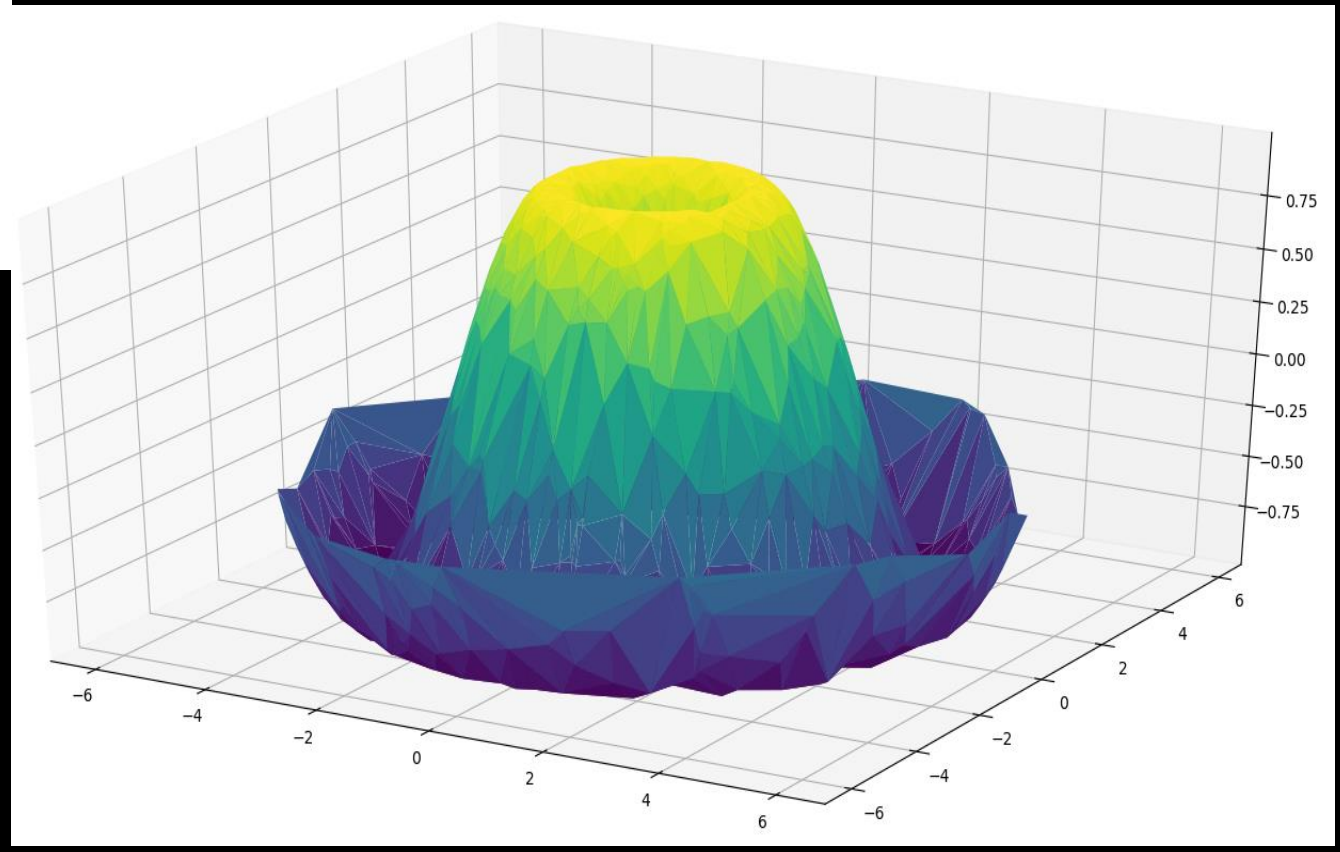
3D plots in Python

using the same MATPLOTLIB

that is not able to make a normal histogram

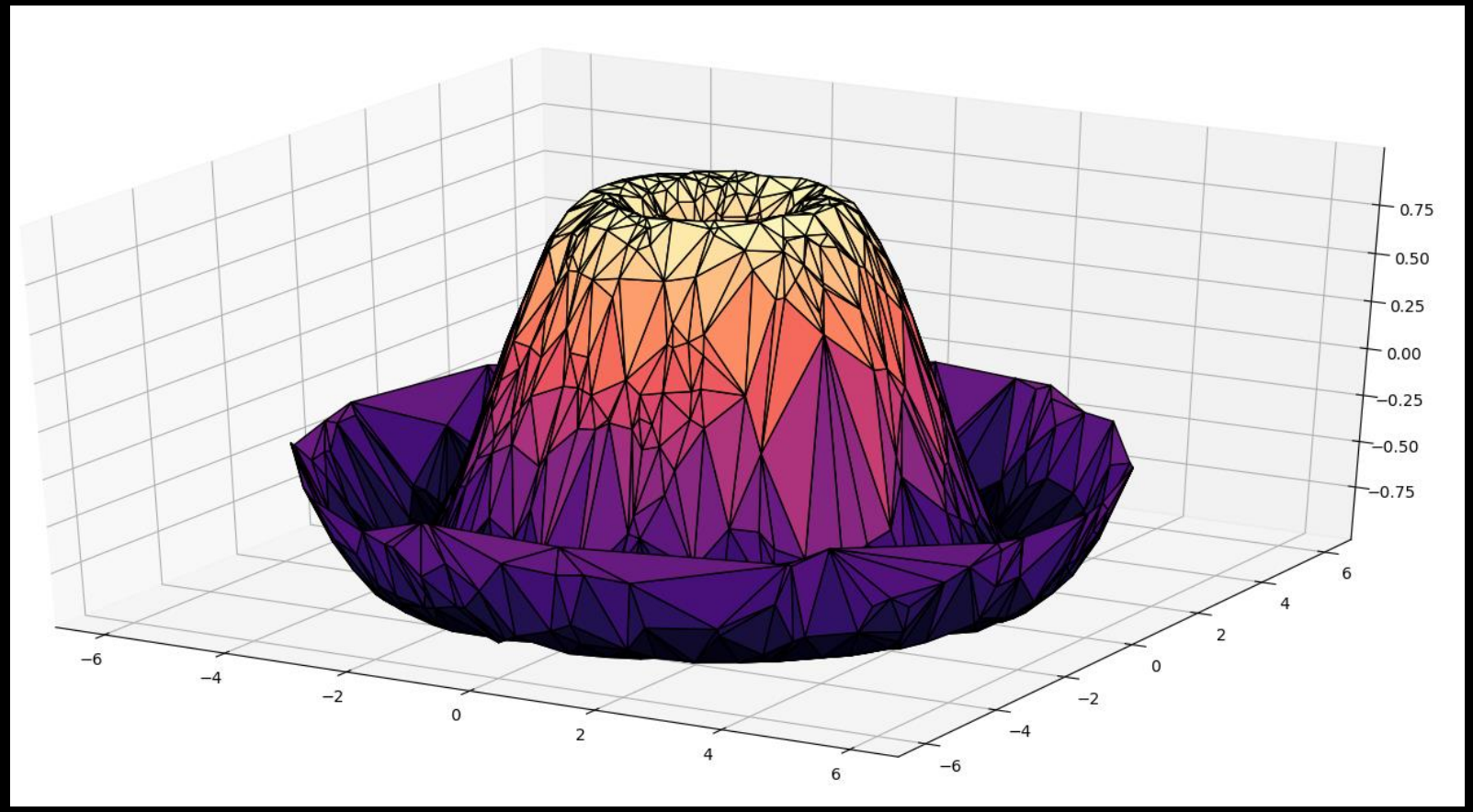
```python
from mpl_toolkits import mplot3d
import numpy as np
import matplotlib.pyplot as plt


def f(x, y):
    return np.sin(np.sqrt(x ** 2 + y ** 2))


theta = 2 * np.pi * np.random.random(1000)
