

# Surface plot

This and the following examples were lifted from the collection at <https://www.mathworks.com/examples/symbolic/mw/symbolic-ex98670373-computational-mathematics-in-symbolic-math-toolbox>. Other nice examples can also be found here <https://www.mathworks.com/examples/symbolic/mw/symbolic-ex98670382-analytical-plotting-with-symbolic-math-toolbox>.

```
syms x y
fsurf(sin(x)+cos(y));
print(gcf,'example_03_fig1.png','-dpng');
```

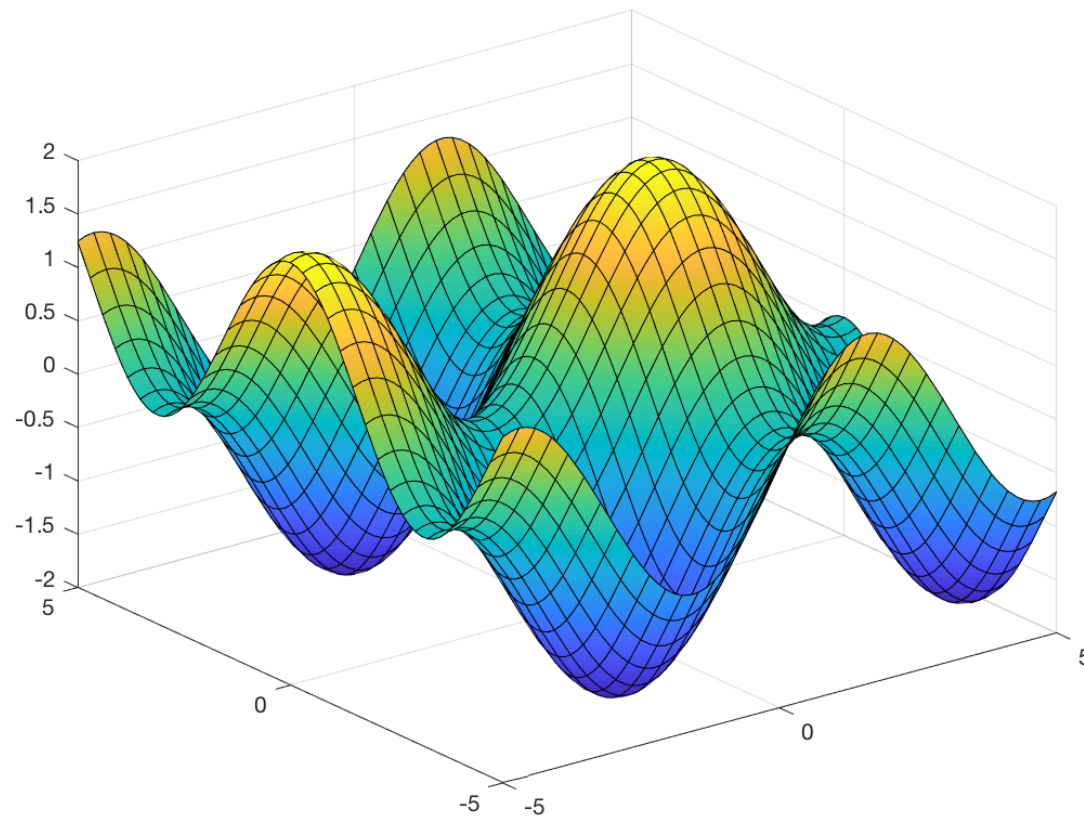


Figure 1: A 2d surface plot.

