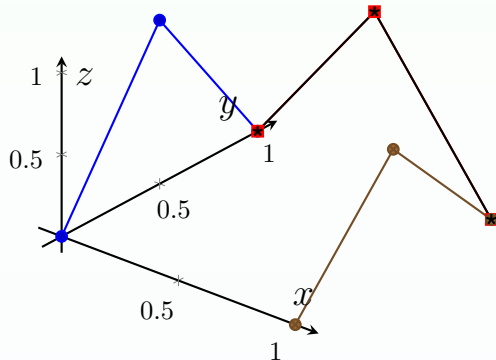


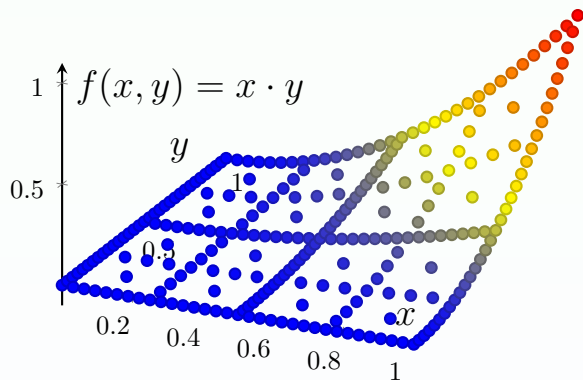
# Linear



```
1 \begin{axis}[xlabel=$x$,
2           ylabel=$y$,
3           zlabel=$z$,
4           enlargelimits= true,
5           view={40}{40},]
6
7 \addplot3 coordinates{(0,0,0)
8 (0,0.5,1)(0,1,0)};
9 \addplot3 coordinates{(0,1,0)
10 (0.5,1,1)(1,1,0)};
11 \addplot3 coordinates{(1,1,0)
12 (1,0.5,.75)(1,0,0)};
13 \addplot3 coordinates{(0,1,0)
14 (0.5,1,1)(1,1,0)};
15 \end{axis}
```

Fonte: Adaptado de Feuersänger (2021, p. 134)

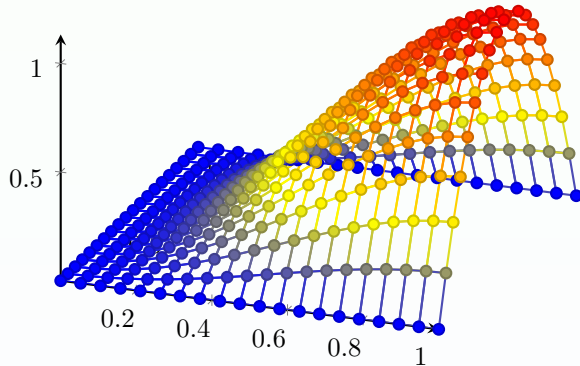
# Scatter



```
1 \begin{axis}[ xlabel=$x$,  
                ylabel=$y$,  
3   zlabel={$f(x,y)=x\cdot y$},  
  \addplot3+ [only marks, scatter]  
5   table  
    {plotdata/  
7     pgfplotsexample4_grid.dat};  
  \end{axis}
```

Fonte: Adaptado de Feuersänger (2021, p. 132)

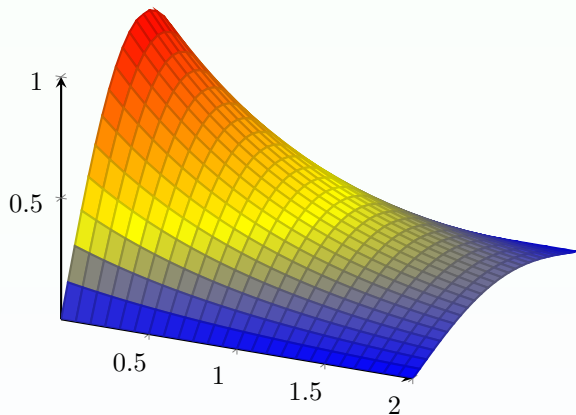
# mesh



```
\begin{axis}[grid=major,  
2 view={40}{30},]  
  \addplot3+ [mesh,scatter,  
4           samples=20,domain=0:1,]  
           {5*x*sin(2*deg(x)) * y*(  
6 \end{axis}
```

Fonte: Adaptado de Feuersänger (2021, p. 135)

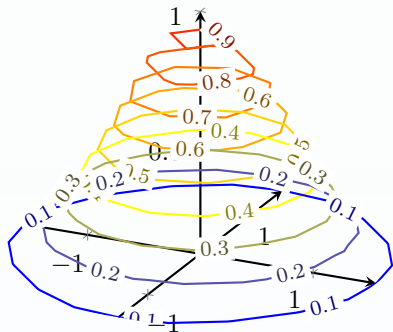
## surface



```
\begin{axis}[grid=major,  
2           mark=none]  
  
4 \addplot3 [surf,  
           shader=faceted,  
6           samples=25,  
           domain=0:2,  
8           y domain=0:1,]  
           {exp(-x)*sin(pi*deg(y))};  
10 \end{axis}
```

