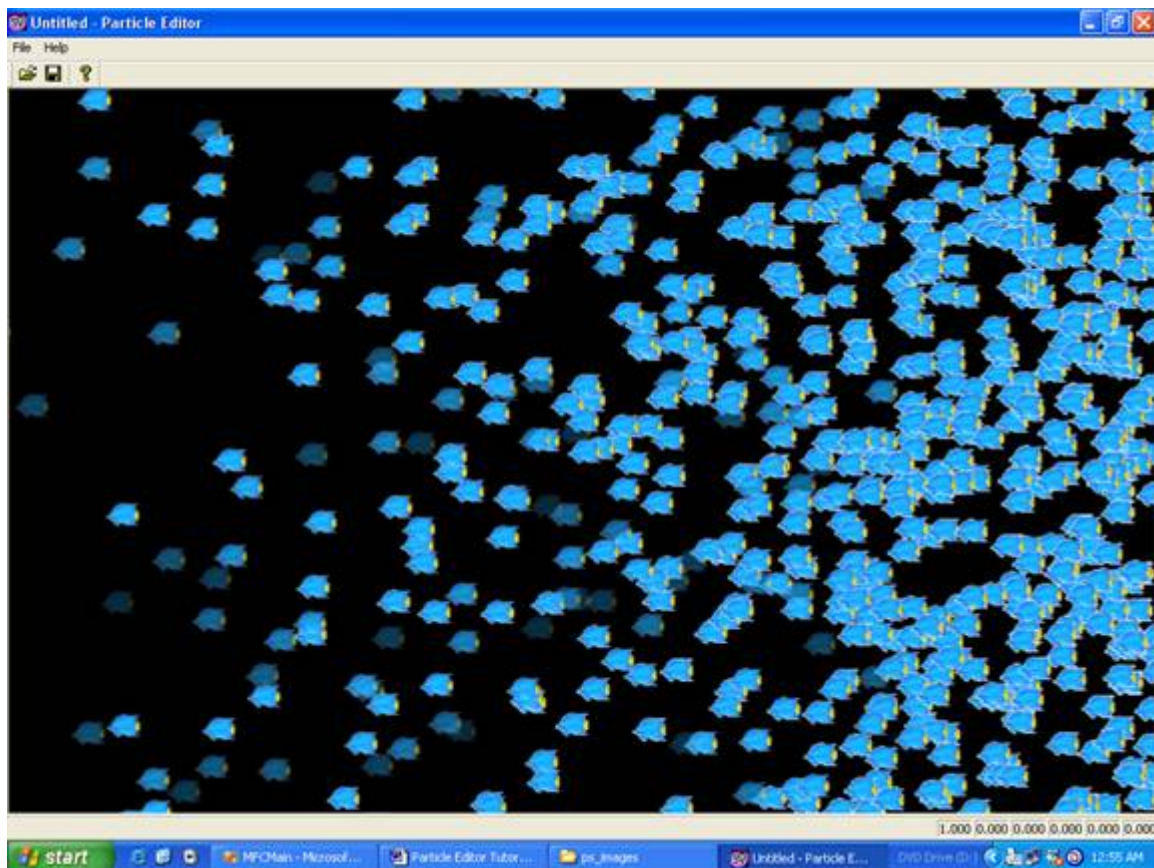
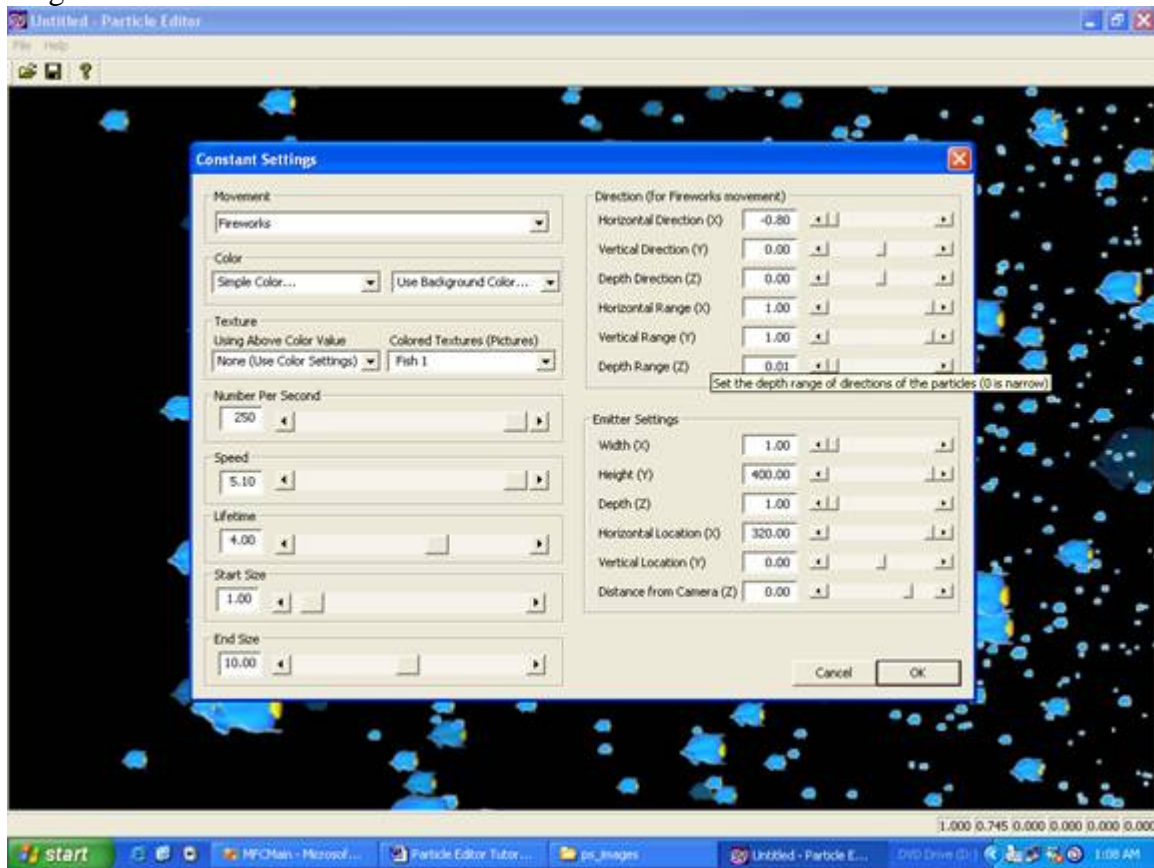
the fish start at the right side of the screen

6 – Close this dialog box by clicking “OK” and open the “feedback settings” dialog box by right clicking on the main display area, and left clicking “feedback settings”. Set the speed to be linked to the skin conductance level.



