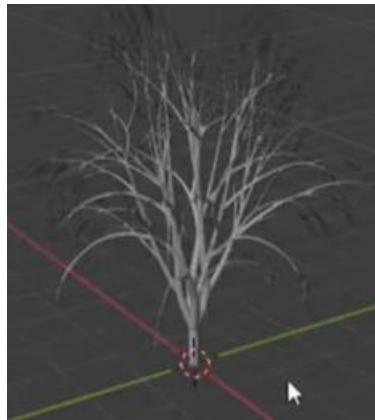


Christmas Tree – Blender Project – quick guide

1 – in preferences: - search for “tree” – turn on the “Sapling tree gen” add on

Delete all start objects including camera and light.

Add > Mesh > Curve > “Sapling Tree Gen”



Open the operation panel in the bottom left, and “load preset” = small pine

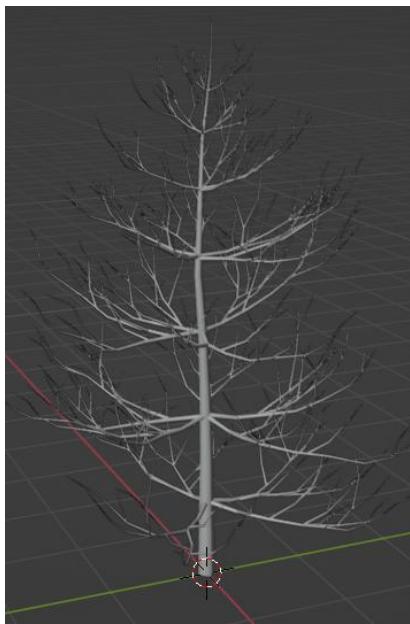


Change Bevel resolution to 0 and curve resolution to 1

Increase “Branch Rings” to 8.

