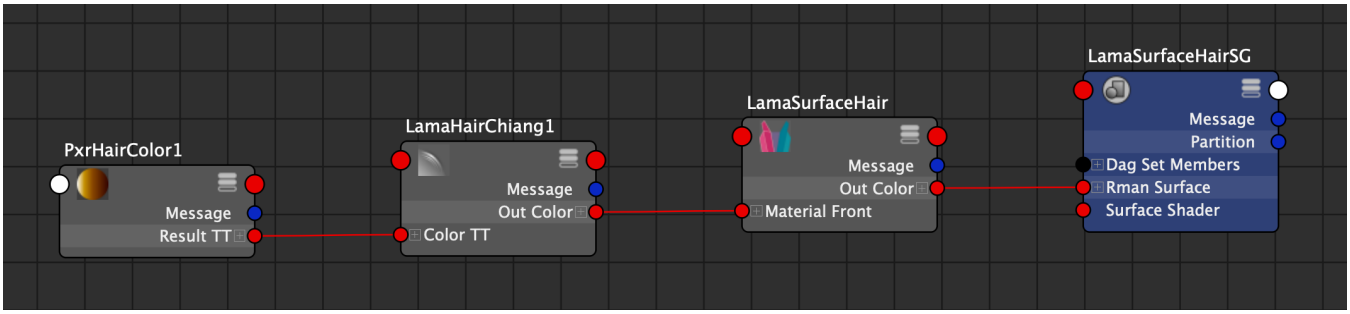
LamaHairChiang



LamaHairChiang is a layer-able version of the Pixar Chiang hair shader used in production at Pixar.

It is based on the research at Disney Animation Studios and features several improvements over PxrMarschnerHair, including improved convergence, more realistic tube-like specular response, and remapped color that is more indicative of the color picked at varying roughness levels.

> **Tips and Tricks**
>
> To use it in conjunction with PxrHairColor, make sure to keep the **R Specular Color** attribute set to white, and simply drive the hair color via **Col or TT**.
>
> If using **PxrHairColor**, please disable **Remap TT Color**, as **PxrHairColor** already remaps the incoming color.



SPECULAR

R Specular Color

Specular color for R lobe. This represents the first bounce of a ray encountering a hair curve. This lobe color should usually be WHITE, the response is consistent with dielectric materials of a surface shader.
In special cases, one might be art directed to tint this lobe - Do so with care.

TT Specular Color

Specular color for TT lobe. Main albedo of the full Chiang component.
The default at 0.4 corresponds loosely to middle grey, considering visibility and bounces in the hair volume.

Remap TT

Color Remap the transmitted color so the final fur color looks closer to the actual color.

Primary Roughness

Longitudinal Roughness for R in degrees

Transmit Roughness

Longitudinal Roughness for TT in degrees

Secondary Roughness

Longitudinal Roughness for TRT in degrees

Azimuthal Roughness

Azimuthal Roughness

Specular Offset

Cone offset in degrees.

Refractive Index

Index of refraction.

R Specular Gain

Gain for R lobe of hair specular. This is like a clearcoat where the specular is fairly sharp and glossy and normally not colored.

TT Specular Gain

Gain for TT lobe of hair specular. This is a transmission-type (refraction) specular with some volume attenuation.

TRT Specular Gain

Gain for TRT lobe of hair specular. This is a rougher and colored specular.

TRRT Specular Gain

Gain for residual energy, also a specular energy.

GLOBALS

Shadow Color

Shadow Color

ADVANCED

Specular Mollification

Improves convergence but may modify the fur's look.

R Specular Lobe Name

Defines the name that can be used in LPE AOVs for the specular R lobe.

TT Specular Lobe Name

Defines the name that can be used in LPE AOVs for the specular TT lobe.

TRT Specular Lobe Name

Defines the name that can be used in LPE AOVs for the specular TRT lobe.

Diffuse Lobe Name

Defines the name that can be used in LPE AOVs for the diffuse lobe.

Matte

Defines the name that can be used by the matte system, to output the weight of this lobe in the final material as an AOV.