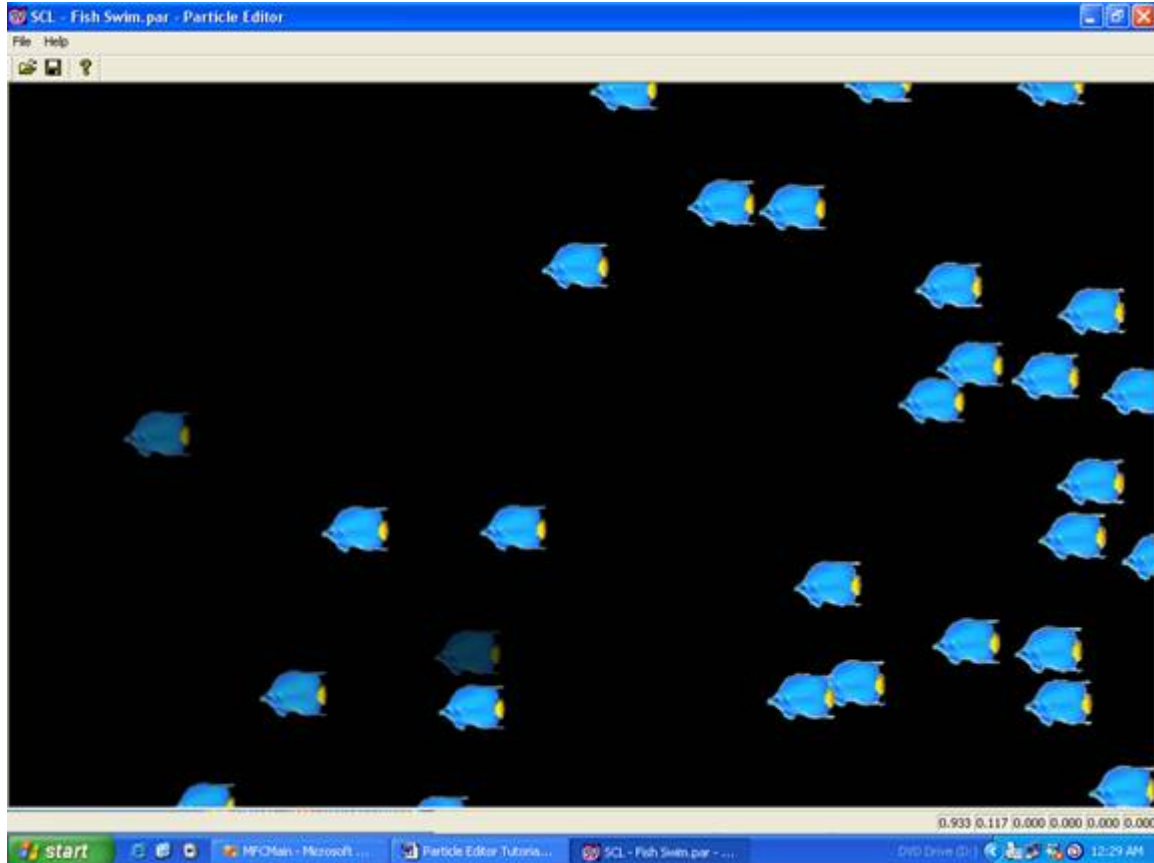
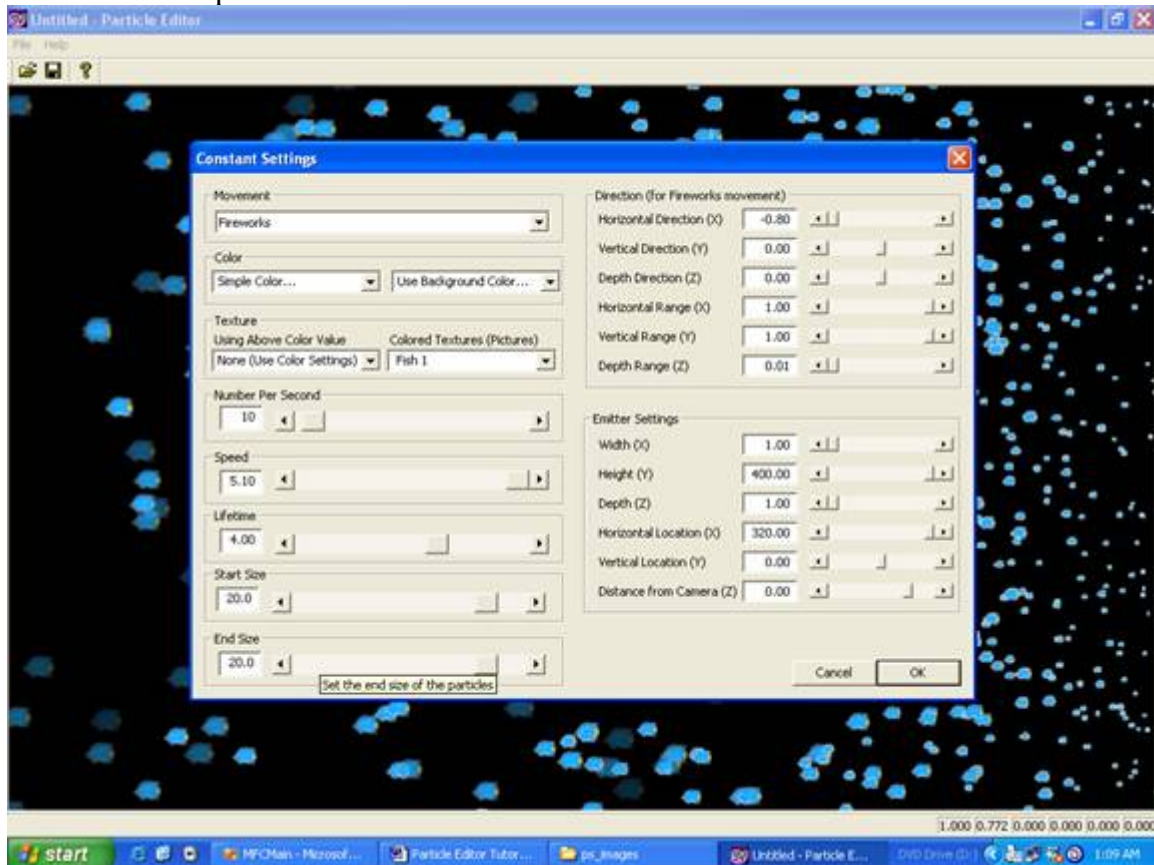
the fish swim faster when the user relaxes
(so they get farther across the screen before disappearing)

7 – We want the fish to swim left, but not shoot towards and away from us, so we need to decrease the depth range. Open the “constant settings” dialog box and set the “depth range” to 0.



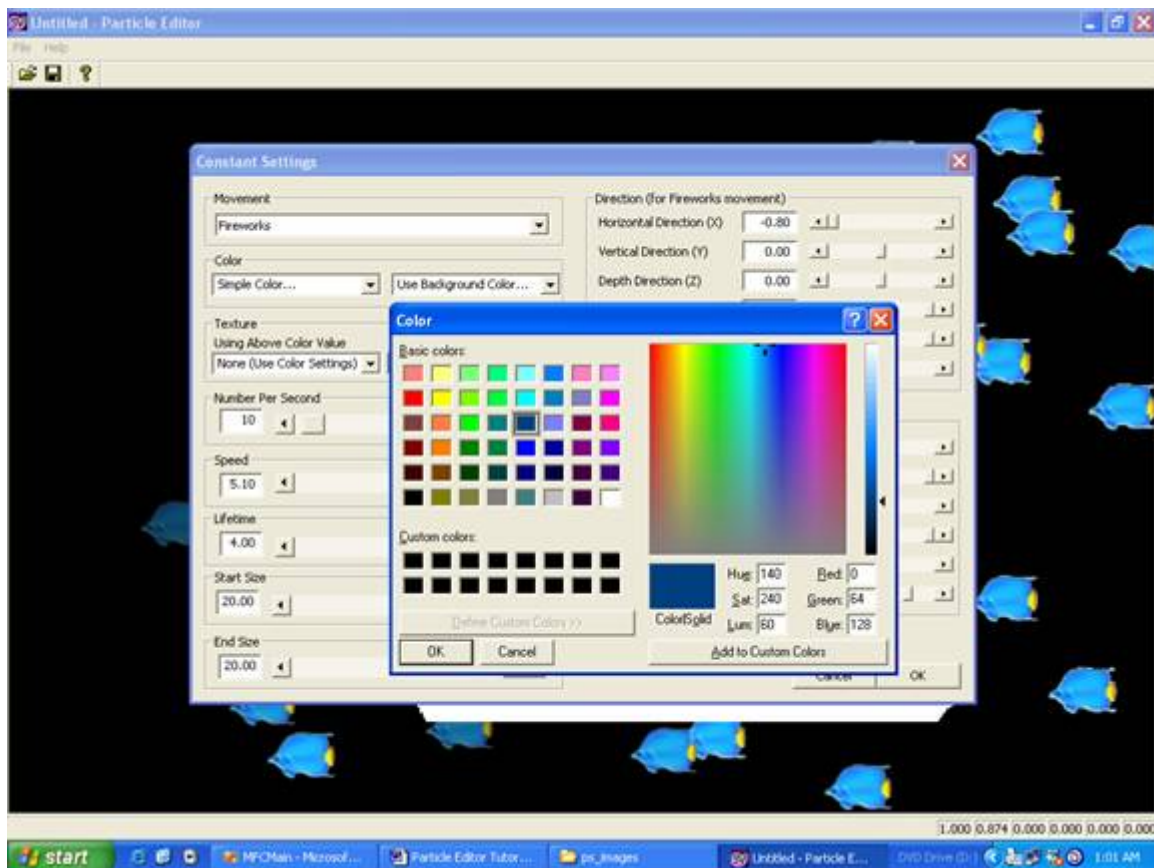
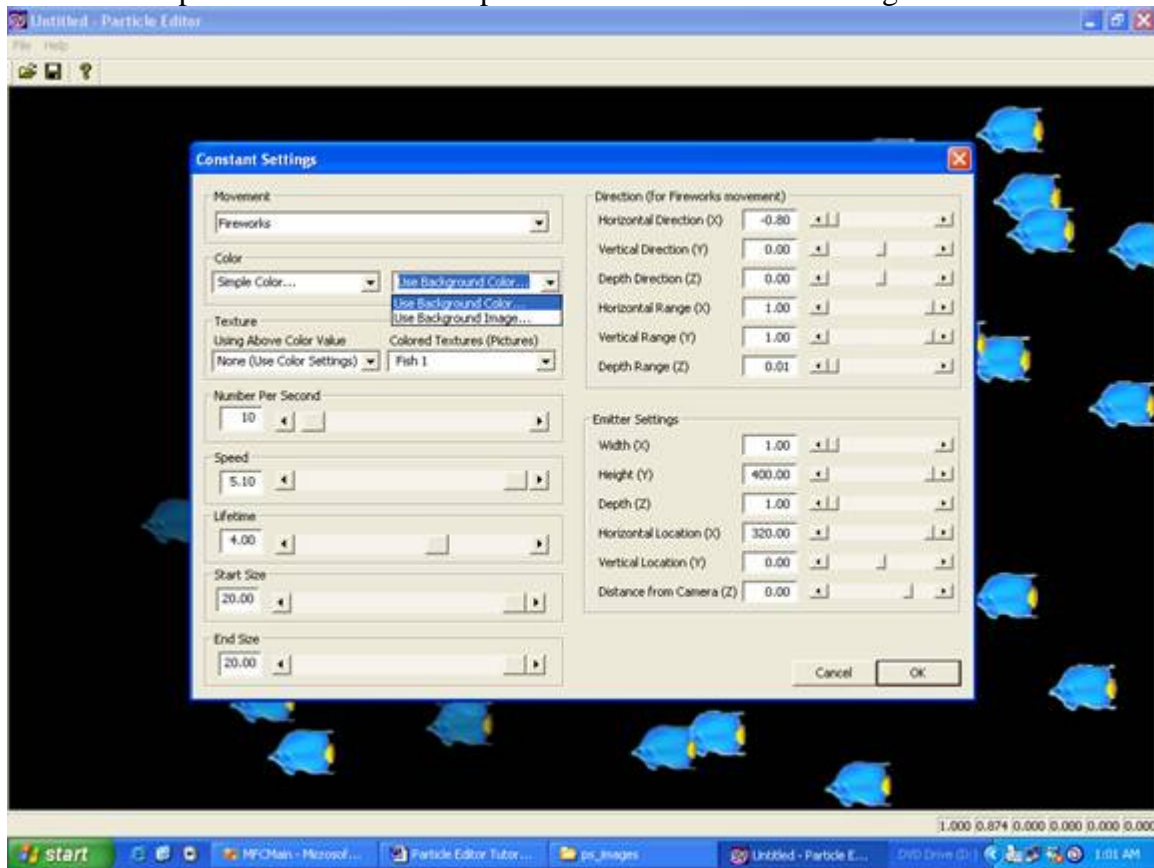
the fish stay in a two-dimensional space

