

In[120]:=

```
ClearAll["Global`*"]
NM[u_] := Sqrt[u.u];

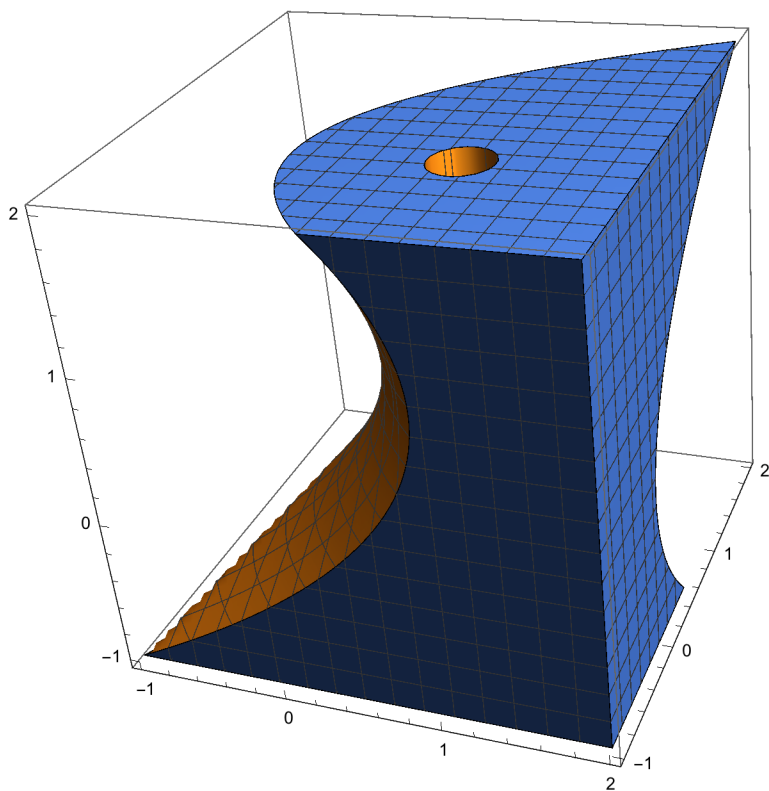
Dist[l1_, l2_, p_] := NM[
  Cross[l2 - l1, l1 - p]] / NM[l2 - l1]

a1 = {1, 0, 0};
a2 = {1, 0, 1};
b1 = {0, 1, 0};
b2 = {1, 1, 0};
c1 = {0, 0, 1};
c2 = {0, 1, 1};
d1 = {1, 0, 0};
d2 = {1, 0, 1};

F[x_, y_, z_] :=
  If[Dist[a1, a2, {x, y, z}] <= Dist[b1, b2, {x, y, z}] && Dist[a1, a2, {x, y, z}] <=
    Dist[c1, c2, {x, y, z}] && Dist[a1, a2, {x, y, z}] <= Dist[d1, d2, {x, y, z}], 1, 0]
FF[x_, y_, z_] := If[Dist[d1, d2, {x, y, z}] <= Dist[b1, b2, {x, y, z}] &&
  Dist[d1, d2, {x, y, z}] <= Dist[c1, c2, {x, y, z}] &&
  Dist[d1, d2, {x, y, z}] <= Dist[a1, a2, {x, y, z}], 1, 0]

In[134]:= KUSsq = RegionPlot3D[F[x, y, z] == 1 && Dist[a1, a2, {x, y, z}] > .2,
  {x, -1, 2}, {y, -1, 2}, {z, -1, 2}, PlotPoints -> 50]
```

Out[134]=



In[136]:=

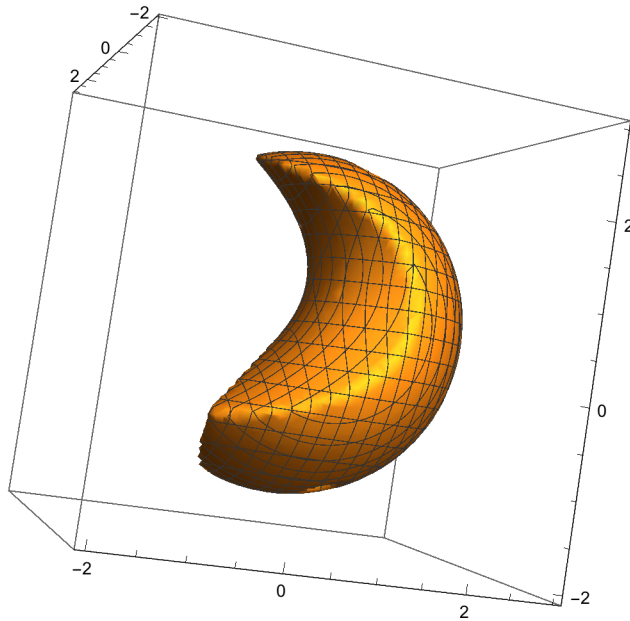
Export["KUSsq.stl", KUSsq]

Out[136]= KUSsq.stl

In[133]:=

```
KUSsph = RegionPlot3D[
  FF[x, y, z] == 1 && Dist[d1, d2, {x, y, z}] > .2 && NM[{x, y, z} - {1 / 2, 1 / 2, 1 / 2}] < 2,
  {x, -2, 3}, {y, -2, 3}, {z, -2, 3}, PlotPoints -> 50]
```

Out[133]=

In[135]:= **Export["KUSsph.stl", KUSsph]**

Out[135]= KUSsph.stl