

# Code journal: Sine Torus

14.07.2020, Mariana Ávalos Arce

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radius_modif = 1; spikey_modif = 1; flower_modif = 1;
for j in range(tubes): # tubes = 60
    outer_rads = (step_outer_angle * PI / 180.0) # this step = 360/tubes
    outer_distance = 0.0
    x = 0.0; y = 0.0; z = 0.0
    for i in range(sections): # sections = 20, strength = 0.5, n_modifs = 6
        if spikey != False or flower != False:
            radius_modif = abs(strength_modif * math.sin((n_modifs/2.0) * j * outer_rads
            - (outer_rads / 2.0))) + strength_modif
        if spikey == True: # spikey = False
            spikey_modif = radius_modif
        elif flower == True: # flower = True
            flower_modif = radius_modif
        inner_rads = (step_inner_angle * PI / 180.0) # this step = 360/sections
        inner_x = distance + spikey_modif * inner_radius * math.cos(i * inner_rads
        - (inner_rads / 2.0)) # distnace = 5, inner_radius = 3
        inner_y = inner_radius * math.sin(i * inner_rads - (inner_rads / 2.0))
        outer_distance = inner_x * flower_modif
        y = radius_modif * inner_y
        x = outer_distance * math.sin(j * outer_rads - (outer_rads / 2.0))
        z = outer_distance * math.cos(j * outer_rads - (outer_rads / 2.0))
        temp = OM.MPoint(x, y, z)
        vertices.append(temp)
```

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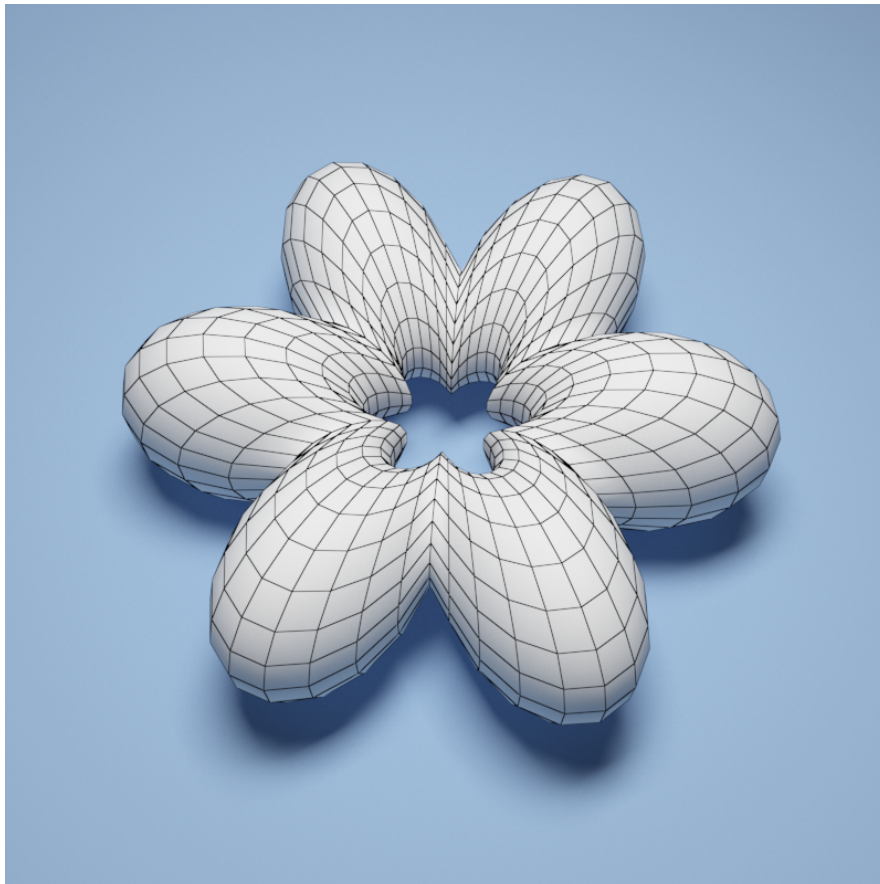


Figure 1: Sine Torus Resulting Image