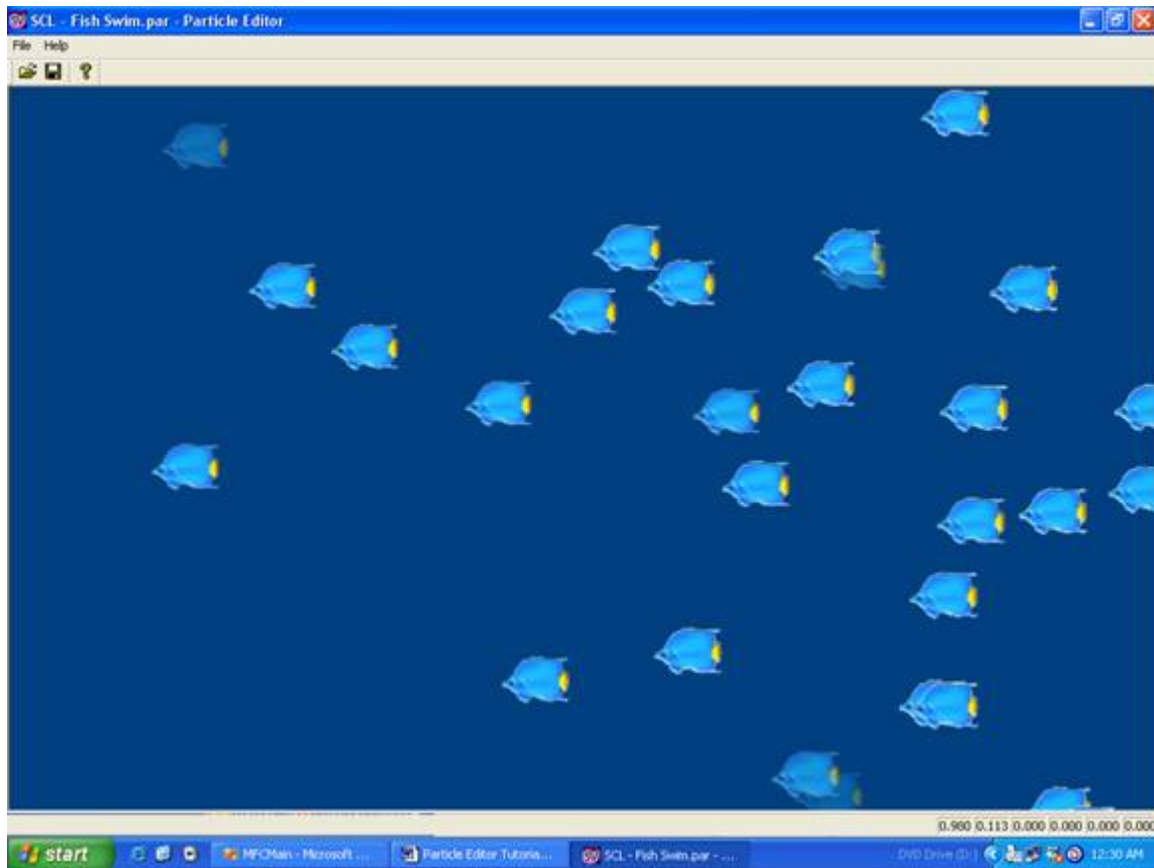
8 – Lets have fewer fish, but make them bigger. Set the start size and end size to 20.0 and the number per second to 10.



the fish are larger and there are fewer on the screen

9 – That’s pretty good, but let’s set the background color to blue. Under color click the background drop-down and click the “Background Color...” option that drops down under the drop down box. Choose a pleasant blue color for the background.





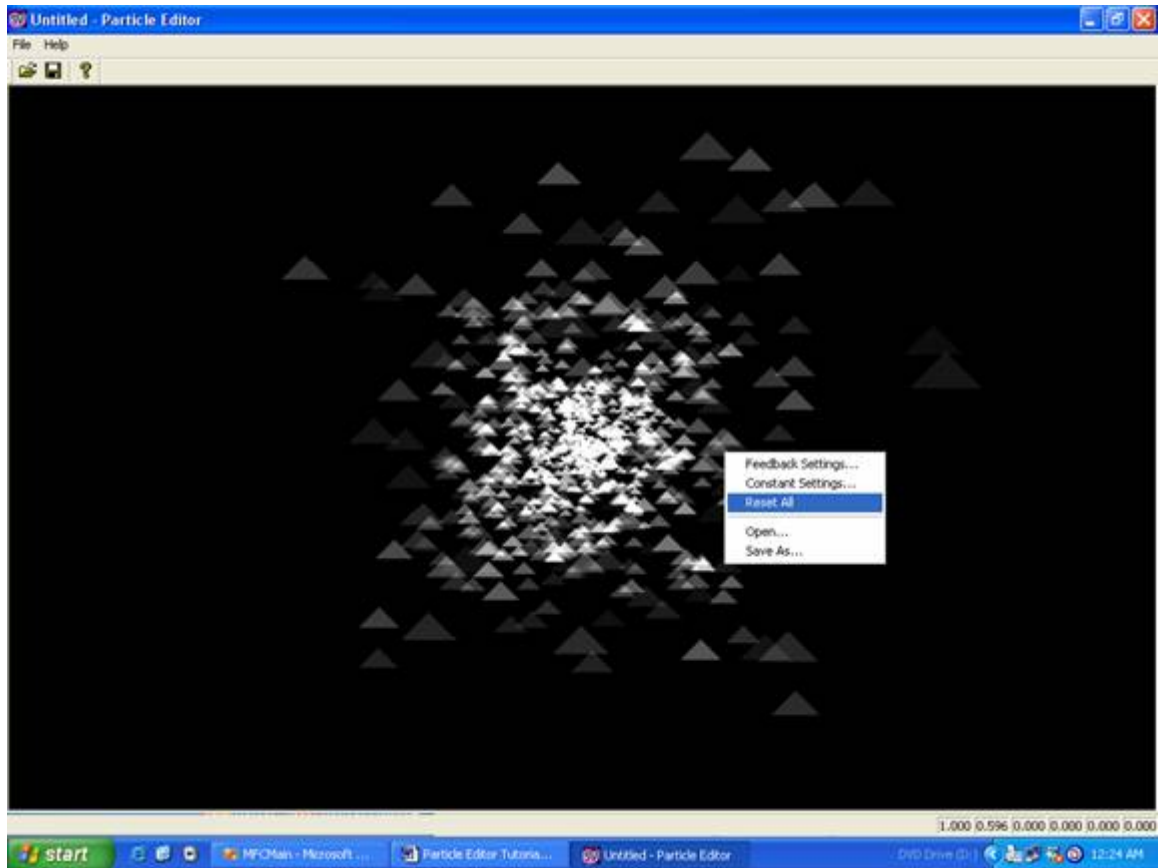
we have a representation of fish swimming in blue water

Now name and save your creation!

