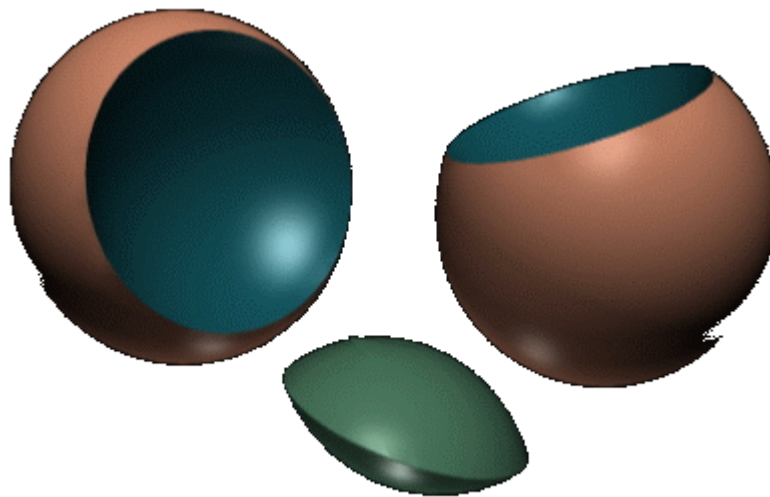


the IceMan

presents

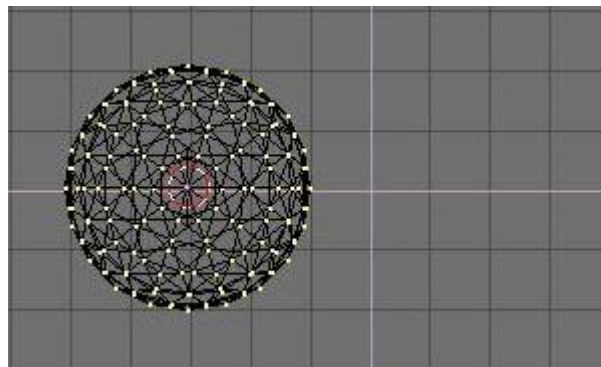
Booleans Intersections in BLENDER



The above image was created with [BLENDER](#) in just 8 simple steps. This tutorial is just a first draft and was slapped together in about an hour, so please ignore any grammatical errors! It is assumed that you know how to get around in Blender. Beginner tutorials are on the way.

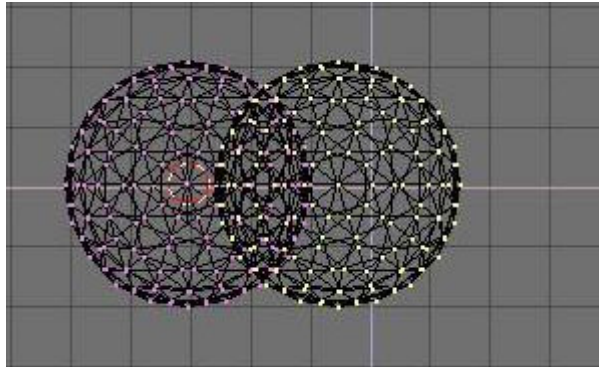
STEP 1

Start out with a clean 3D screen and add a Mesh >> Icosphere with 3 Subdivisions.



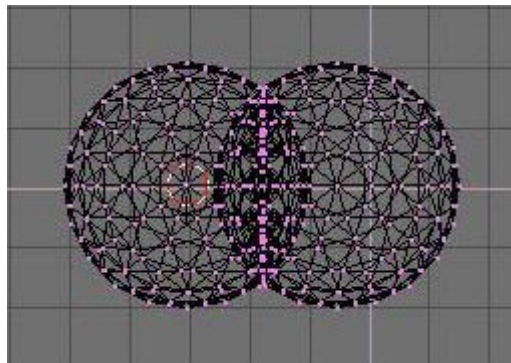
STEP 2

Stay in Edit Mode and duplicate the Sphere by pressing SHIFT+D. Move the new Sphere to the side of the 1st one.



