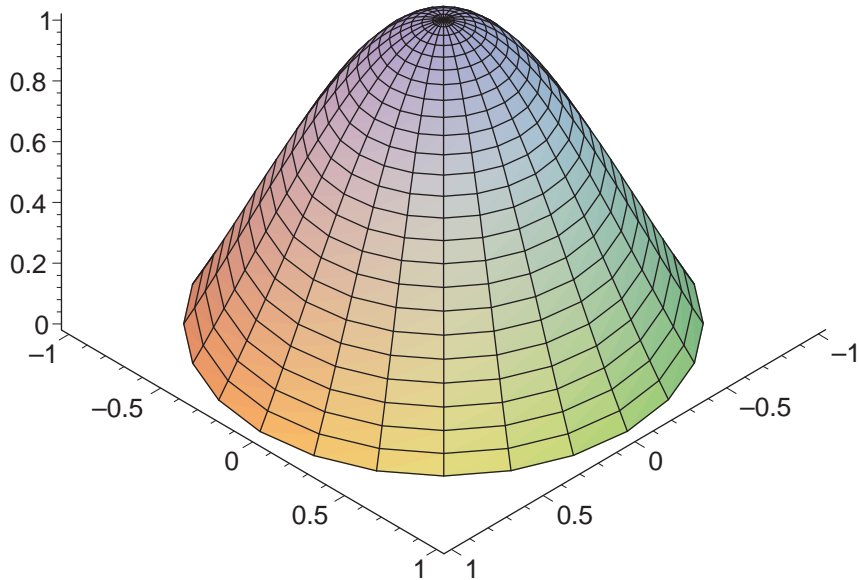
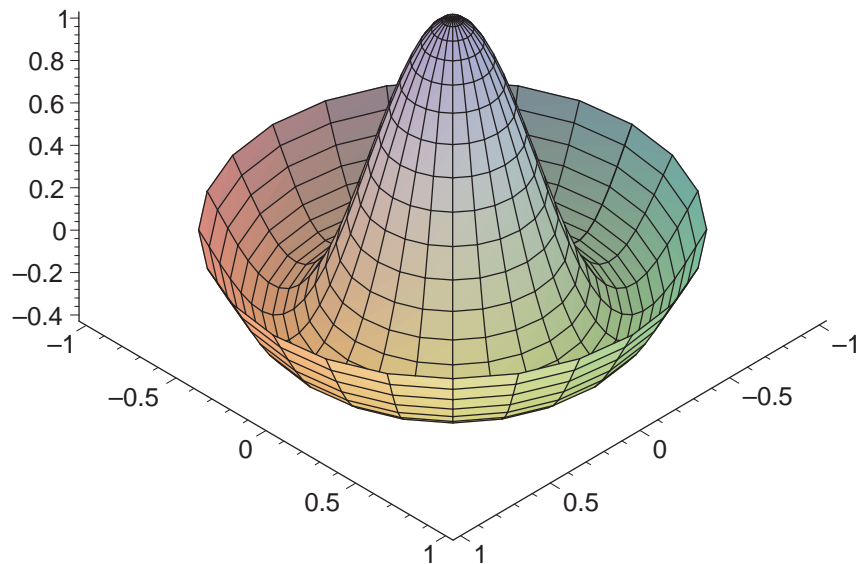


figures MAPLE

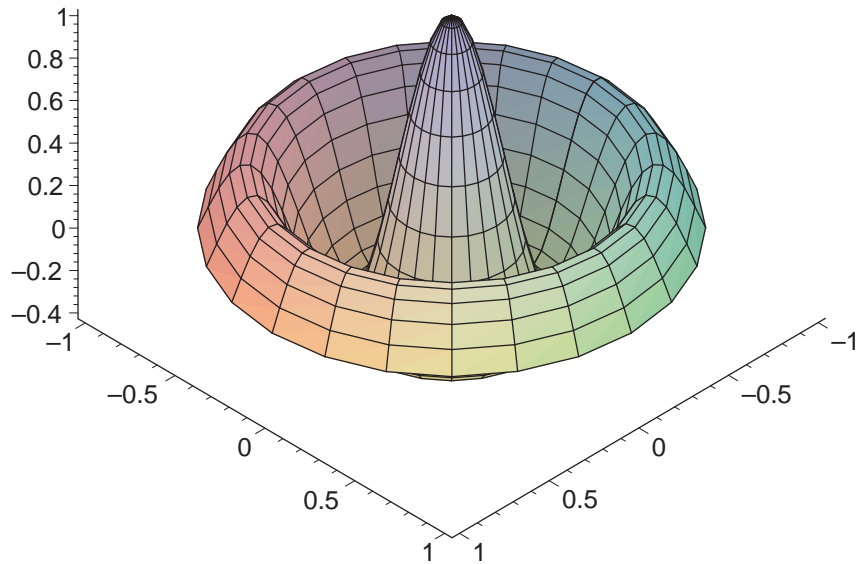
```
► alpha1:=BesselJZeros(0,1);  
v:=(r,t)→BesselJ(0,alpha1*r)*cos(alpha1*t);  
plot3d([r,theta,v(r,0)],r=0..1,theta=-Pi..Pi,coords=cylindrical,axes=frame);
```



```
► alpha2:=BesselJZeros(0,2);  
v:=(r,t)→BesselJ(0,alpha2*r)*cos(alpha2*t);  
plot3d([r,theta,v(r,0)],r=0..1,theta=-Pi..Pi,coords=cylindrical,axes=frame);
```



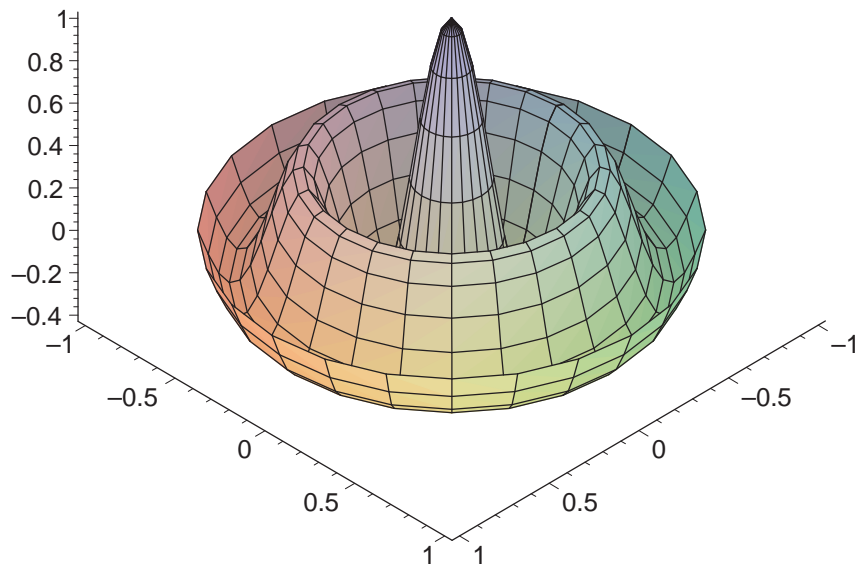
```
► alpha3:=BesselJZeros(0,3);  