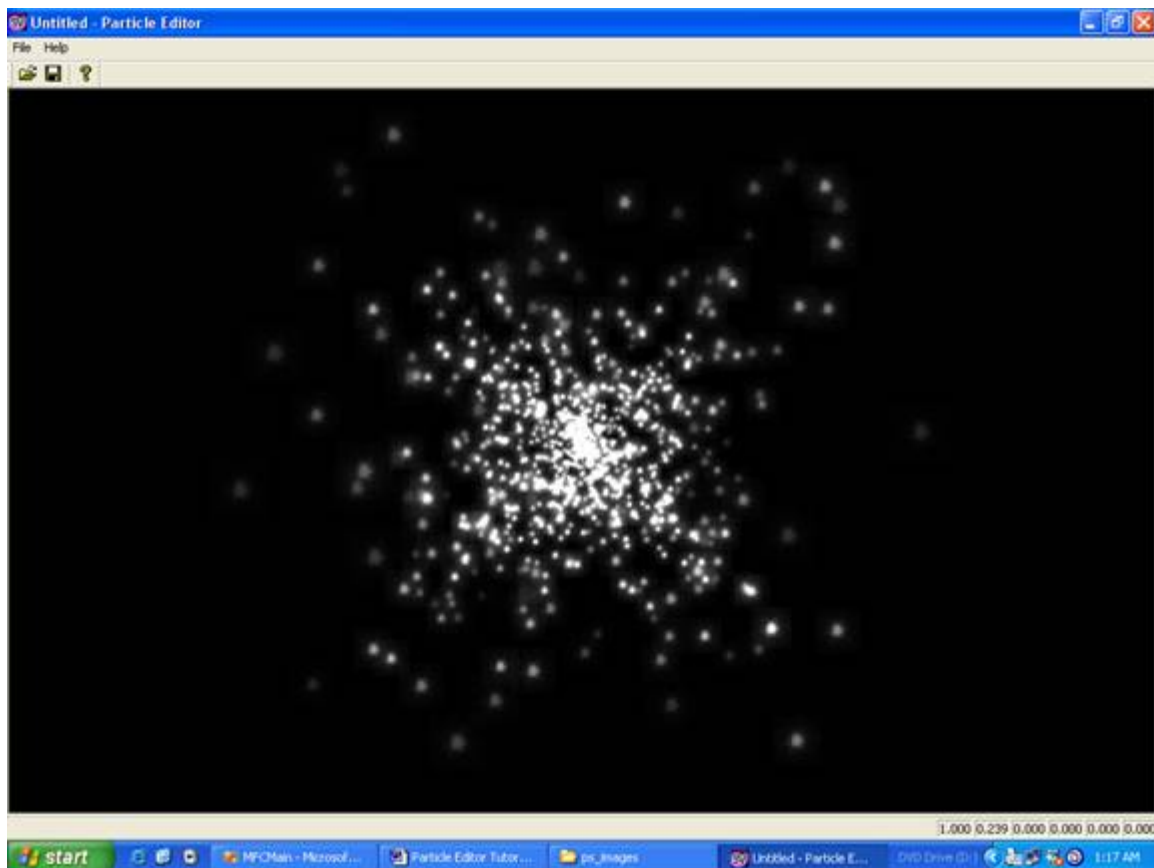
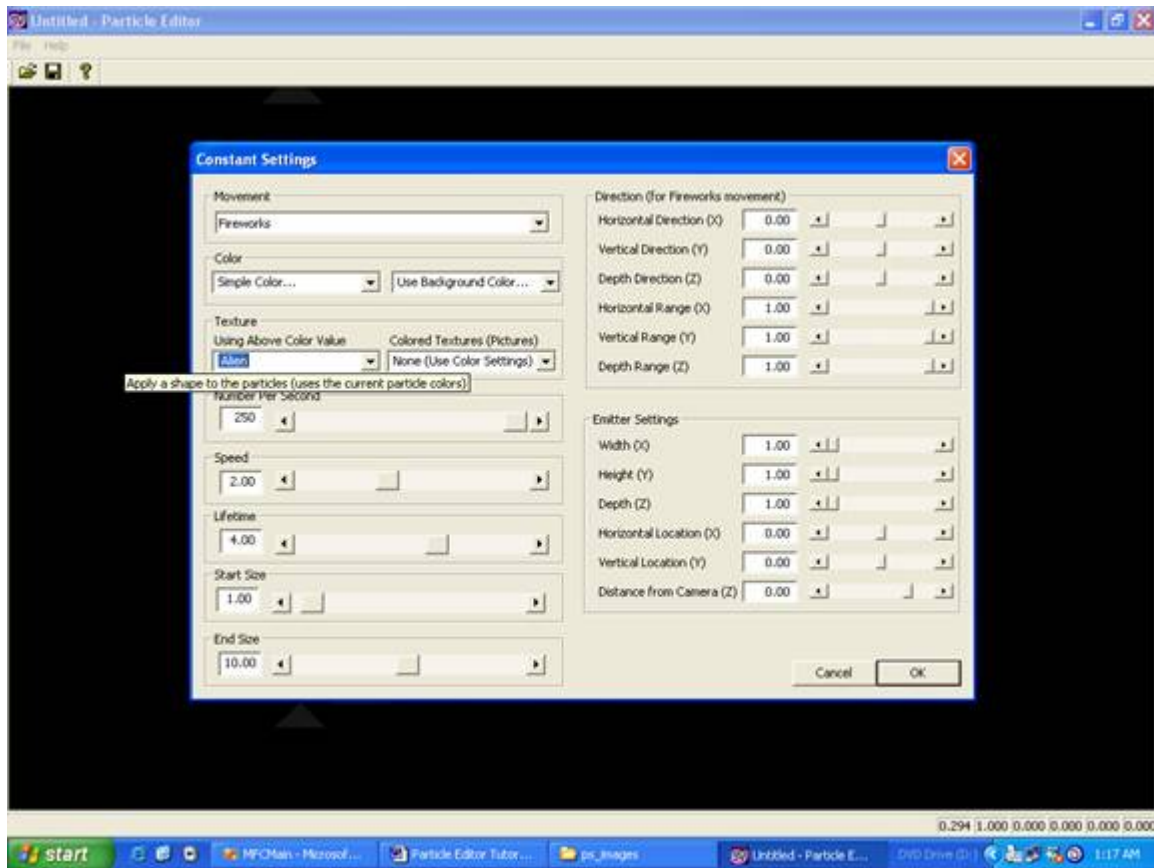
To observe simulated changes in the relaxation levels, disconnect the Wild Divine LightStone hardware and close and reopen the Particle Editor software. The horizontal mouse movement will simulate Skin Conductance Level changes (the vertical simulates Heart Rate Frequency Analysis changes).

Goal 2 : Create a colorful hourglass that forms as the user relaxes.

1 – Open the Particle Editor program. Right click on the main animation area, and the left click on “Reset All”. This will reset the particle system attributes to the minimum standard default settings.