Play with random seed value until you get a tree shape you like: -

Go up to Settings field and in branch splitting, increase the level to 3

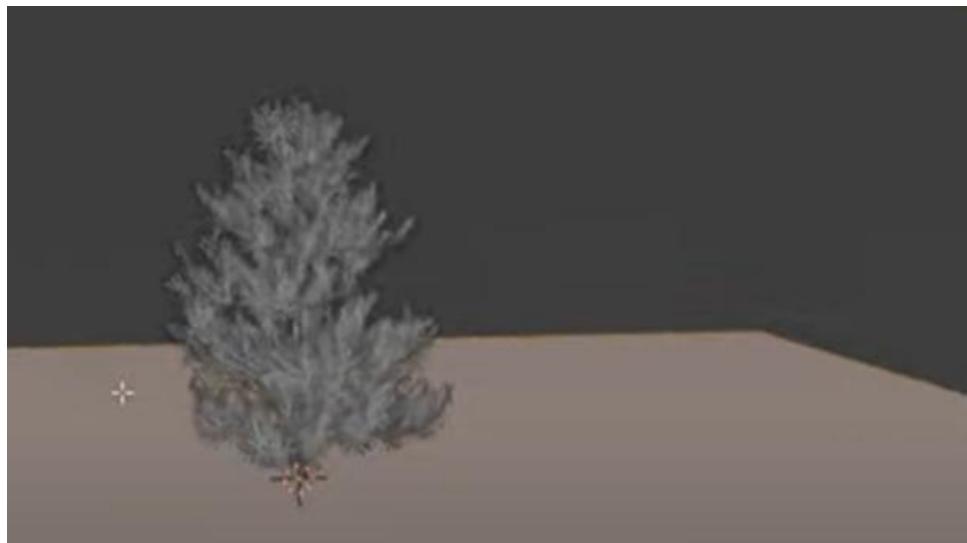


Next go to the “Leaves” setting and turn on “Show Leaves”: -

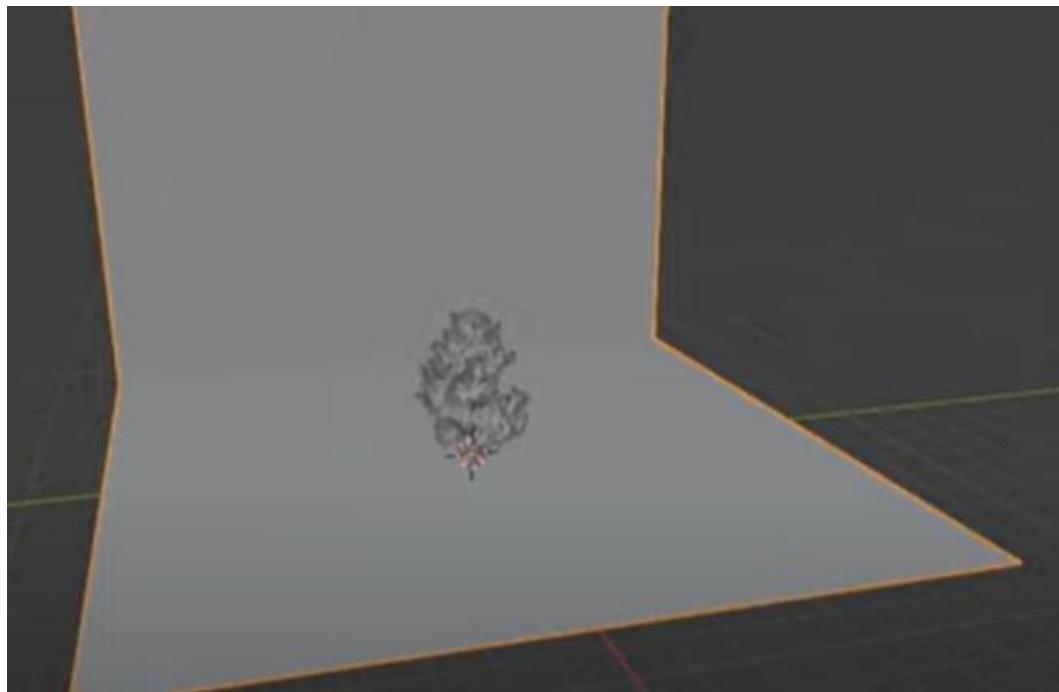


Next we will create an “Infinite Background” for our tree.

Add a Mesh > Plane and scale it up about this big: -



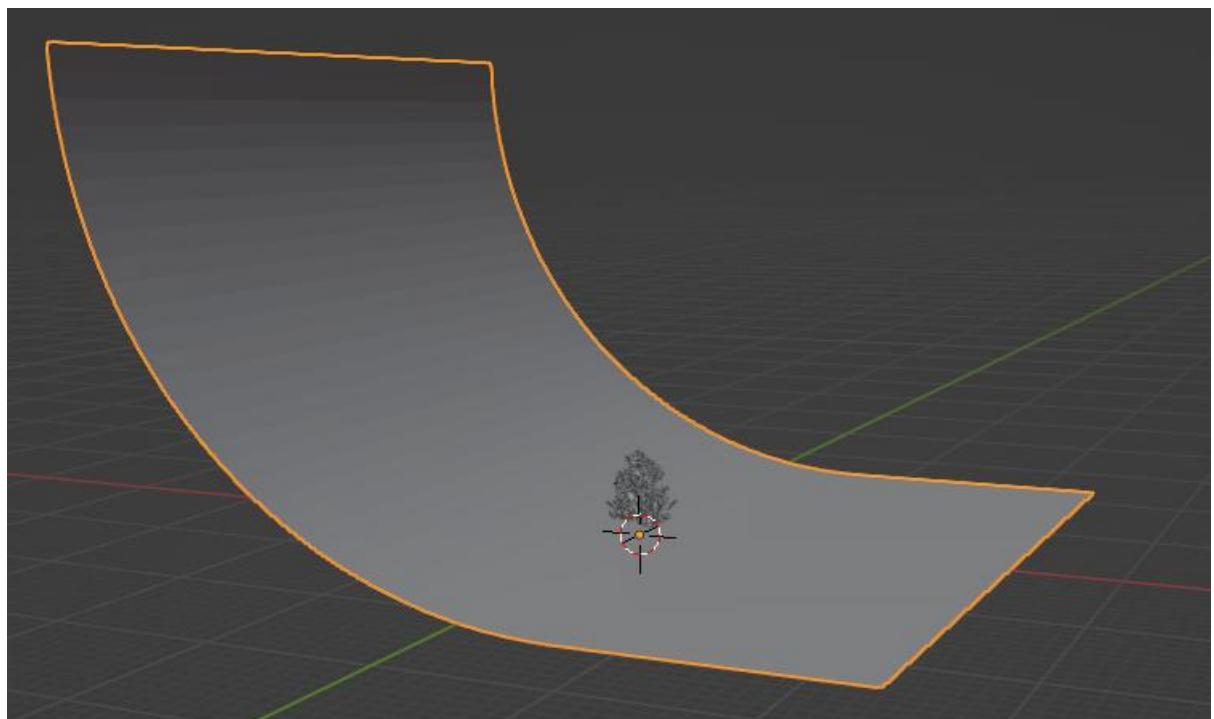
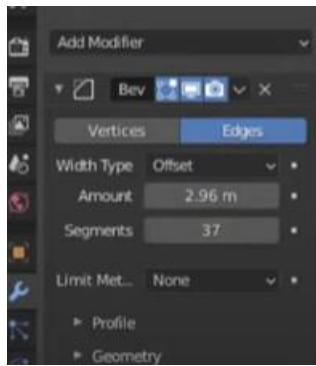
Go into Edit Mode, select the back edge and extrude upwards in the Z direction



