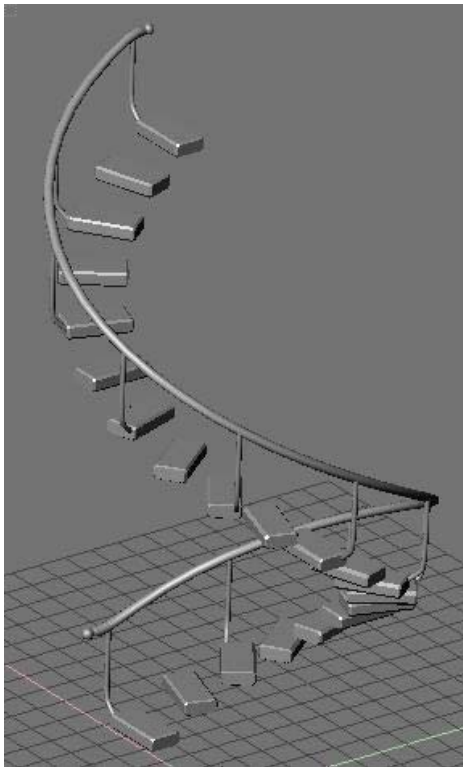


# Spiral Stairs

## *Screw Dup?*

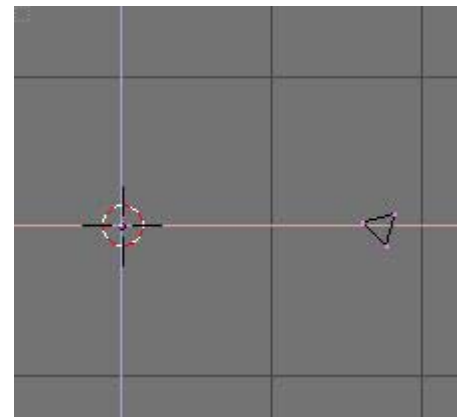


I assume you're already familiar with the screw, spin and spin dup functions in Blender. But what if you want to copy an object in a spiral? There's no "screw dup" function.

In this simple tutorial I will show a trick to copy in a spiral.

There are other, perhaps better ways. I know of at least one tutorial that deals with this using IPOs and dupli frames (I should probably look it up since I've forgotten how to do it ;). I like to use tools I'm familiar with though, so I came up with this way of copying instead.

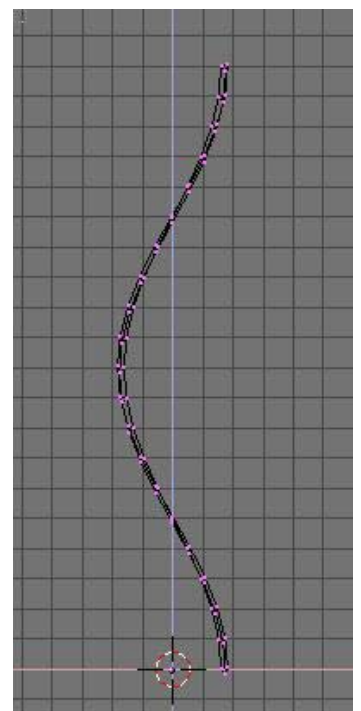
First make a triangle (three vertex circle). It doesn't really have to be a triangle, but since that's the smallest closed shape it will probably be the best.



Next make a line between two vertices, it should be the exact length in units as the number of steps per turn you will use. I chose to use 20. To make it I just scaled up one side of a plane 10 times (use ctrl button to scale in steps).

