Kapitola 2.5 Kuželová plocha

```
> restart;
> plotsetup(inline,plotoptions=`portrait,noborder,shrinkby=0`);
```

Kuželová plocha eliptická

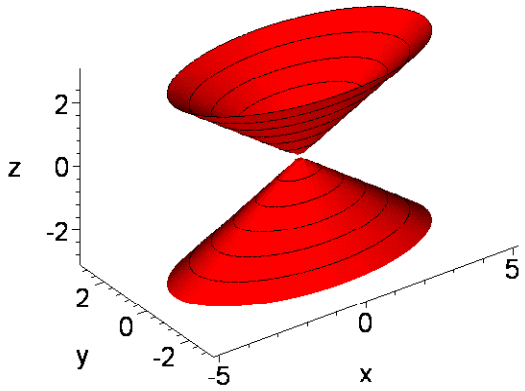
```
> KuP:=x^2/4+y^2-z^2/2=0;
```

$$KuP := \frac{x^2}{4} + y^2 - \frac{z^2}{2} = 0$$

```
> kv:=KuP:
```

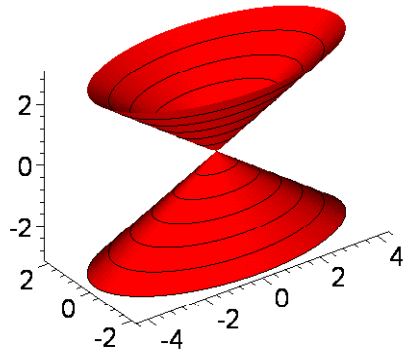
Užití příkazu "implicitplot"

```
> kvg:=plots[implicitplot3d](lhs(kv),x=-5..5,y=-3..3,z=-3..3,axes=
  frame,color=red,style=patchcontour,grid=[50,50,50],contours=10,l
  ight=[100,-5,1,1,1],tickmarks=[3,3,3],orientation=[52,63],scalin
  g=constrained):
> plots[display](kvg,axes=frame,scaling=constrained,orientation=[-
  126,60]);
```



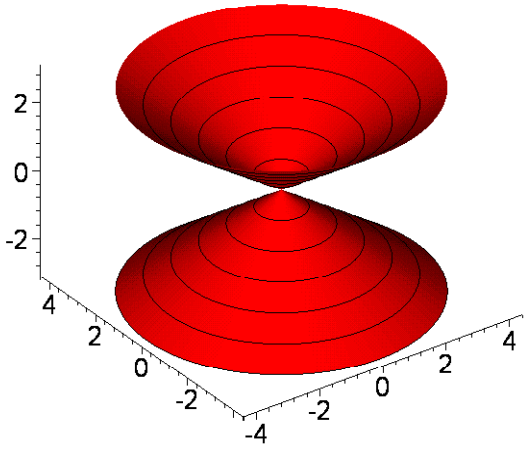
Parametrický graf

```
> plot3d([sqrt(2)*t*cos(u),(sqrt(2)/2)*t*sin(u),t],t=-3..3,u=-Pi..
  Pi,axes=frame,color=red,style=patchcontour,grid=[80,80],contours
  =10,light=[100,-5,1,1,1],tickmarks=[3,3,3],orientation=[-126,60]
  ,scaling=constrained);
```



Rotační kuželová plocha

```
> plot3d([sqrt(2)*t*cos(u),sqrt(2)*t*sin(u),t],t=-3..3,u=-Pi..Pi,a
  xes=frame,color=red,style=patchcontour,grid=[80,80],contours=10,
  light=[100,-5,1,1,1],tickmarks=[3,3,3],orientation=[-126,60],sca
  ling=constrained);
```




```
>
```