v:=(r,t)→BesselJ(0,alpha3*r)*cos(alpha3*t);  
plot3d([r,theta,v(r,0)],r=0..1,theta=-Pi..Pi,coords=cylindrical,axes=frame);
```



```

► alpha4:=BesselJZeros(0,4);
v:=(r,t)→BesselJ(0,alpha4*r)*cos(alpha4*t);
plot3d([r,theta,v(r,0)],r=0..1,theta=-Pi..Pi,coords=cylindrical,axes=frame);

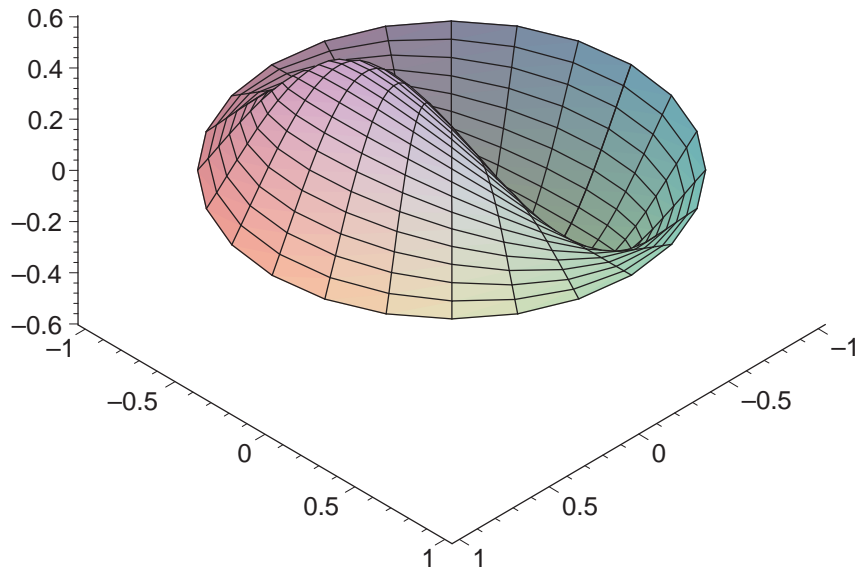
```



```

► alpha[1,1]:=BesselJZeros(1,1);
u:=(r,theta,t)→BesselJ(1,alpha[1,1]*r)*cos(theta)*cos(alpha[1,1]*t);
plot3d([r,theta,u(r,theta,0)],r=0..1,theta=-Pi..Pi,coords=cylindrical,
axes=frame);

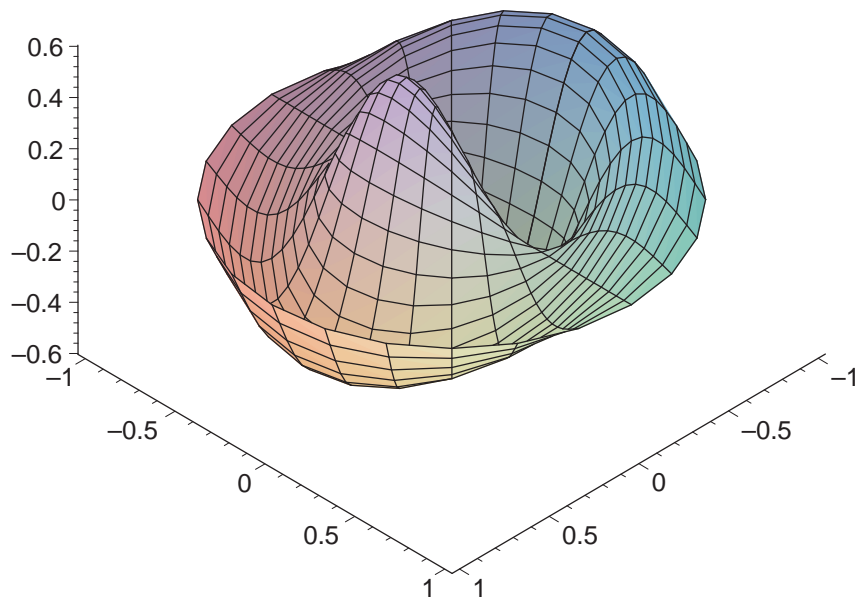
```