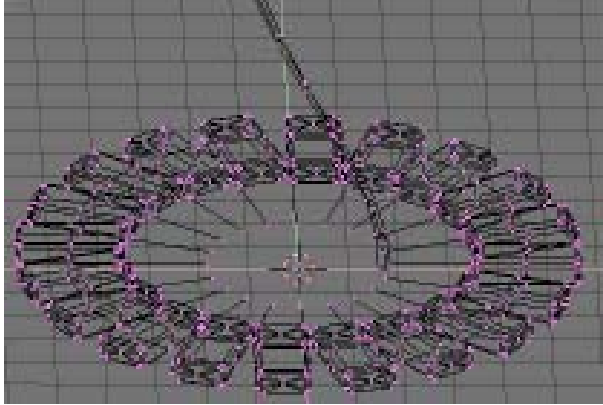
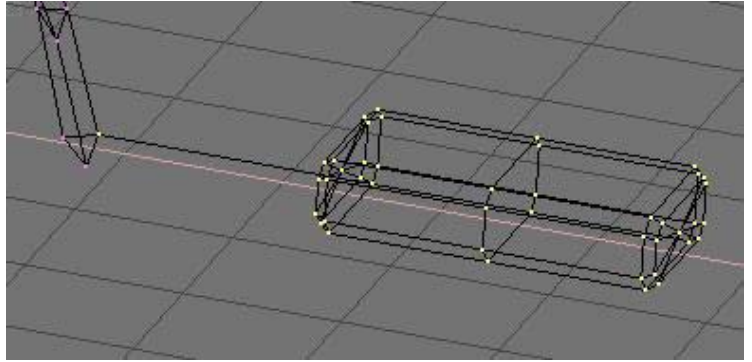
Now just set the number of steps and turns in edit buttons and screw.

Delete what's left from the line and you should have something like this.

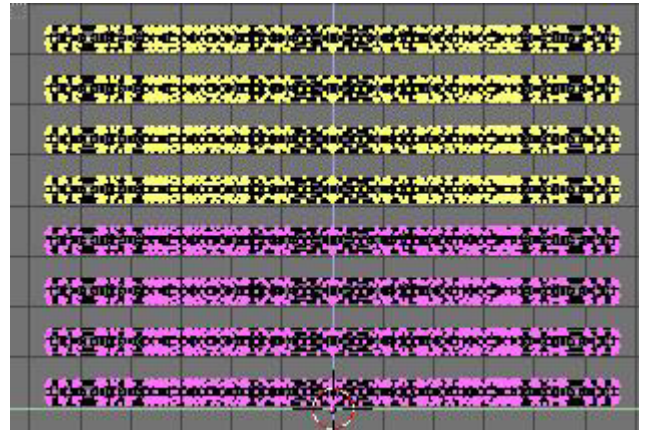


Ok, so far nothing strange. Now for the little trick.

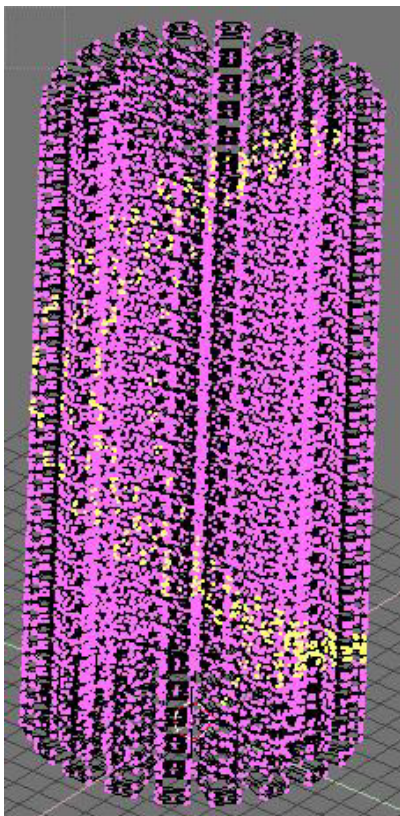
Model a stair, or whatever it is you want to copy in a spiral. Connect it to a vertice with identical location to one in the original triangle.



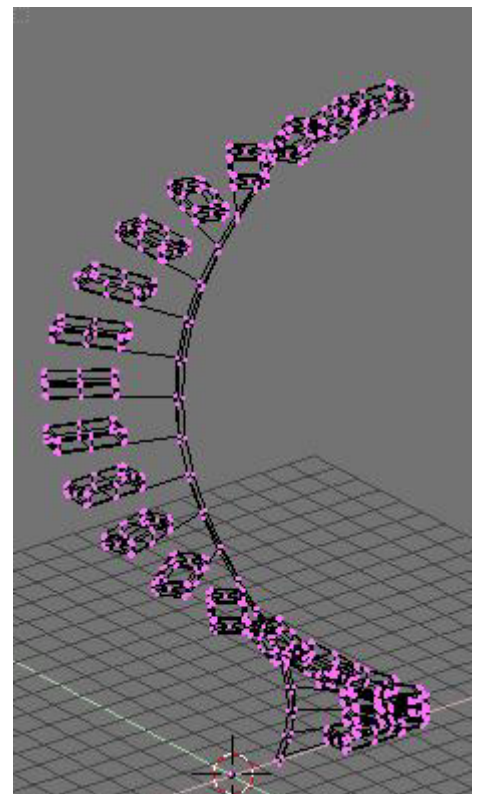
Next, use spin dup to copy it in a circle. Make sure you use the same number of steps, and set the degree to 360.