# Contour plot

```
syms x y  
fcontour(sin(x)+cos(y));  
print(gcf,'example_03_fig2.png','-dpng');
```

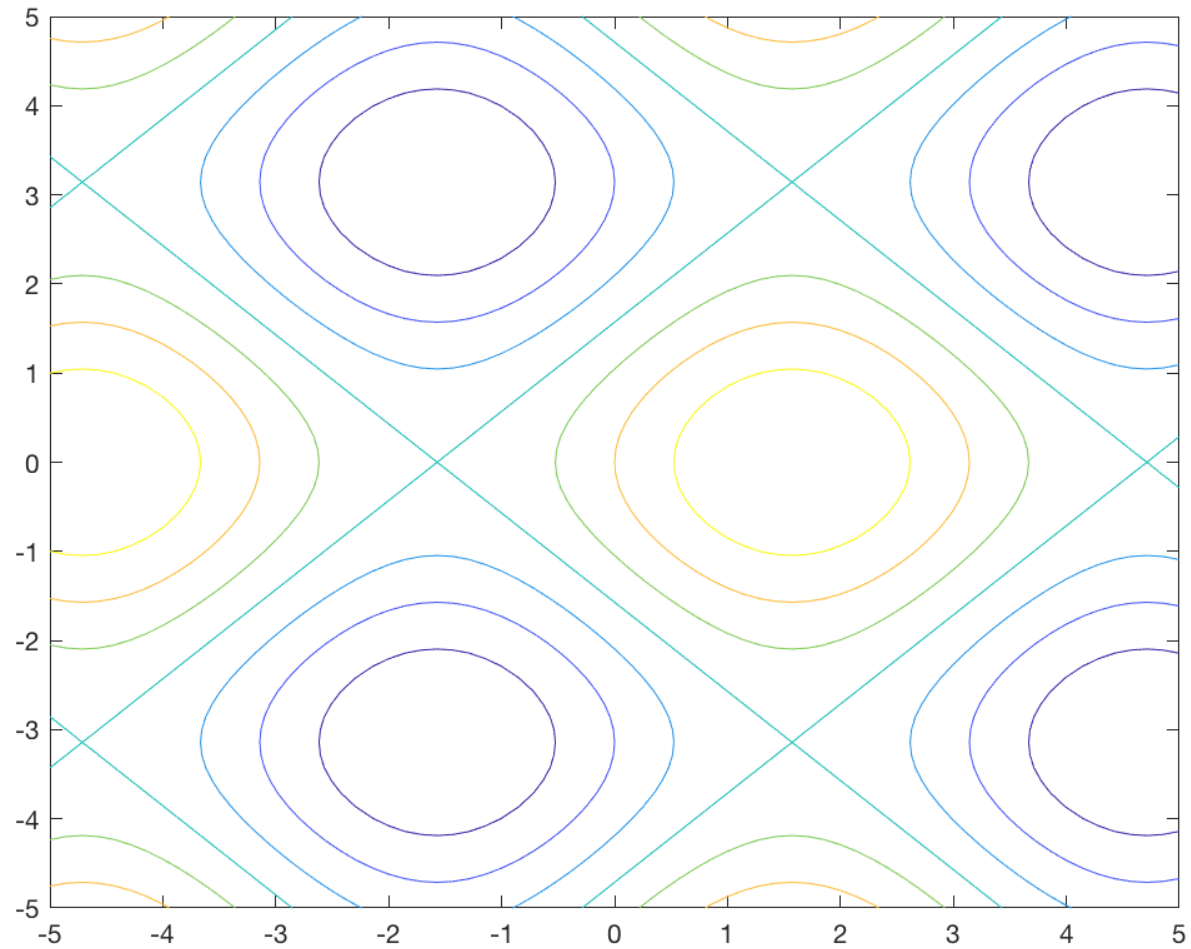


Figure 2: A contour plot

# Parameteric plot

```
syms t
xt = exp(abs(t)/10).*sin(5*abs(t));
yt = exp(abs(t)/10).*cos(5*abs(t));
zt = t;
h = fplot3(xt,yt,zt,[-10,10],'r');
view([-45,20]);
print(gcf,'example_03_fig3.png','-dpng');
```

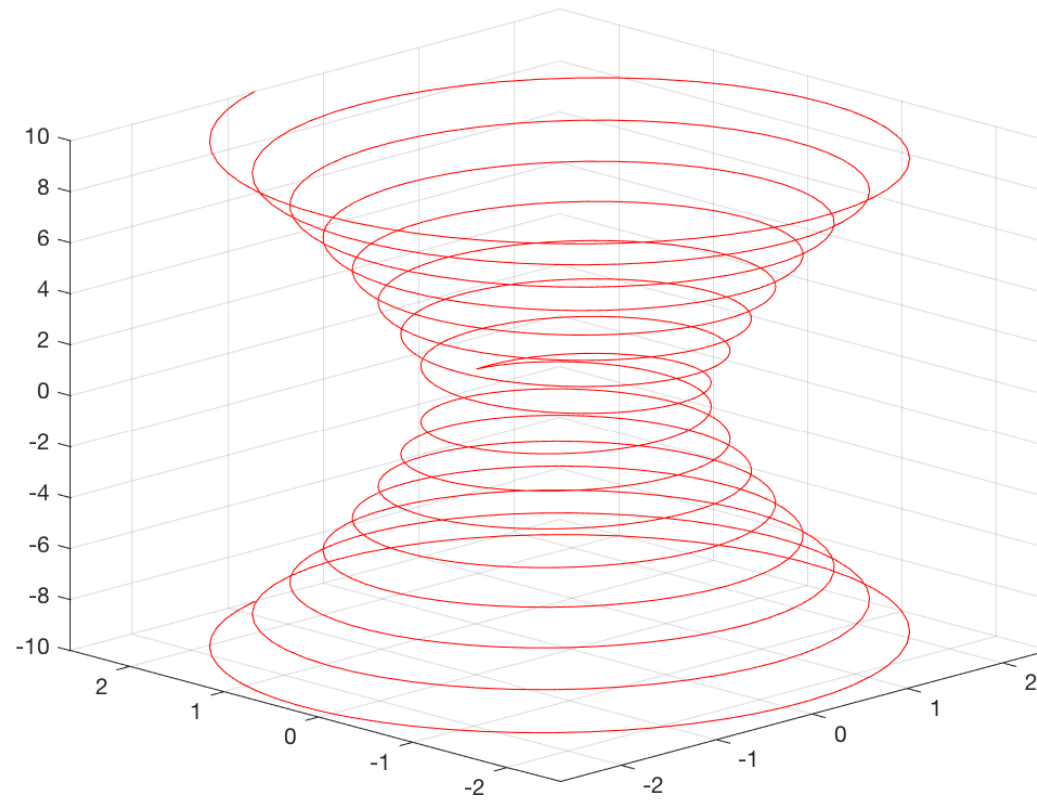


Figure 3: A 3d parametric plot.