La fonction "goutte d'eau"

In [18]:

```
import numpy as np
import matplotlib.pyplot as plt
from mpl_toolkits.mplot3d import Axes3D
from matplotlib import cm


def f(x, y):
    r = np.sqrt(x**2 + y**2)
    return (np.exp(-r) * np.cos(4*r))
```

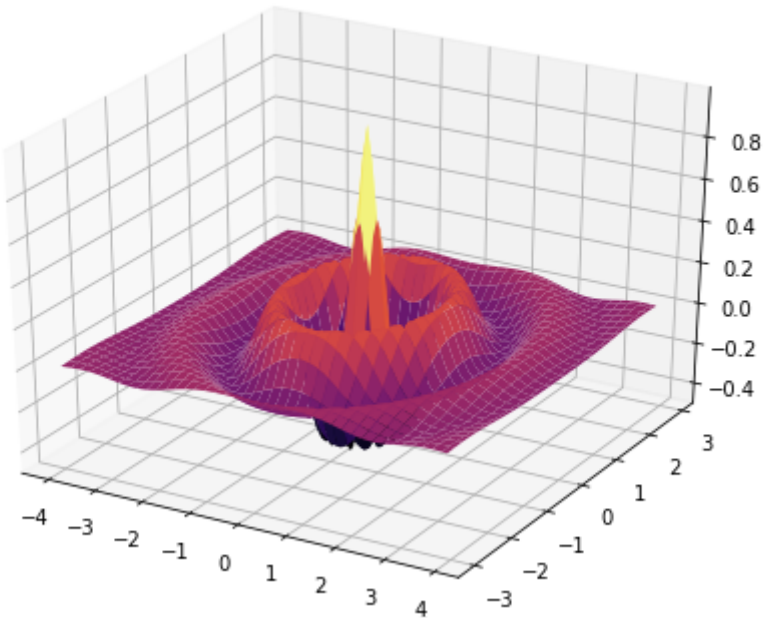
In [19]:

```
x = np.arange(-4.0, 4.0, 0.1)
y = np.arange(-3.0, 3.0, 0.1)

X, Y = np.meshgrid(x, y)
Z = f(X, Y)


fig = plt.figure(figsize=[8, 6])
ax = fig.gca(projection='3d')

ax.plot_surface(X, Y, Z, cmap=cm.inferno)
plt.ioff()
```



In [ ]:

```
```