



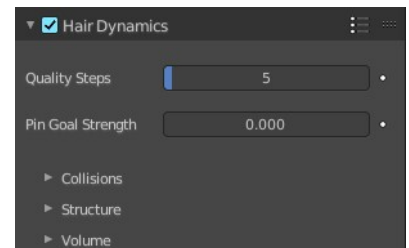
## 26.10.10 Editors - Properties Editor - Particle Properties Tab - Hair - Hair Dynamics panel

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## Hair Dynamics panel

Hair particles can have dynamic properties using physics. To enable hair physics, click the checkbox beside Hair Dynamics.



### Quality Steps

Quality of the simulation in steps per frame (higher is better quality but slower).

### Pin Goal Strength

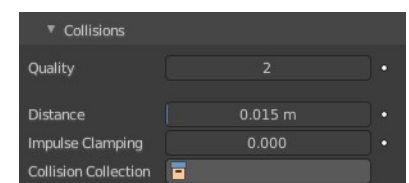
Spring stiffness of the vertex target position.

Warning! If you use motion blur in your animation, you will need to bake one extra frame past the last frame which you will be rendering.

### Collisions

#### Quality

A general setting for how fine and good a simulation you wish. Higher numbers take more time but ensure less tears and penetrations through the cloth.



## Distance

The distance another object must get to the cloth for the simulation to repel the cloth out of the way. Smaller values might cause errors but provide some speed-up while larger will give unrealistic results if too large and can be slow. It is best to find a good in between value.

## Impulse Clamping

Prevents explosions in tight and complicated collision situations by restricting the amount of movement after a collision.

## Collision Collection

Only objects that are a part of this Collection can collide with the cloth. Note that these objects must also have Collision physics enabled.

## Structure

### Vertex Mass

Value for the mass of the hair.

### Stiffness

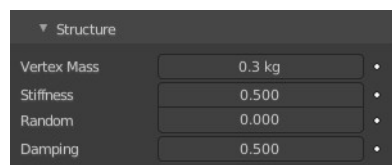
Controls the bending stiffness of the hair strands.

### Random

Random stiffness of hair.

### Damping

Damping of bending motion.



## Volume

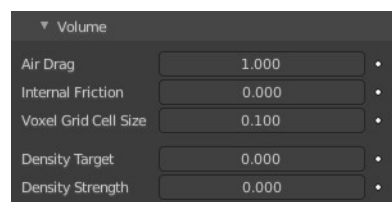
Some phenomena of real-world hair can be simulated more efficiently using a volumetric model instead of the basic geometric strand model. This means constructing a regular grid such as those used in fluid simulations and interpolating hair properties between the grid cells.

### Air Drag

Controls how thick the air is around the hair causing the hair to flow slower.

### Internal Friction

Amount of friction between individual hairs.



## **Voxel Grid Cell Size**

Size of the voxel grid cells for interaction effects.

## **Density Target**

Maximum density of the hair.

## **Density Strength**

The influence that the Density Target has on the simulation.