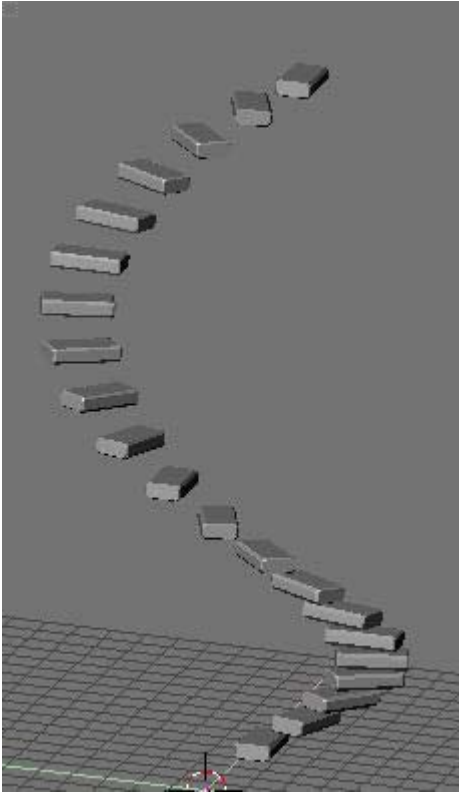


In the next step, hide the spiral shape (H) then select all vertices and duplicate them to one unit higher up (use ctrl). Then select all vertices and duplicate those to two steps higher, and so on until you have at least twenty (if you chose the same number as me) circles of steps.



Now unhide the spiral again, then remove doubles. If you select vertices connected to your spiral now (L) you should get something like what you see on the left. Press select swap and delete vertices. Now it should look more like the picture to the right.



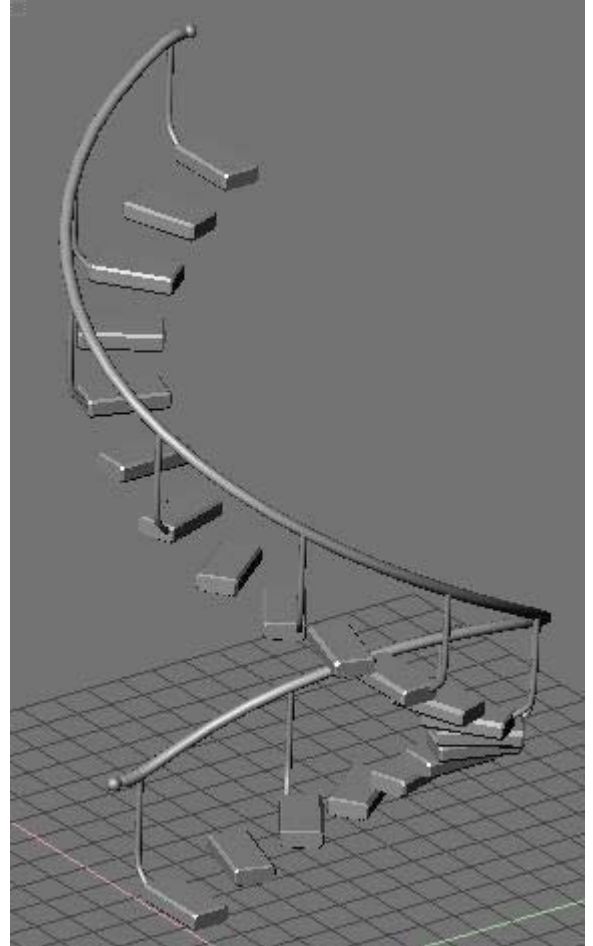


In top view it should be easy enough to select and delete the spiral shape. You might want to save it on a different layer though, in case you want to copy more objects like this.

Just to make it look more like stairs I used the same technique and the usual screw function to add a hand rail.

There, that was pretty easy wasn't it?

I hope it helped someone too ;)



Pontus Forsberg

If you have any comments or questions about this tutorial, my mail is [p.forsberg@excite.com](mailto:p.forsberg@excite.com)