STEP 3

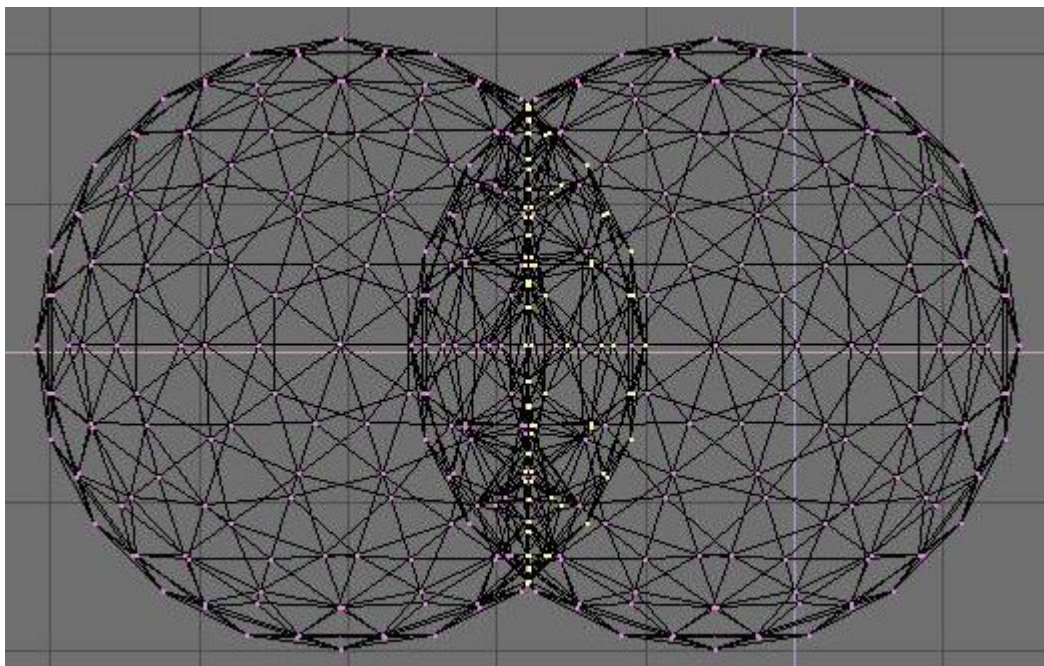
Press the 'A' key one time to deselect all vertices, then again to select all vertices. Press 'F9' to get into the Edit Button Window and click the 'Intersect' Button.



Now zoom in a little because the next step is a bit tricky.

STEP 4

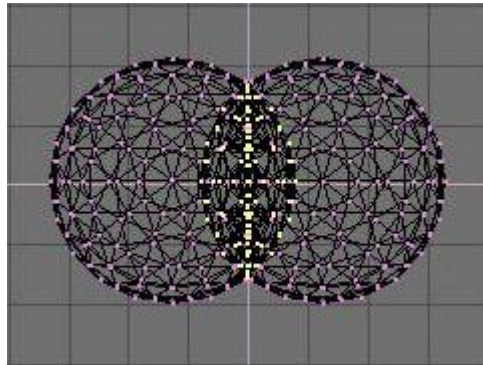
Place the cursor over one of the newly created vertices in the intersection and press the 'L' key.



The selection should be the part of the left sphere that was inside of the right one.

STEP 5

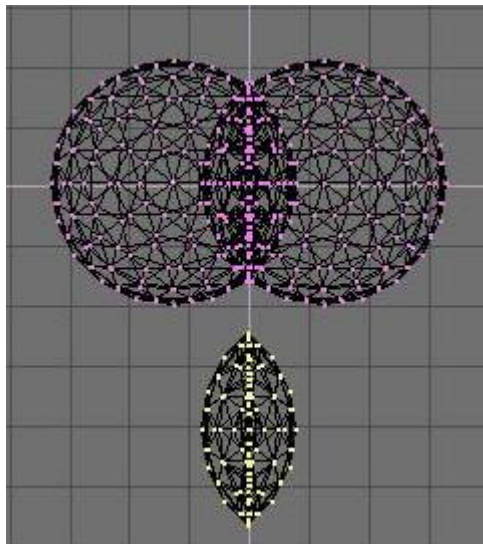
Repeat step 4 on the exact opposite side on the sphere on the right.



Now the selected part is the Union of only the parts that the two spheres intersect with each other. Zoom back out for the next step.

STEP 6

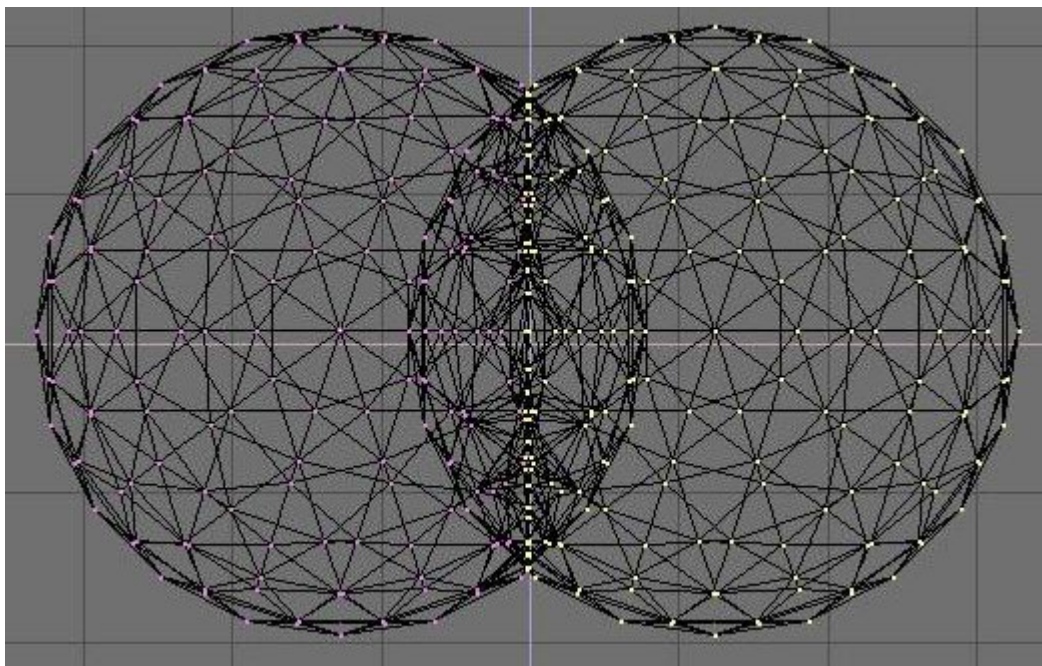
Lets duplicate that selection with a 'SHIFT+D' and move it out of the way for now by pressing the 'G' key and moving it.