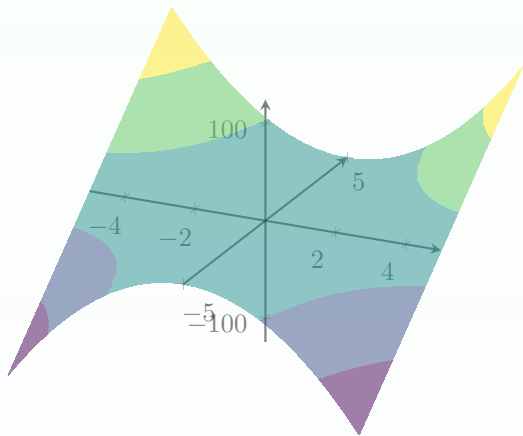
Fonte: Adaptado de Feuersänger (2021, p. 139)

## contour



```
\begin{axis}[mark=none]
2
    \addplot3 [contour gnuplot
4        ={number=14},
        label=false]
6        {exp(0-x^2-y^2)};
\end{axis}
```

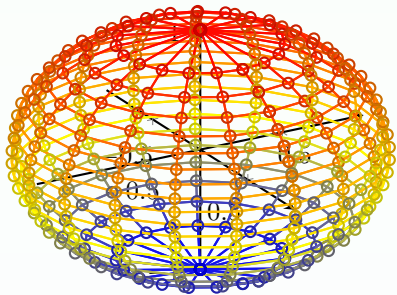
## filled contour



```
1 \begin{axis}[  
    colormap name=viridis,  
3    mark = none,  
    opacity=.5]  
5  
    \addplot3 [contour filled]  
7        {x^2*y};  
\end{axis}
```

Fonte: Adaptado de Feuersänger (2021, p. 165)

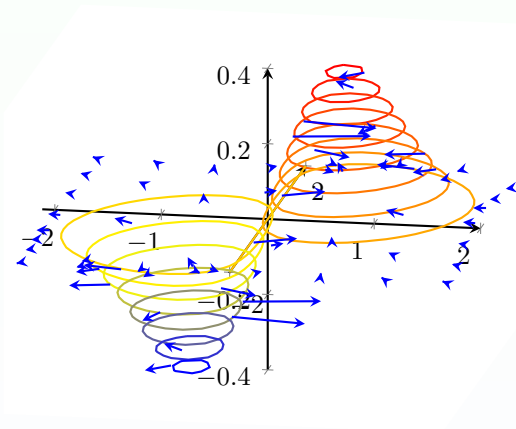
## parametrized



```
\begin{axis}[view={60}{20}]
2 \addplot3[only marks,
      mesh,z buffer=sort,
4      scatter,scatter src=z,
      samples=20,
6      domain=-1:1,
      y domain=0:2*pi,]
8      ({sqrt(1-x^2)*cos(deg(y))},
      {sqrt(1-x^2)*sin(deg(y))},
10     x);
\end{axis}
```

Fonte: Adaptado de Feuersänger (2021, p. 172)

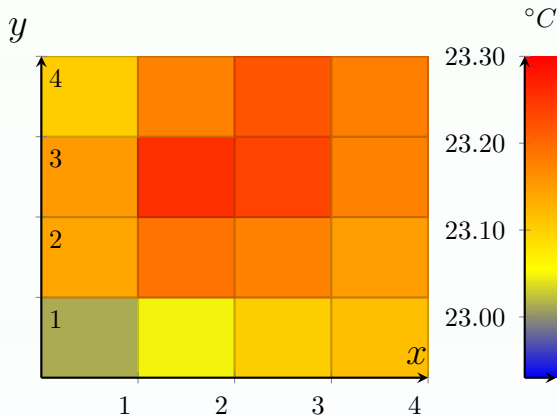
## 3D quiver



```
1 \begin{axis}[domain=-2:2,  
               view={45}{45},  
3   axis background/.style=  
     {fill=white},]  
5  
6 \addplot3 [  
7   contour gnuplot={number=20,  
                       labels=false},  
9     thick,] {exp(0-x^2-y^2)*x};  
11 \addplot3 [blue,-stealth,  
             samples=10, quiver={  
13   u={exp(0-x^2-y^2)*(1-2*x^2)},  
             v={exp(0-x^2-y^2)*(-2*x*y)},  
15   scale arrows=0.3},,]  
             {exp(0-x^2-y^2)*x};  
17 \end{axis}
```

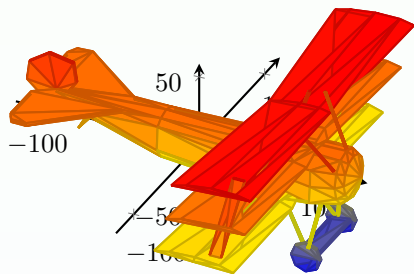


image



```
1 \begin{axis}[view={0}{90},  
3   xlabel=$x$,ylabel=$y$,  
   colorbar, mark=None,  
   colorbar style={  
5     title={\footnotesize $\textcircled{C}$},  
     yticklabel style={  
7       /pgf/number format/.cd,  
         fixed, fixed zerofill}},  
9     scale=.75,  
     colorbar style={  
11      width=.03\linewidth,  
        at={(1.25,0)},  
13      anchor=south west},]  
  
15 \addplot3[surf] file  
    {plotdata/tempdata.dat};  
17 \end{axis}
```

