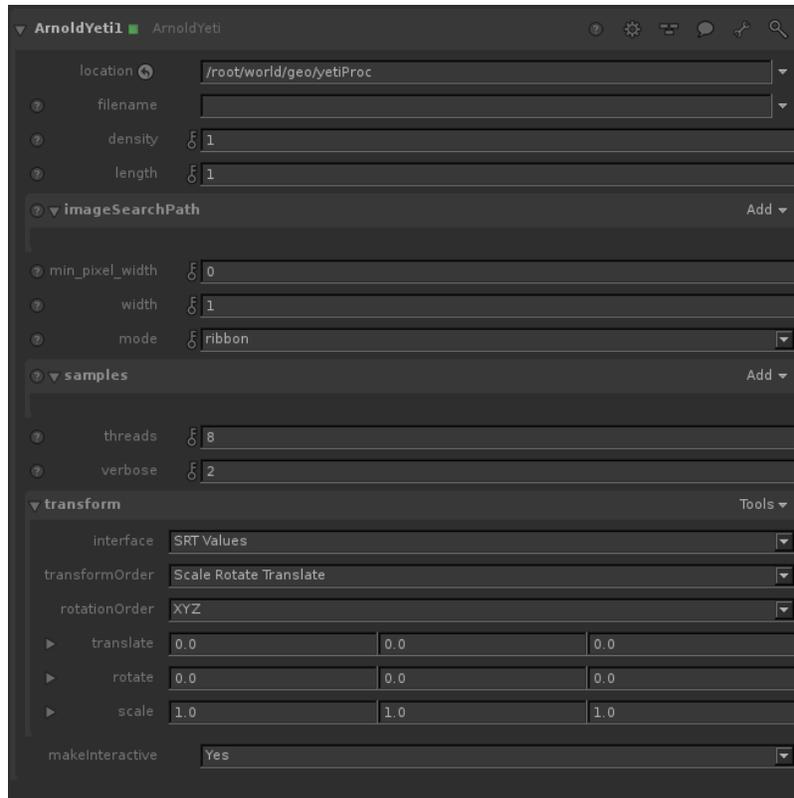# Arnold Yeti

KtoA supports Yeti, a powerful node-based toolset for producing fur, feathers and efficiently instancing geometry. To work, the environment variable PATH must include the path to Yeti's bin directory. KtoA will attempt to also retrieve the bounding box of the groom and display it in the viewer.

Filename

Yeti .fur groom file to use.

Density

Controls how dense the fur will be.

Length

Increases the overall length of the fur.

Min Pixel Width

If this value is non-zero, curves with a small on-screen width will be automatically enlarged so that they are at least the specified size in pixels. The enlargement fraction is then used in the hair shader to adjust the opacity so that the visible thickness of the hair remains the same. For a given number of AA samples, this makes it a lot easier to antialias fine hair, at the expense of render time (because of the additional transparency/depth complexity). Good values are in the range of 0.2 to 0.7. Values closer to 0 are faster to render but need more AA samples. So if your scene already uses very high AA settings, you should use a low value like 0.1. For best results, you may need to increase the auto-transparency depth, and/or lower the auto-transparency threshold, but watch the effect on render times. Note that this parameter currently works with the ribbon mode only.
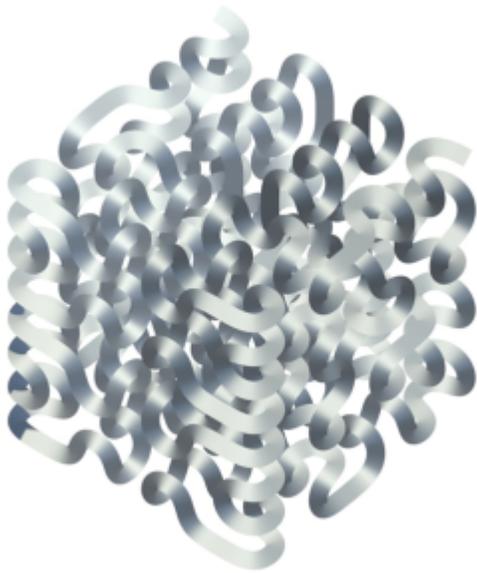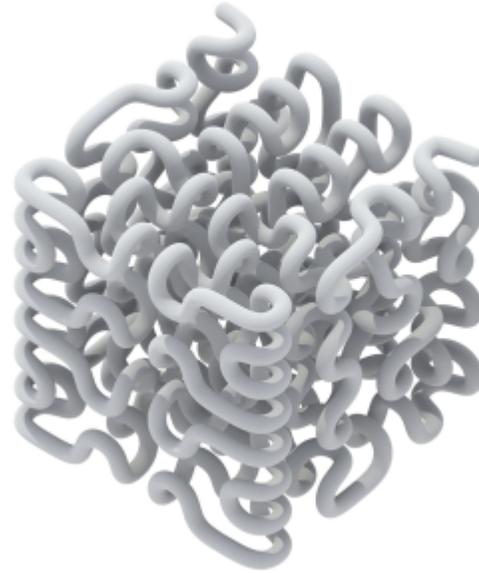
0.1	1

Mode

There are three algorithms for rendering curves in Arnold.

Ribbon	Thick

Ribbon

Ribbon mode is recommended for fine geometry such as realistic hair, fur or fields of grass. These curves are rendered as camera-facing flat ribbons. For secondary and shadow rays, they face the incoming ray direction. This mode doesn't look so good for very wide hairs or dramatic zoom-ins because of the flat appearance. This mode works best with a proper hair shader (perhaps based on a Kay-Kajiya or Marschner specular model).

Thick

Thick mode resembles spaghetti. It has a circular cross-section and a normal vector that varies across the width of the hair. Thick hairs look great when zoomed in, and are especially useful for effects work, but their varying normals make them more difficult to antialias when they are small. You can use any shader with this rendering mode, including lambert, phong, etc.

Oriented

Oriented mode allows the curves to face in a given direction at each point. This is more useful for modeling blades of grass, tape, and so on.

Width

Overrides the width of the fur.

Samples

Add frame-relative sample times you wish to sample the Yeti groom at, e.g. -0.25 and 0.25.

Threads

The number of threads to use when evaluating the graph at render time.

Verbosity

Used to change how much information Yeti outputs during evaluation and rendering.

Transform

Apply a transform to the groom to position it. Note that this can be done interactively in the viewer with manipulators.