Tab back into object mode, go to the “Modifiers” tab

Add a Bevel modifier: -

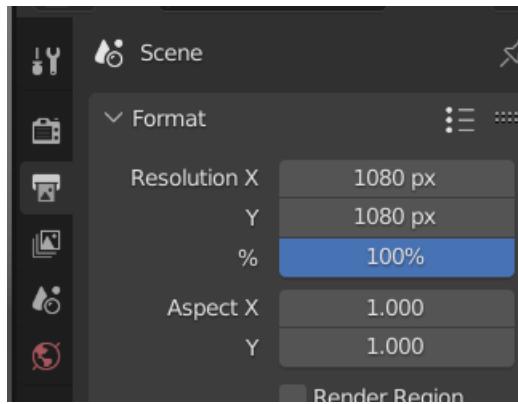
Increase the amount and number of segments: -



Go back into Edit mode, select the backface and scale on the X or Y axis only to make the background wider as needed.

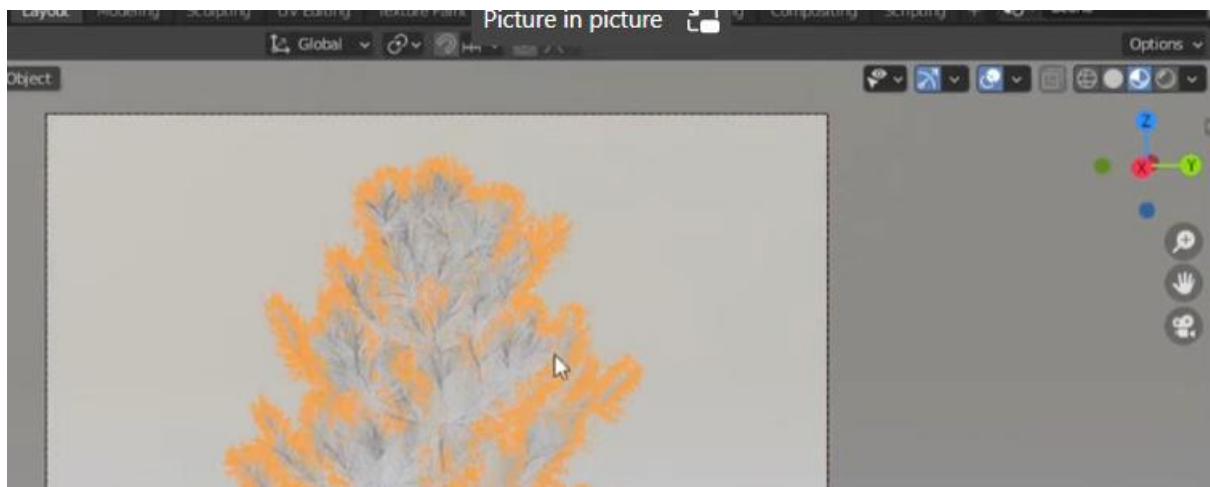
Add a Camera back to the scene. Move the view until you have a good view on the tree and then press **Ctrl + Alt + Numpad 0** to fix the camera view to the current view.

In output properties, change the resolution to 1080 x 1080:



Press numpad 0 to enter camera view. Use “G” to frame the tree. Also after pressing G, you can also click the middle mouse and drag to zoom in and out.

Now for Materials – go to material preview mode & Select the leaves: -



Go to Material Properties, +New and pick a leaf colour.

Next do the same with the tree trunk, colouring brown.

Finally also select the background object and give it a nice Christmas background color like orange or light red:-



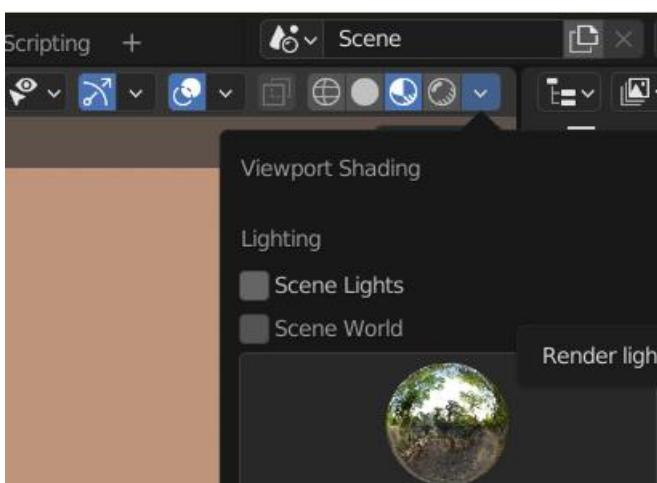
Time for some lighting :-

Add a point light and use G then Z to move up over the tree

Press Numpad 7 to move to top view then press G and move the light to roughly this position between the tree and the camera:-