Our original Intersection is still in tact. Zoom in again for the next step.

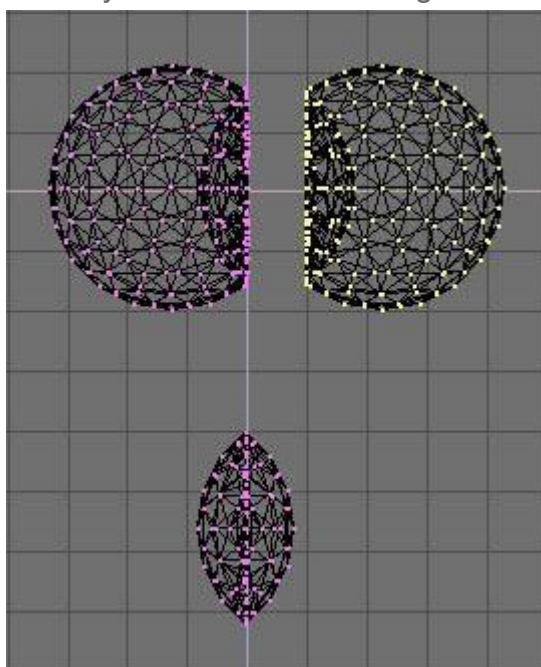
STEP 7

Place the cursor over one of the new vertices as we did in Step 4 and press the 'L' key. Next place the cursor over one of the vertices of the sphere on the right and press the 'L' key.

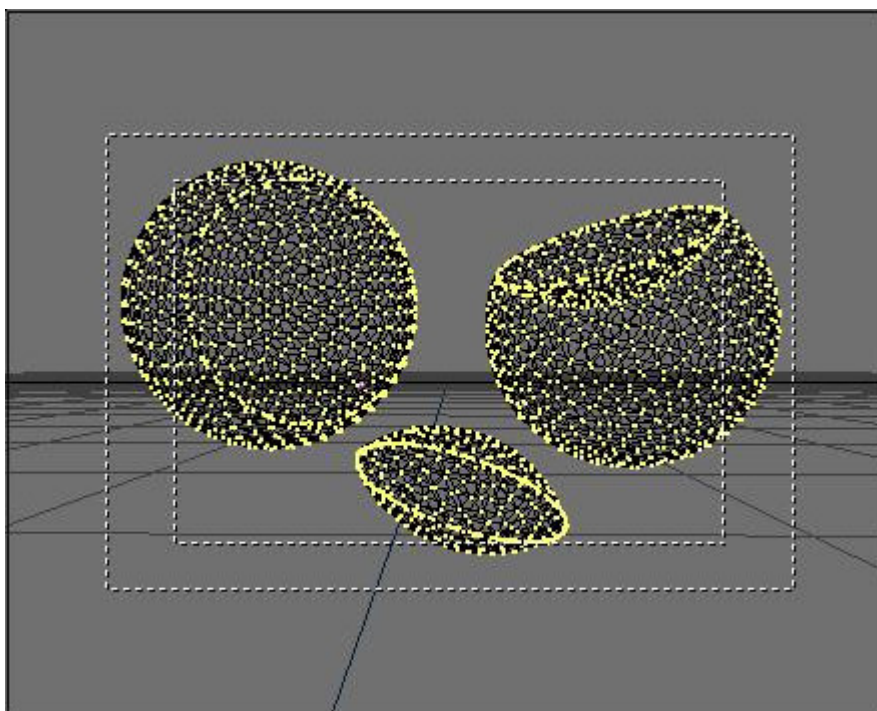


STEP 8

Press the 'G' key and move your selection to the right.



Now we have the Sphere on the Right with the area that was occupied by the Left Sphere Subtracted from it. (Resulting in the same for the Left Sphere). Move and rotate things around a bit and this is what you'll get.



That's all there is to it ! Different combinations of Unions, Additions and Subtractions can result in all kinds of new and interesting shapes. I used the technique described by [Mika Saari on Blendermania](http://members.yourlink.net/gruff/intersect.html) to assign the different materials to the new shapes that were created using Boolean Intersections in Blender.