r = 6 * np.random.random(1000)
x = np.ravel(r * np.sin(theta))
y = np.ravel(r * np.cos(theta))
z = f(x, y)
ax = plt.axes(projection='3d')
ax.plot_trisurf(x, y, z,
                cmap='viridis', edgecolor='none')
```



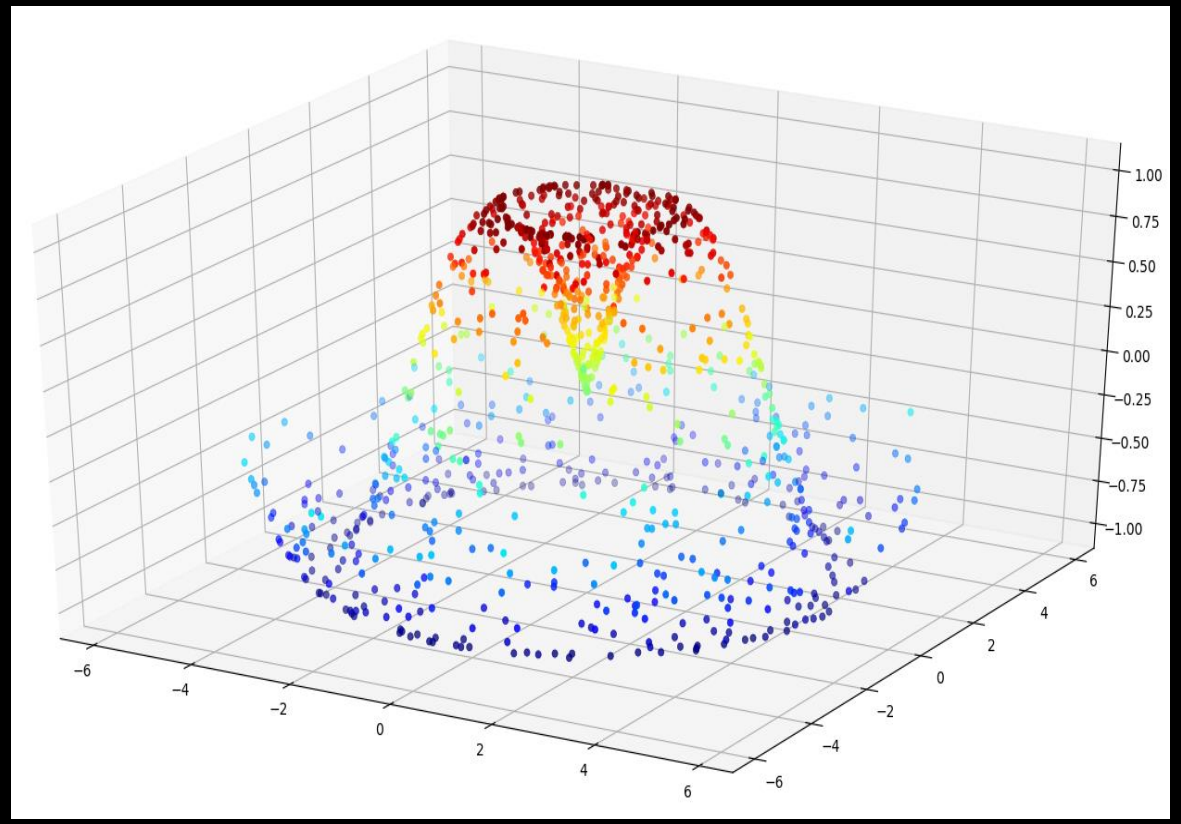
```
ax.plot_trisurf(x, y, z,
                cmap='magma', edgecolor='black')
```

