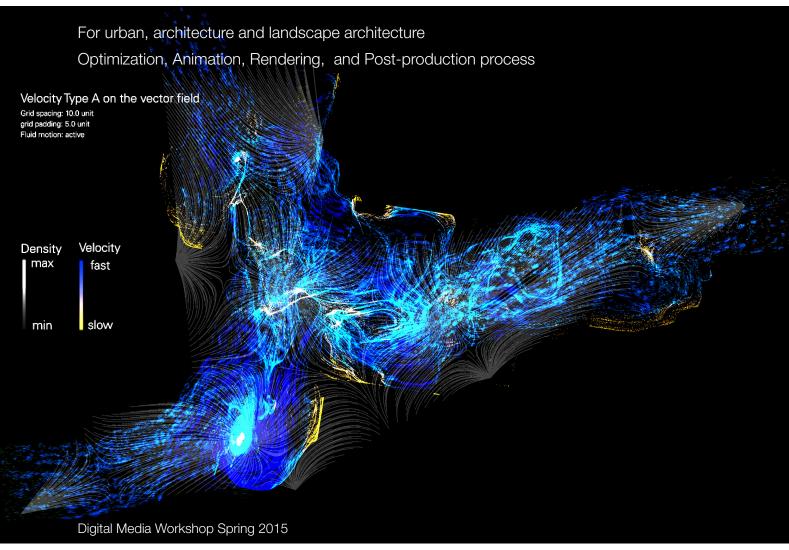


## INTRODUCTION TO 3D VISUALIZATION

## **BASIC PARTICLE SYSTEM TUTORIALS**



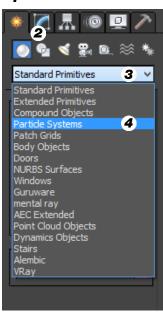
Namju Lee

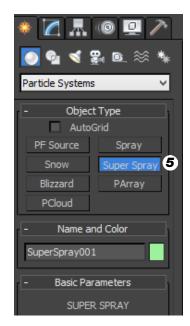
nlee1@gsd.harvard.edu / nj.namju@gamil.com

## **Understanding Particle System in 3ds max**

3ds max provide with several particle systems, including event-driven particle system.

1





1 go to create panel

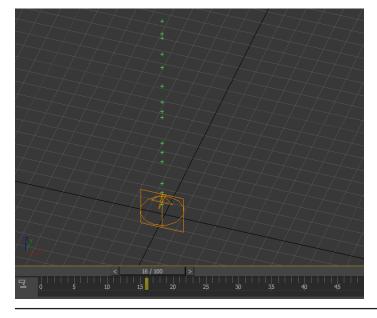
2 click geometry button

3 click the Drop-down menu

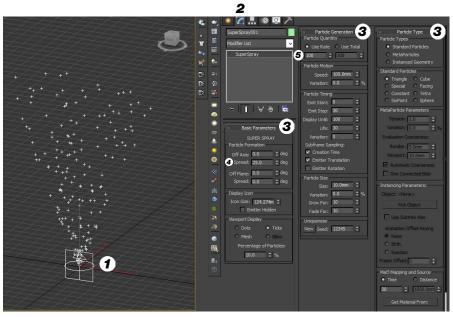
4 choose Particle Systems

5 click the Super Spray

And then you can create it by click and drag in the view



if you drag the Timeslider Bar, the Super Spary creates parties.





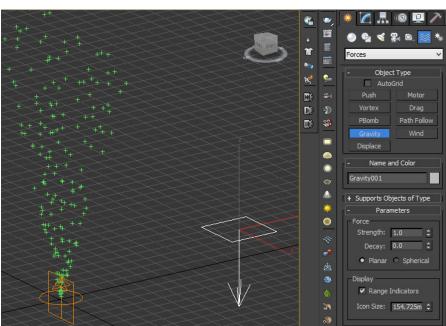
2 go to Modify panel

3 click each menu to expand and show the parameters of PS

4 Spread: 25.0

5 Use Rate: 100

Thus, you increase the angle of particle behavior, and the number of particles in the screen.