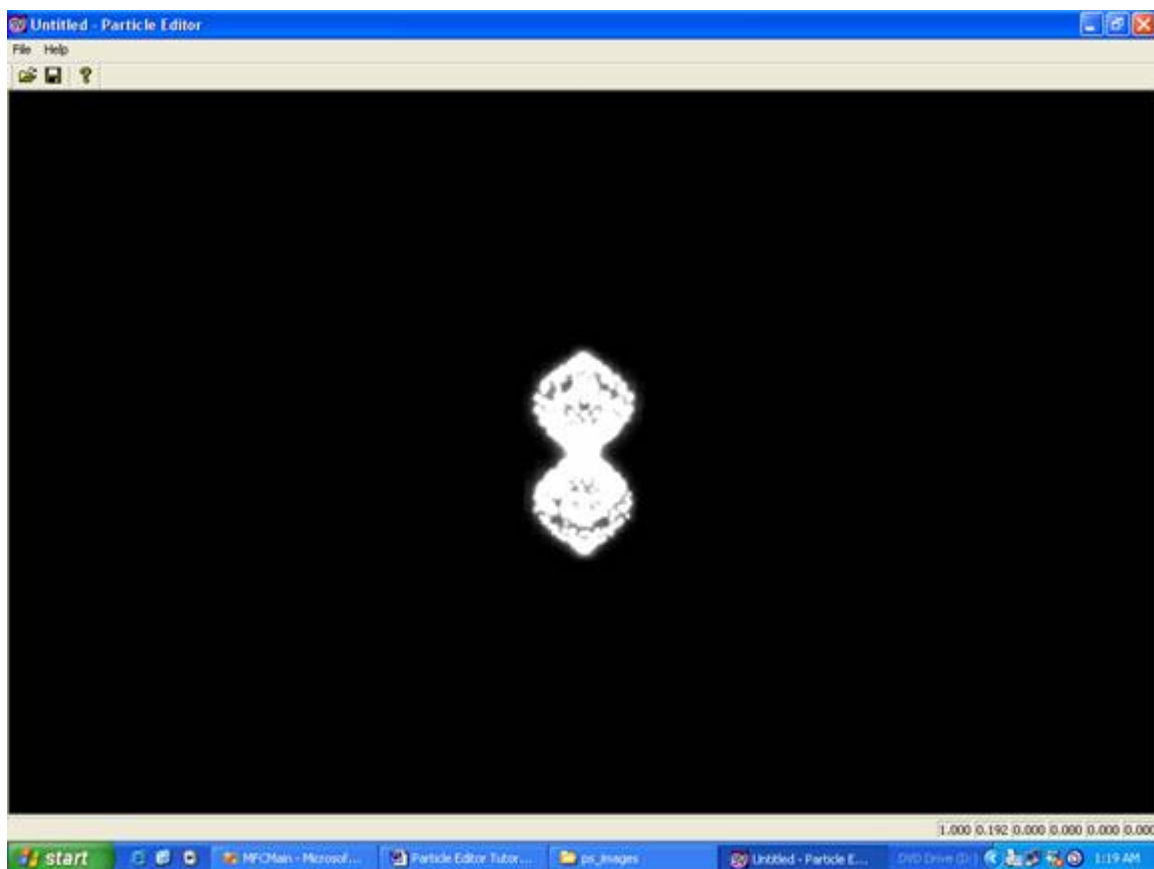
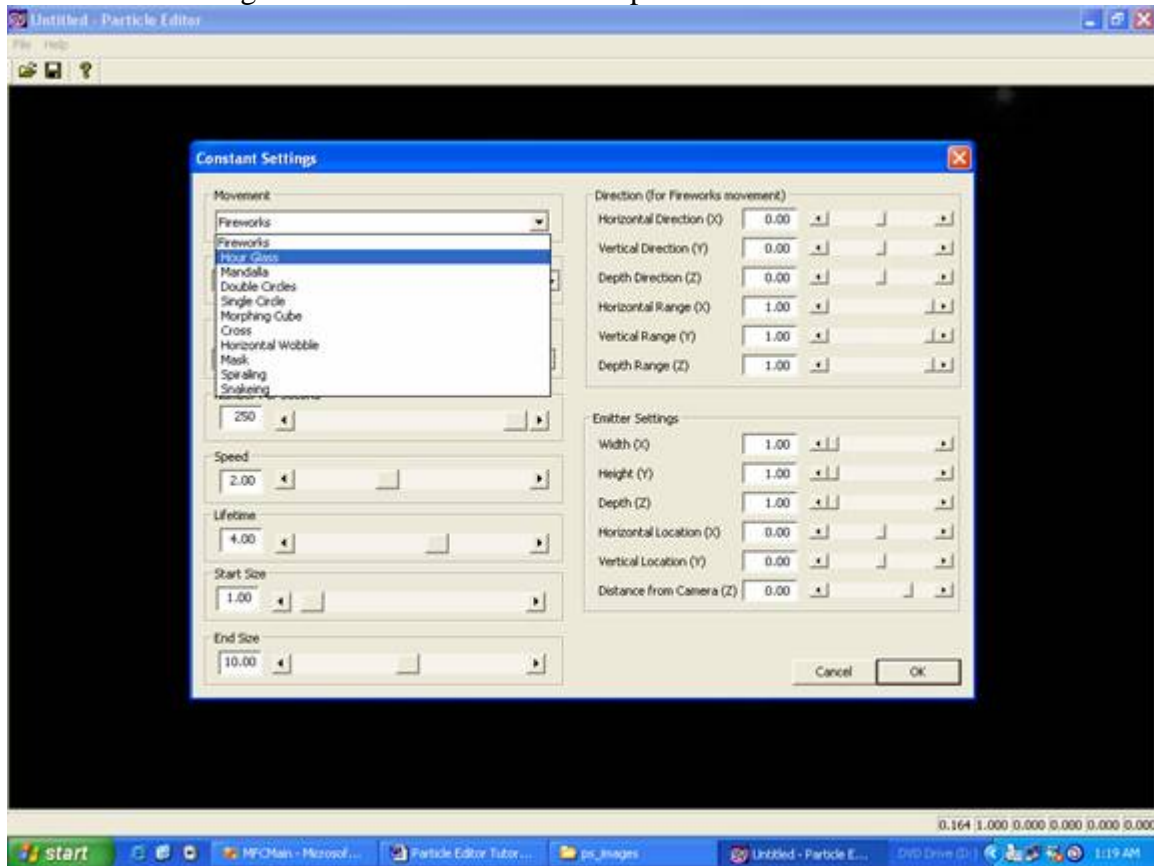


2 – Right click on the main animation area, and then left click on “Constant Settings” to open the constant settings dialog box. Under the “using above color value” drop-down, choose “Alien”.



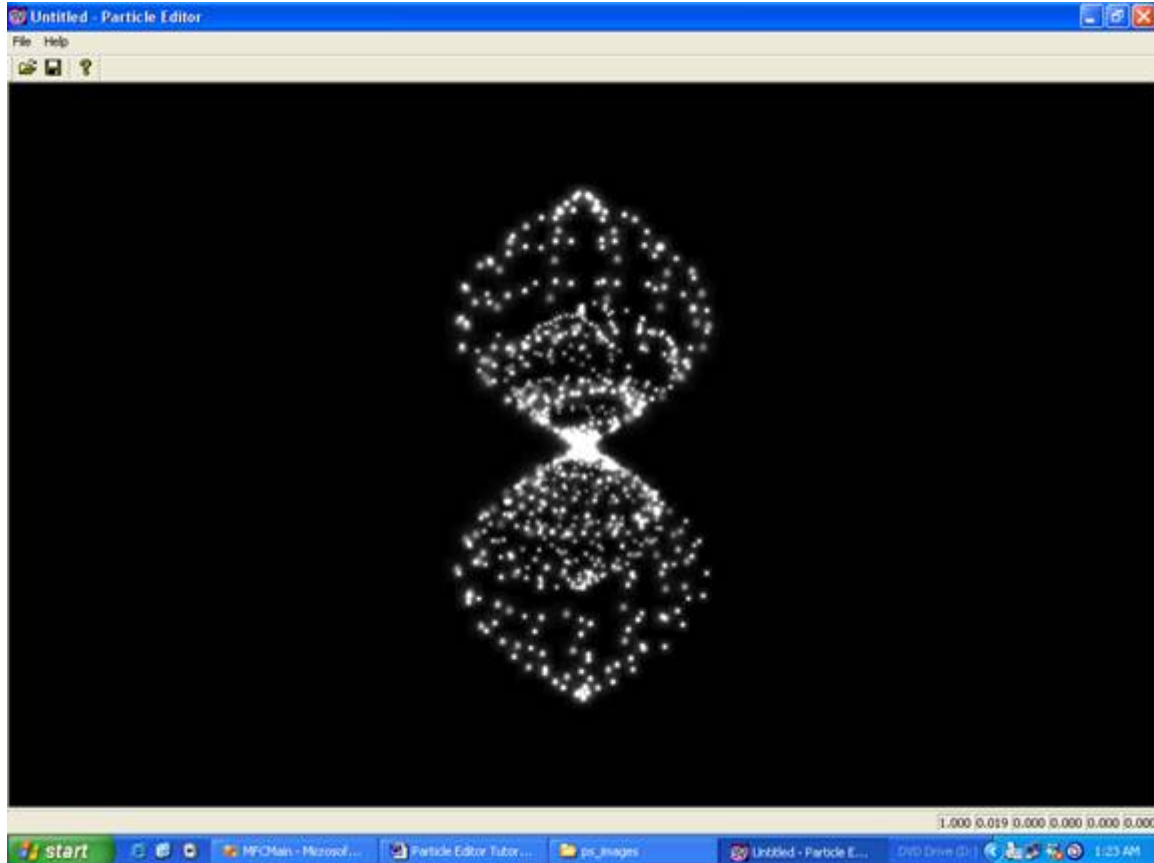
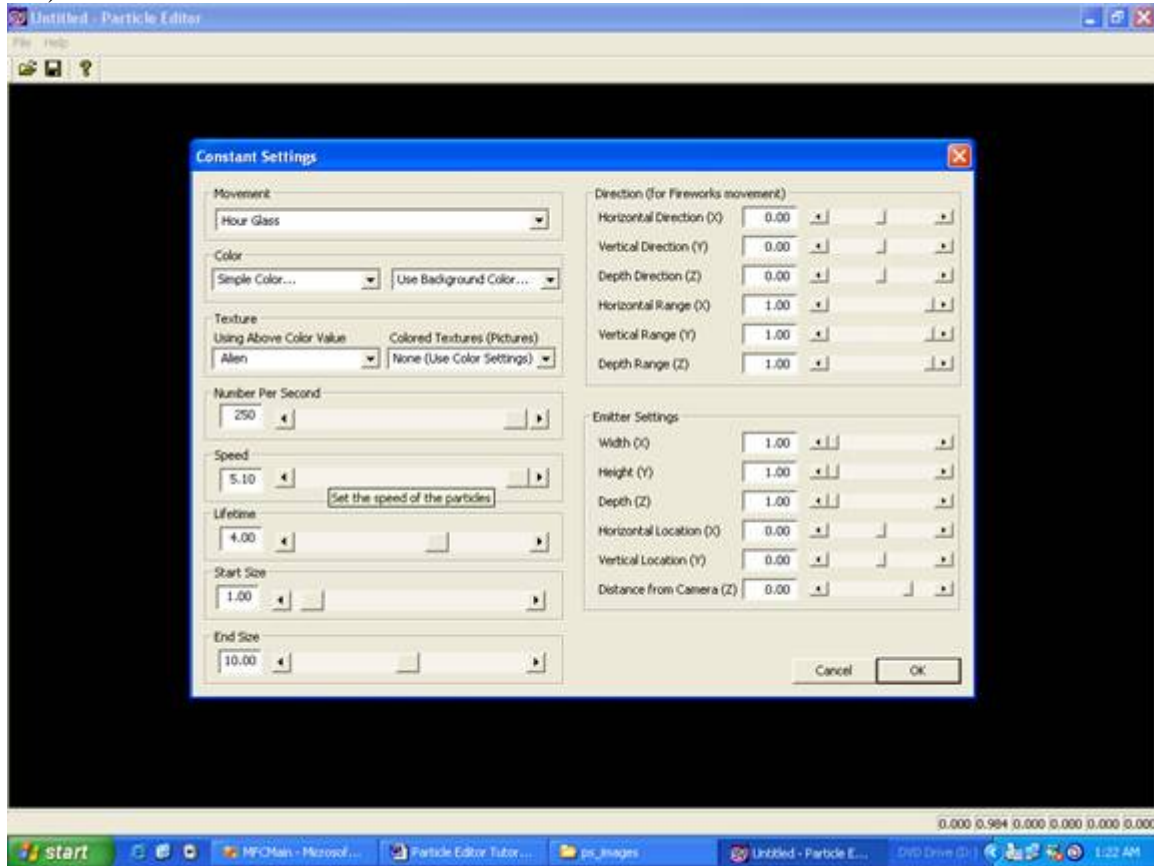
the shape of the particles has changed