In the top right drop down – turn on “Scene Lights” and “Scene World”

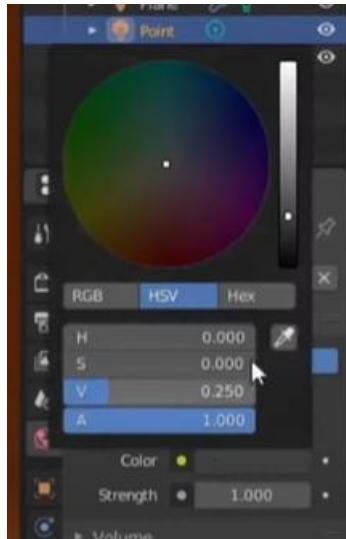


Increase the point light power to about 1000W

And increase the light radius to around 2m

May need to play with the “Shadows” setting in the render properties to get good shadows – and make sure the plane is still directly under the tree..

Go to World properties and drop the “Color” setting to completely dark..



Time to Decorate the Tree!!

Place the 3rd cursor to the right of the tree here, by using shift + right click (outside the camera view):



Now add an “Ico Sphere” mesh.

Select the ico sphere and go to material properties + add new

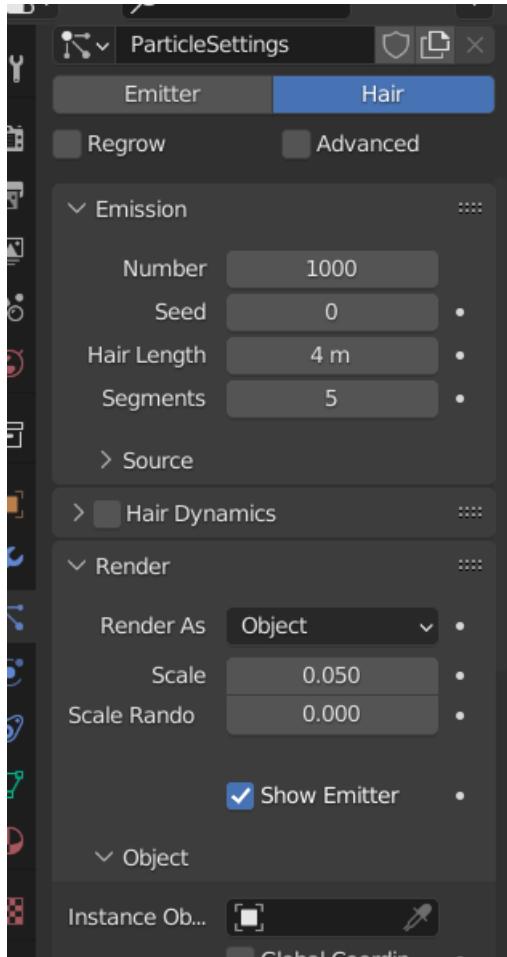
Change Surface to “Emission”. Change strength to around 3 and change the colour to something yellowish.

Go to “Render properties” and select the “Bloom” option. The ico sphere globe should now give off a glow.

Select the model and turn off “show overlays” so we can see the model clearly.

Go to “Particle Properties” and click on the “+” symbol.

Select “Hair” and under render “render as object”



Select the “instance object” and set it to “icosphere”, this is the icosphere we have just created.

You can adjust the size by adjusting the scale field and also lower down the number of instances from 1000 to something more like 100 – what ever number you feel is the right fit.

You should now have something like this: -



That's the lights added but next we need to add some metallic bauble decorations.

Turn overlays back on - Move the 3d cursor again to near the 1st icosphere and now add a 2nd icosphere [shift+right click]

After adding, right click on the icosphere and select "shade smooth" to make it a smooth round ball.

Add a new material – increase the "metallic" value and decrease the roughness to get a metal sparkling effect.

Again select the trees leaves, and go to "Particle Properties"

Again temporarily turn off overlay so we can see the tree better.

Again add a 2nd particle system to the tree using the "+" symbol and again select "Hair".

As before, set to "Render as object" and add the new icosphere as the instance object.

Reduce the scale and number until the amount and size on the tree looks good.

Aim for something like this: -

You can adjust the seed values on both lights and baubles to get different placements.



Your final step is to set up and render the final image of your beautiful Christmas tree.

Go to render properties, set the render engine to "Eevee" if not already.

Turn on the "Screen space reflections" option.

Finally touches – pick a colour for your baubles by adjusting its material. You can do different colours by adding more icospheres and associated particle systems. Tip use Shift + D to duplicate the existing bauble.

In Render properties, Colour management – change look to "High Contrast" and increase the exposure setting.

And that's it! – Happy Christmas!