The most well-known **colormaps are:**

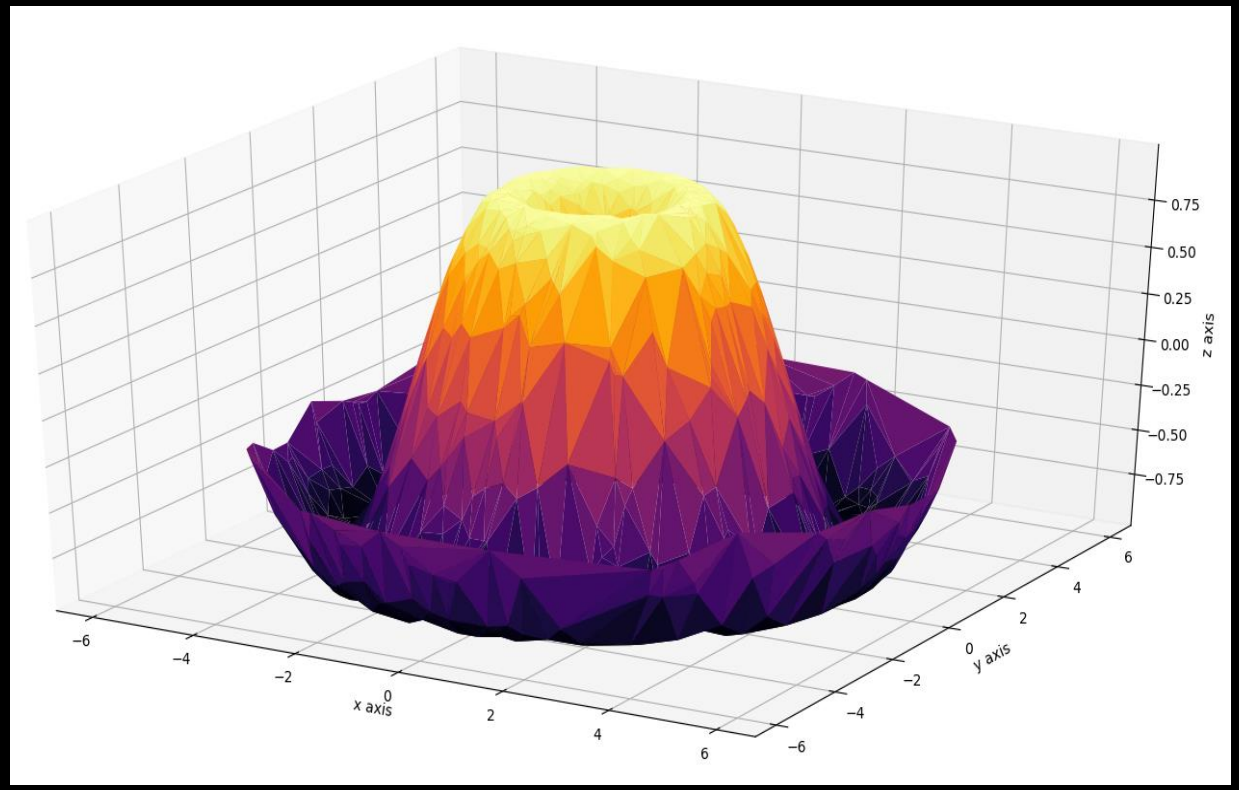
- **JET**
- **PARULA**
- **GRAY**
- **Etc.**



```
ax.scatter(x, y, z, c=z, cmap='jet', linewidth=0.5)
```




```
ax.set_xlabel('x axis')
ax.set_ylabel('y axis')
ax.set_zlabel('z axis')
```



Plotly library https://plot.ly/python/3d-axes/