3 – Choose “hour glass” from the movement drop-down.



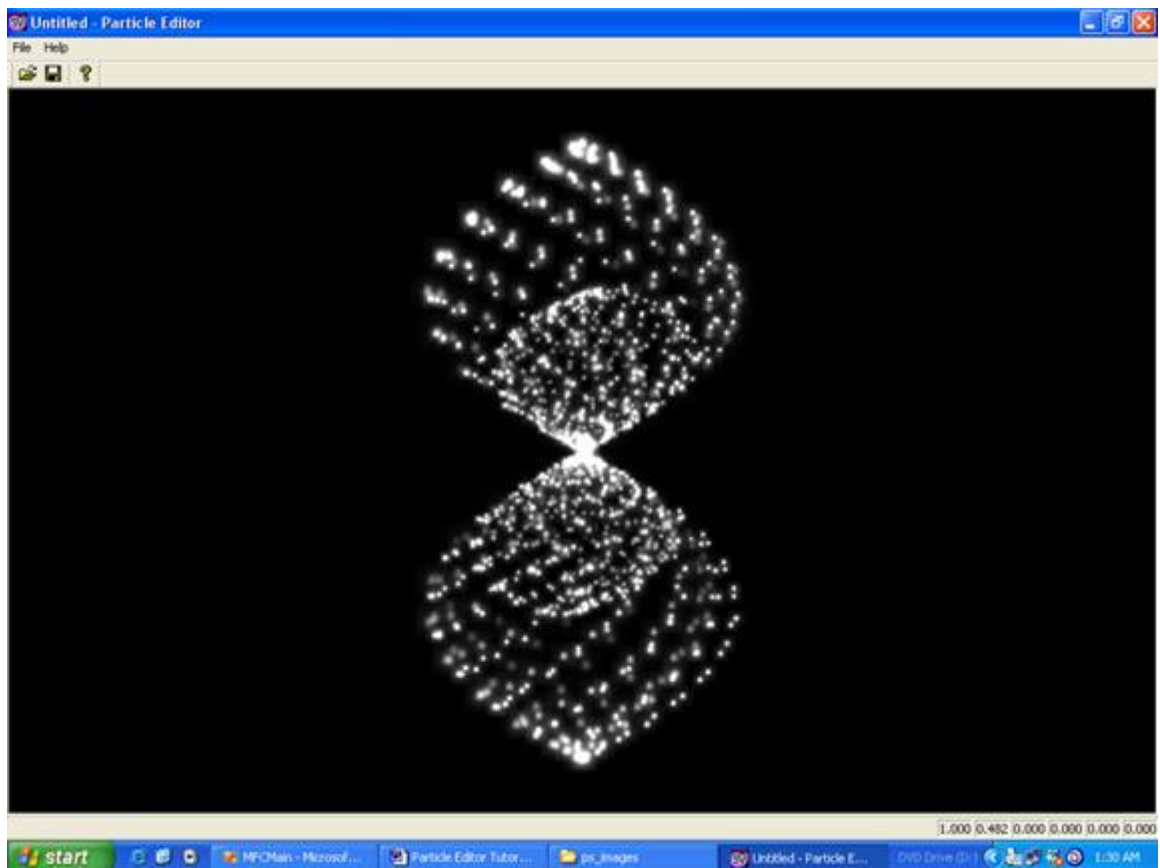
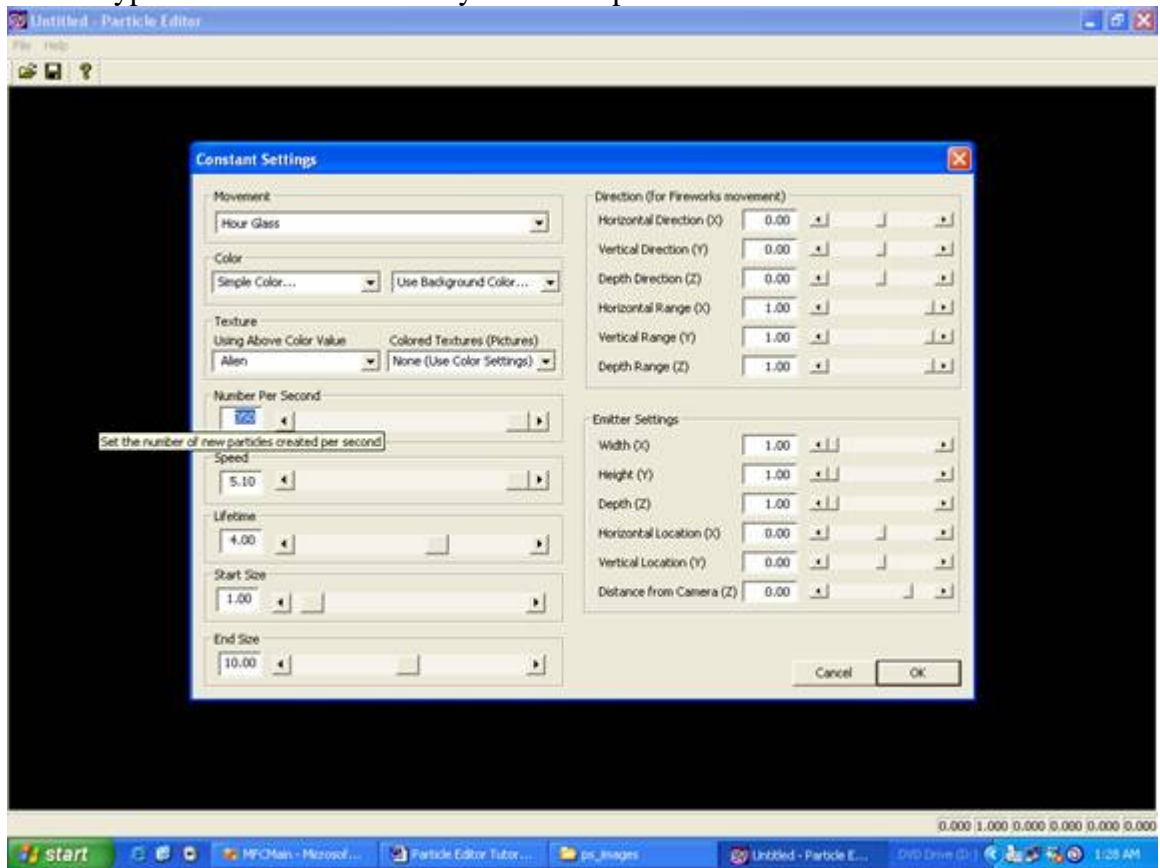
the particles now move in a pattern that forms an hour-glass