```

► alpha[1,2]:=BesselJZeros(1,2);
u:=(r,theta,t)→BesselJ(1,alpha[1,2]*r)*cos(theta)*cos(alpha[1,2]*t);
plot3d([r,theta,u(r,theta,0)],r=0..1,theta=-Pi..Pi,coords=cylindrical,
axes=frame);

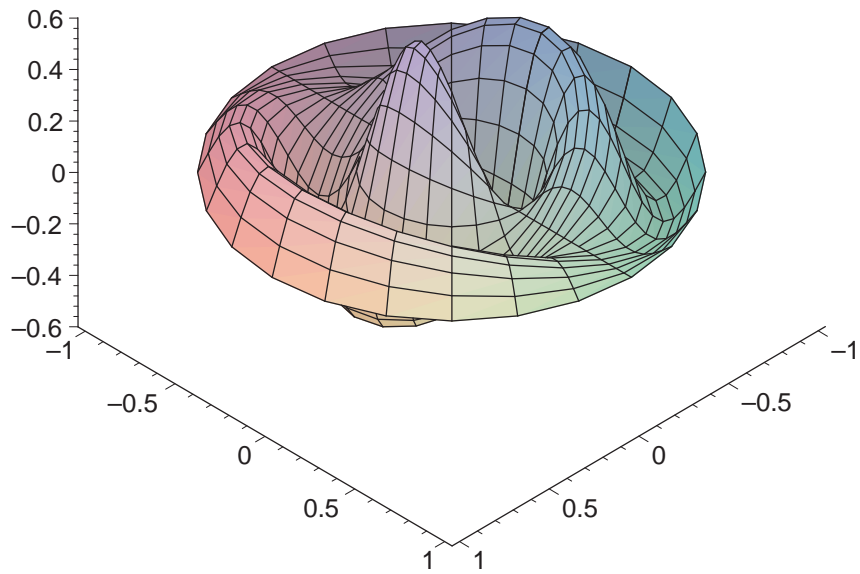
```



```

► alpha[1,3]:=BesselJZeros(1,3);
u:=(r,theta,t)→BesselJ(1,alpha[1,3]*r)*cos(theta)*cos(alpha[1,3]*t);
plot3d([r,theta,u(r,theta,0)],r=0..1,theta=-Pi..Pi,coords=cylindrical,
axes=frame);

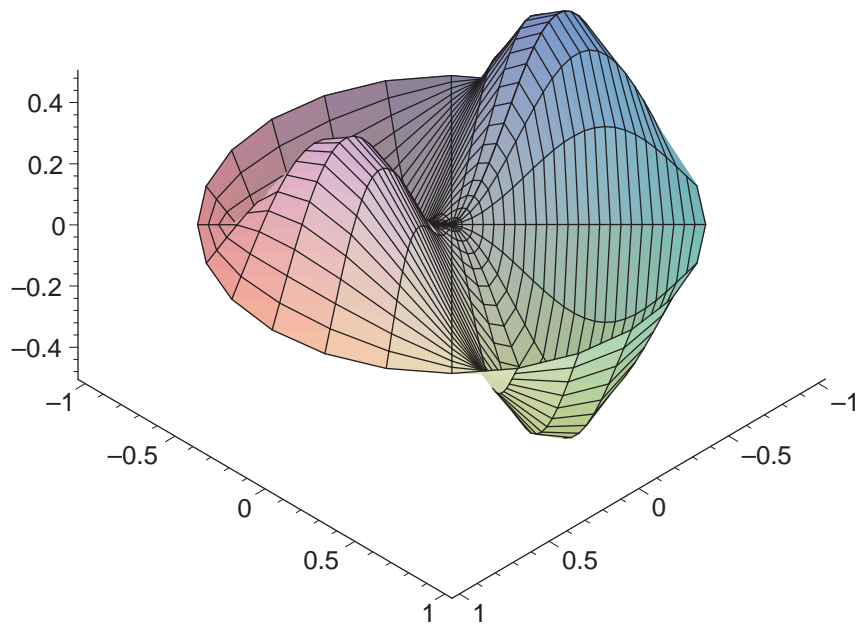
```



```

► alpha[2,1]:=BesselJZeros(2,1);
u:=(r,theta,t)→BesselJ(2,alpha[2,1]*r)*cos(2*theta)*cos(alpha[2,2]*t);