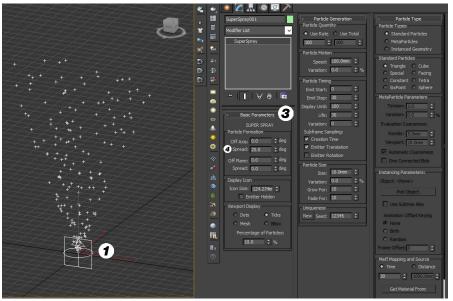
So far so good, we will install forces that interact with the PS.

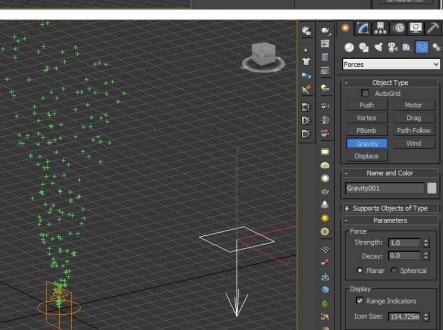
1 go to Create panel

2 click the Space Warps

3 click Gravity in the Forces menu

4 click and drag in the viewport to create a gravity force





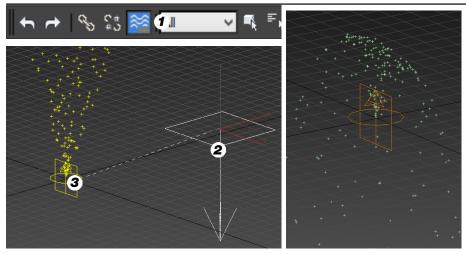
- 1 select the Particle System(PS)
- 2 go to Modify panel
- 3 click each menu to expand and show the parameters of PS
- 4 Spread: 25.0
- 5 Use Rate: 100

Thus, you increase both the angle of particle behavior, and the number of particles in the screen.

So far so good, we will install forces that interact with the PS.

- 1 go to Create panel
- 2 click the Space Warps
- 3 click Gravity in the Forces menu
- 4 click and drag in the viewport to create a gravity force

But noting happen, don't worry, we need to bind each other.

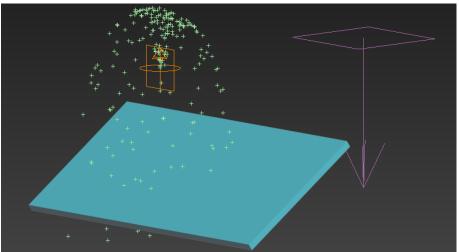


- 1 click the Bind button
- 2 click the gravity and....
- 3 drag and drop on the PS

Move Timeslider bar!!

What happen?? If you feel like the gravity is too strong, try to find how to decrease the gravity force on the Modify panel.

Let us create a book like this!

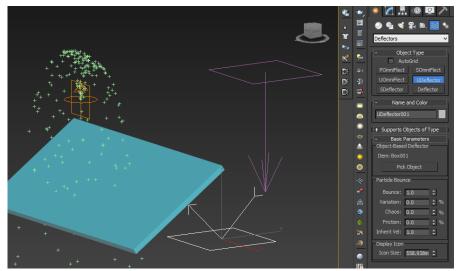


- Deflectors

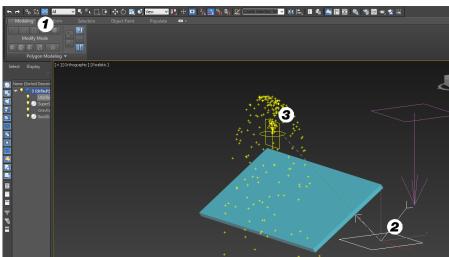
  Converted Bounce

  Bounce: ILD : %

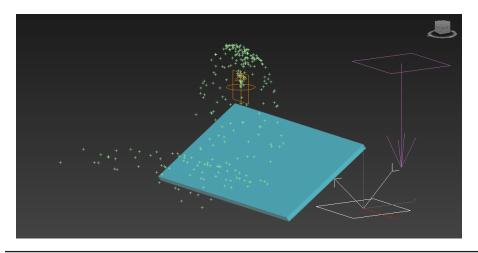
  Conv
- 1 click the Space Warps2 choose Deflectors menu
- 3 click UDeflector button
- 4 create a UDeflector by click and drag in the viewport



- 1 click Pick Object on the panel2 select the box in the viewport
- But noting happen? This is because we need to bind!!!



- 1 click the Bind button
- 2 click the UDeflector in the viewport and....
- 3 drag and drop on the PS



move Timeslider, and see what happen in the viewport!!!

## Memo