4 – Make the hour glass large by sliding the speed slider-bar all the way to the right (to 5.1)



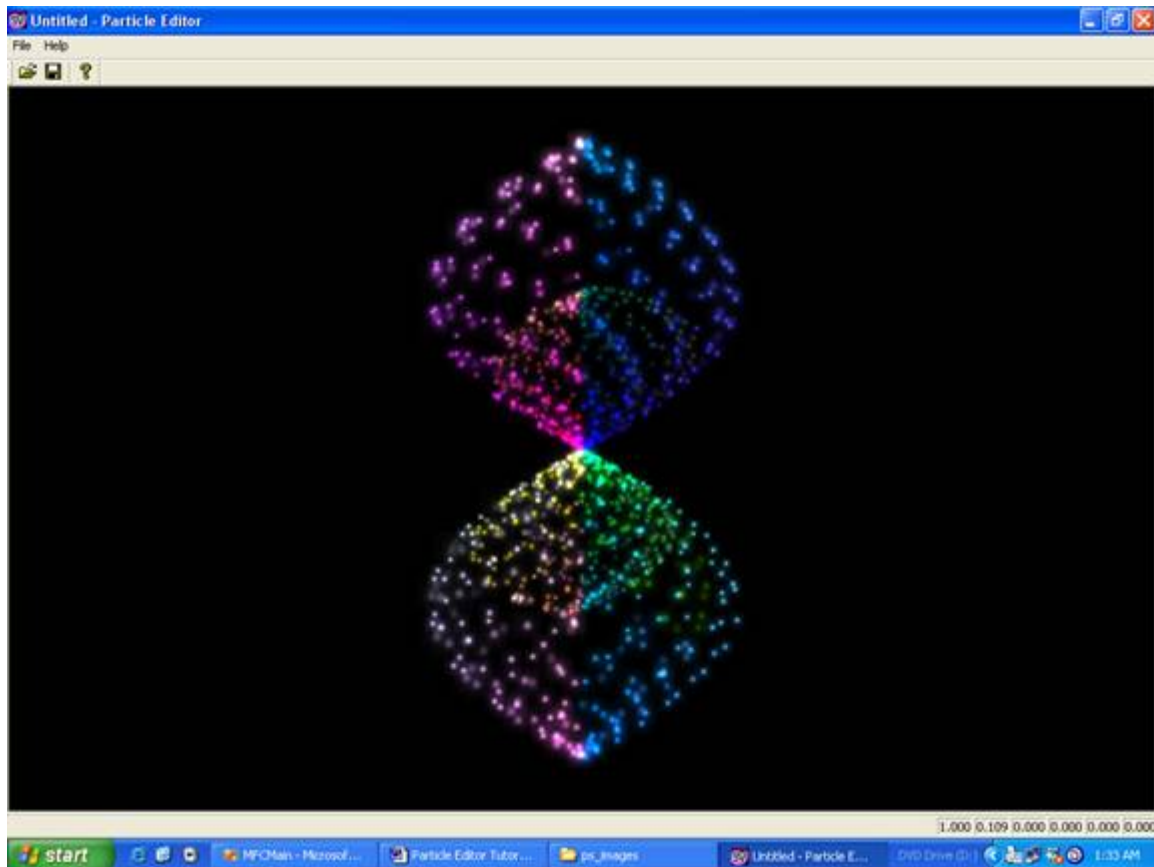
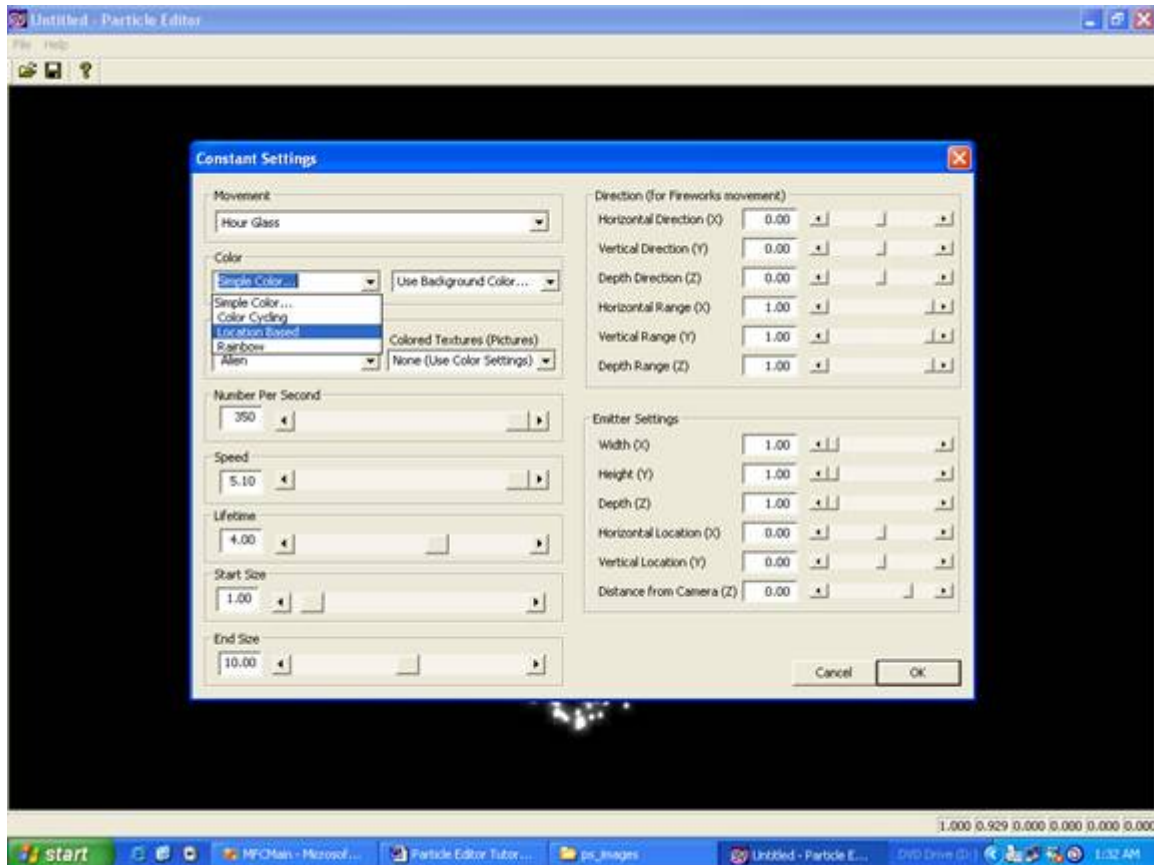
the hour glass is now larger

5 – Make the hour glass more full by adding more particles per second. The particle slider is already all the way to the right (250). To increase the number of particles per second type the number 350 directly into the input box to the left of the slider-bar.



