



# Particle Disintegration

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Sunique Plante



# Render Stats

- Average Render Time: Mantra-3min/frame  
1280x720
- Number of lights in scene: 2  
(1 sun and sky light)
- All Complexity of geometry (approximate):  
Points: 15,035  
Vertices: 80,470  
Polygons: 25,192



# About this Project

- This project uses the particle disintegration examples from Professor Fowler's website including popnet, scatter, attribute randomize, and Booleans to create the simulation.
- I used object merges to bring in the particles and the toy disintegration into their own separate geo node.
- I followed an online tutorial to aid my understanding of how to do a particle disintegration, the node network setup, and caching out the simulations.

**Examples provided by Professor Fowler**

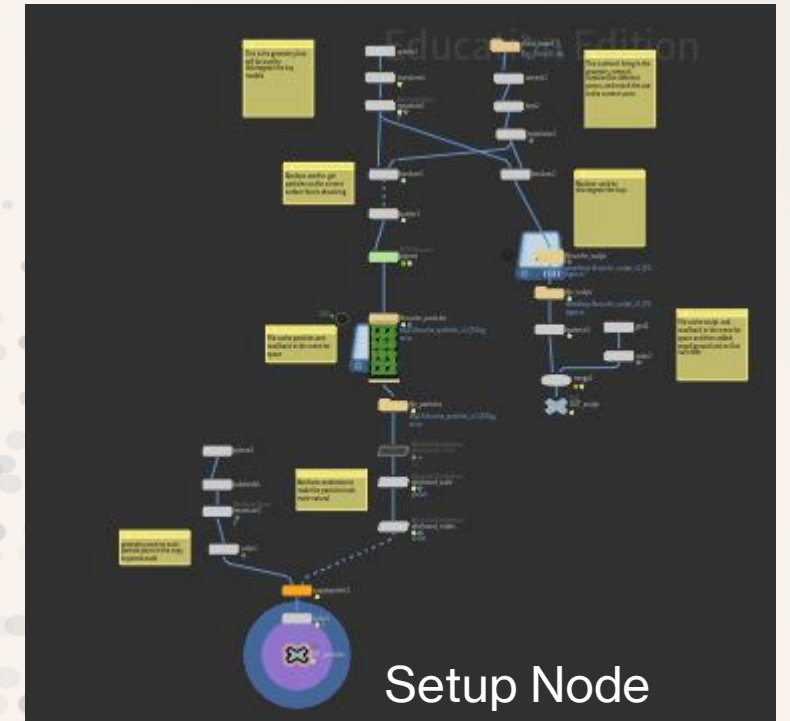
**Source: <http://deborahrfowler.com/HoudiniResources/ParticleExampleDisintegration.html>**

**Video tutorial of Particle disintegration:**

**<https://www.youtube.com/watch?v=i3CTAlvJOIQ&list=PL4TWIm0jxEfrRVSJ4stj36gCNaSo77SwB&index=4>**

# File Organization

- In the top level, are the 3 different node networks and the lights/camera.
- The Setup node has the initial toys and particle system, it is used to control or change the geometry and particle simulation. (This node is not visualized)
- The Wood Toys and Particle node include object merges of the null objects that are in the Setup node (These nodes are visualized)



# Challenges

- The main challenge of this project was to get enough particles to be produced and to simulate the look I wanted for the disintegration. I followed Professor Fowler's tutorials of the initial setup of a particle disintegration. Continuing to develop the node graph by looking at some Youtube tutorials of different ways to make a particle disintegration.
- The final result used a popnet, scatter, and attribute randomize nodes to get the full simulation.