plot3d([r,theta,u(r,theta,0)],r=0..1,theta=-Pi..Pi,coords=cylindrical,
axes=frame);

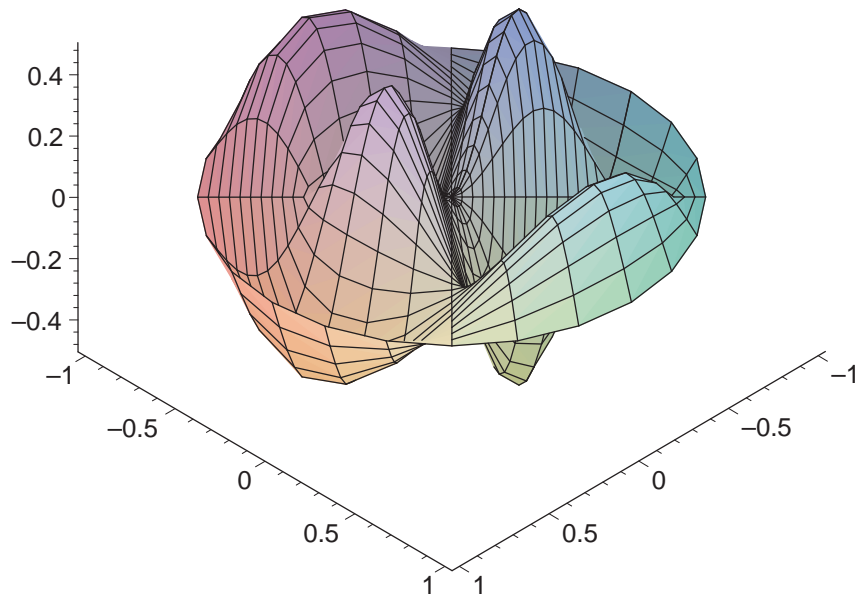
```



```

► alpha[2,2]:=BesselJZeros(2,2);
u:=(r,theta,t)→BesselJ(2,alpha[2,2]*r)*cos(2*theta)*cos(alpha[2,2]*t);
plot3d([r,theta,u(r,theta,0)],r=0..1,theta=-Pi..Pi,coords=cylindrical,
axes=frame);

```



```

► alpha[2,3]:=BesselJZeros(2,3);
u:=(r,theta,t)→BesselJ(2,alpha[2,3]*r)*cos(2*theta)*cos(alpha[2,3]*t);
plot3d([r,theta,u(r,theta,0)],r=0..1,theta=-Pi..Pi,coords=cylindrical,
axes=frame);

```