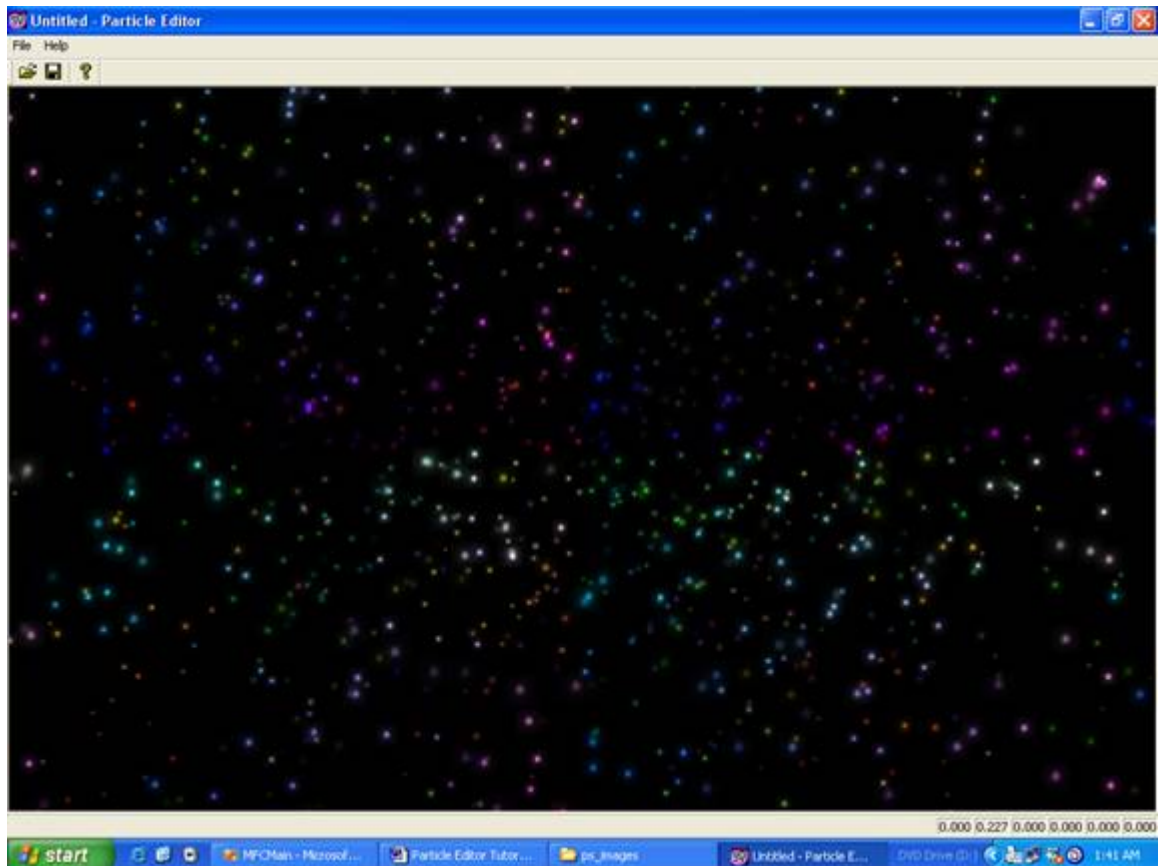
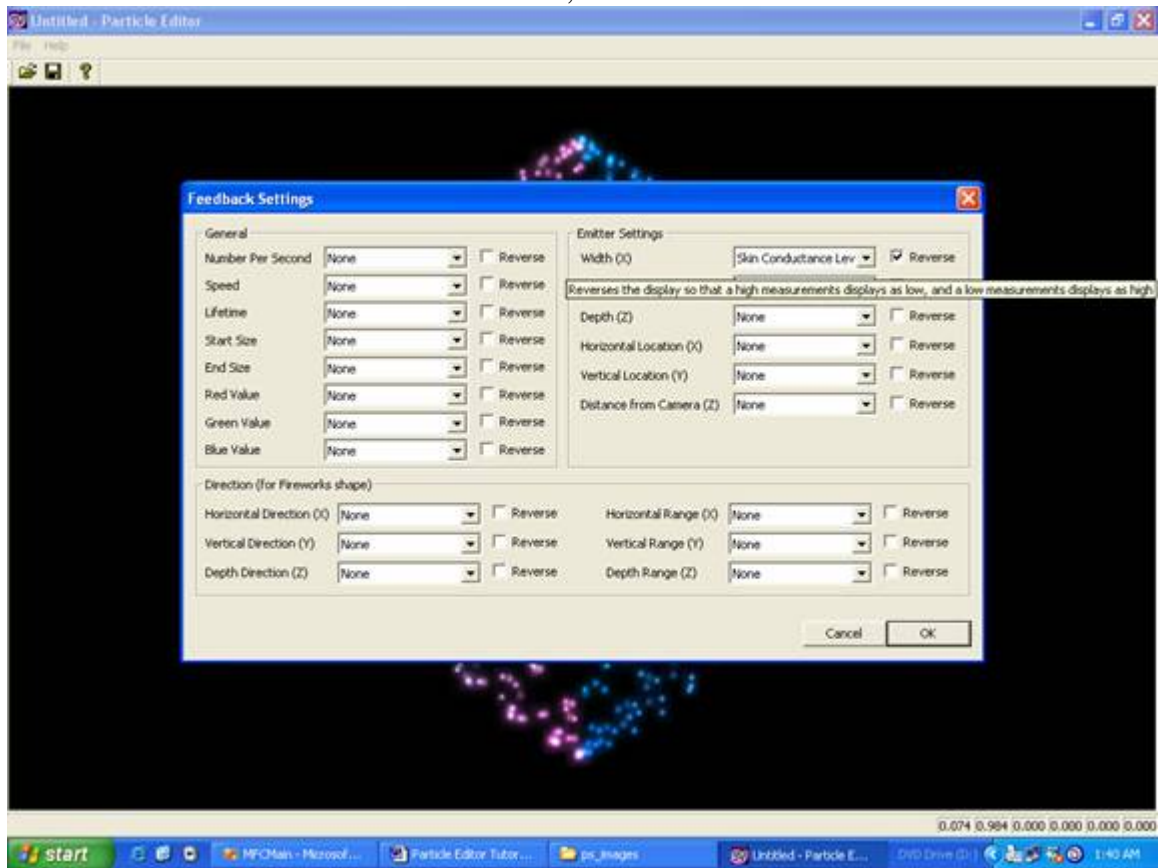
the hour glass is made up of more particles

6 – Add color to the hour-glass by choosing “location based” from the color drop down box.

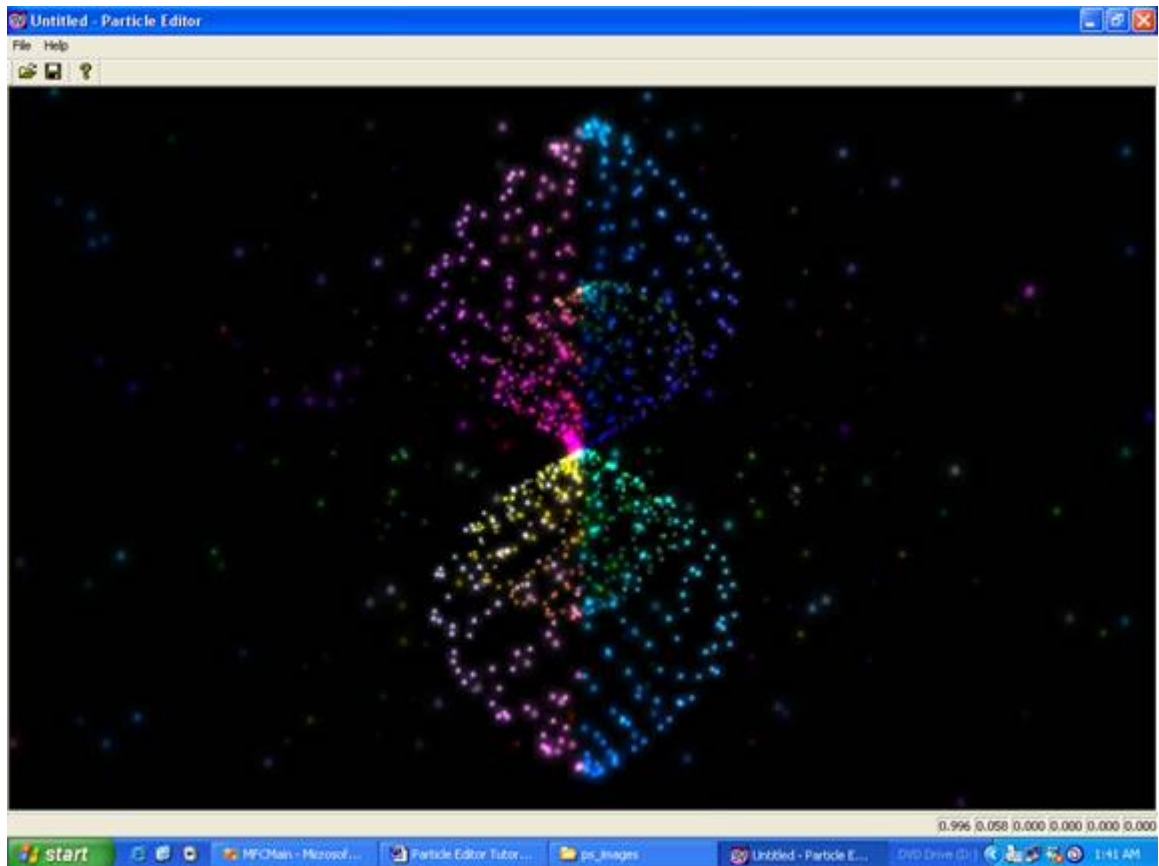


the particles of the hour glass are colored based on their locations

7 – Click “ok” to close the constant settings dialog box, then right click on the main animation area to open the feedback settings dialog box. Link the width and height of the emitter both to Skin Conductance Level, and click the reverse check-boxes.



now when the user is not relaxed, the particles cover the whole screen



when the user relaxes the particles converge into a colorful hourglass

Now name and save your creation!

To observe simulated changes in the relaxation levels, save your work, then disconnect the Wild Divine LightStone hardware and close and reopen the Particle Editor software. Load your saved file, then move the mouse slowly back and forth horizontally. When the LightStone is not connected horizontal mouse movement simulates changes in Skin Conductance Level and vertical mouse movement simulates changes in Heart Rate Frequency Analysis changes.