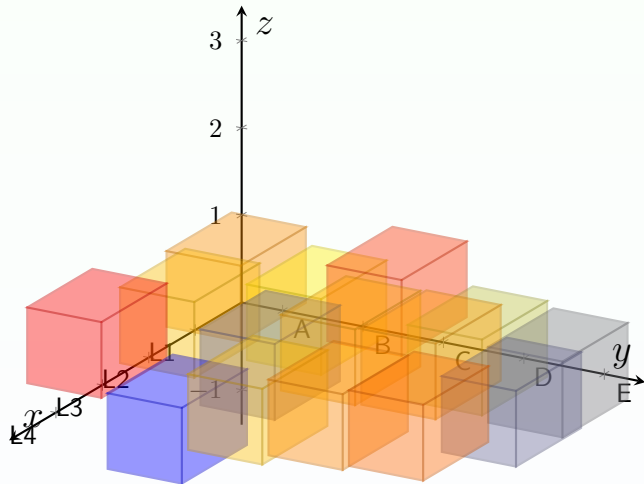
## patch



```
1 \begin{axis}[mark=none,]  
  \addplot+ [fill] coordinates  
3     {(0,1) (1,2)  
       (0,3) (-1,1.5)}--cycle;  
5 \end{axis}
```

Fonte: Adaptado de Feuersänger (2021, p. 182)

## 3D bar/constant



Fonte: Adaptado de owen (2020)

Nota: There are currently no equivalents of const plot and its variants or the bar plot types like ybar for three dimensional axes, sorry. (FEUERSÄNGER, 2021, p. 185)

```

1 \begin{axis}[view={120}{20},
    width=10cm,height=10cm, grid=major,xmin=1,xmax=4,
3    ymin=1,ymax=5,zmin=-1,zmax=3,
    xtick={1,2,3,4},    xticklabels={L1, L2, L3, L4},
5    ytick={1,2,3,4,5}, yticklabels={A, B, C, D, E},
    ylabel={y$}, xlabel={x$}, zlabel={z$},
7    axis equal,]

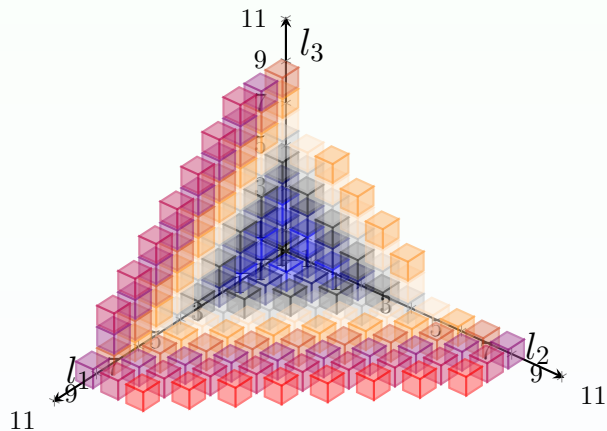
9 \addplot3[only marks,scatter,mark=cube*,mark size=1cm,
    fill=blue,opacity=0.5] coordinates
11 {(1,1,0.7)(1,2,0.5)(1,3,0.9)(1,4,0.4)(1,5,0.33)};

13 \addplot3[only marks,scatter,mark=cube*,mark size=1cm,
    fill=orange,opacity=0.5] coordinates
15 {(2,1,0.6)(2,2,0.3)(2,3,0.65)(2,4,0.67)(2,5,0.31)};

17 \addplot3[only marks,scatter,mark=cube*,mark size=1cm,
    fill=red,opacity=0.5] coordinates
19 {(4,1,1)(4,2,0.2)(4,3,0.6)(4,4,0.72)(4,5,0.78)};
    \end{axis}

```

## scatter 3D



Fonte: Adaptado de Feuersänger (2021, p. 133)

# Referências



FEUERSÄNGER, C. **Manual for Package pgfplots: 2D/3D Plots in L A TEX, Version 1.18.1.** [S.l.: s.n.], 2021. Disponível em: <https://www.ctan.org/pkg/pgfplots>. Acesso em: 21 jul. 2021.



OWEN. **Plotting 3D bar plot in PGF.** [S.l.: s.n.], 2020. Disponível em: <https://tex.stackexchange.com/users/191523/owen>. Acesso em: 1 ago. 2021.



SERGEJ. **Plotting matrix image data.** [S.l.: s.n.], jul. 2015. Disponível em: <https://tex.stackexchange.com/questions/255432/plotting-matrix-image-data>. Acesso em: 1 ago. 2021.