

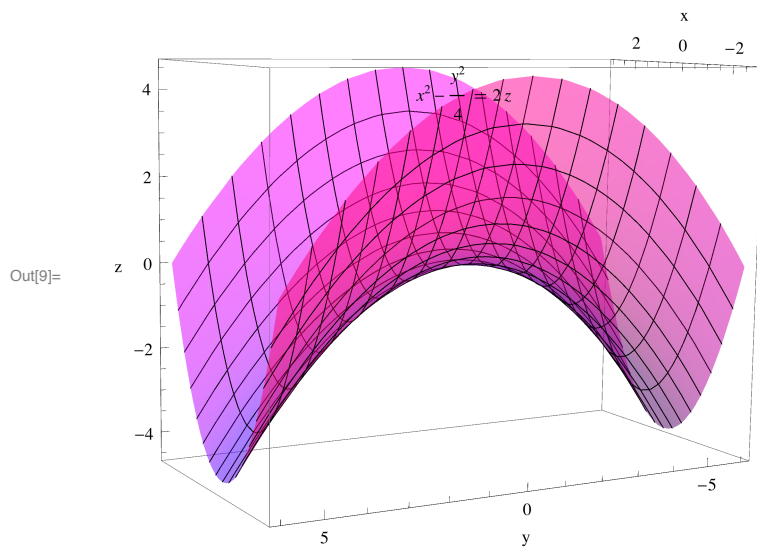
```
In[1]:= a = 1;
        b = 2;
```

```
In[3]:= k1 = 3; k2 = 3;
```

```
In[7]:= QPH = ParametricPlot3D[{{x, y, 1/2 (x^2/a^2 - y^2/b^2)}, {x, -k1 a, k1 a}, {y, -k2 b, k2 b}},
                                PlotStyle -> {Magenta, Opacity[0.5]}, AxesLabel -> {"x", "y", "z"}];
```

```
In[8]:= TxtPH = Graphics3D[Text[ $\frac{x^2}{a^2} - \frac{y^2}{b^2} == 2z$ , {0, 0, 4}]];
```

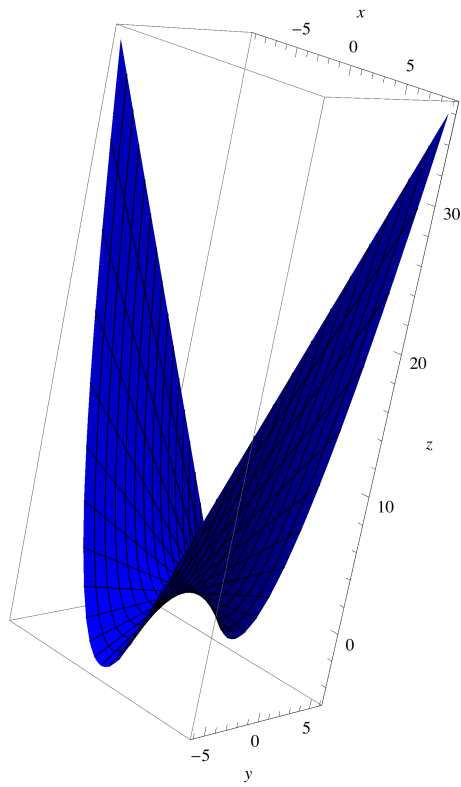
```
In[9]:= Show[QPH, TxtPH]
```



```
In[10]:= (* de reprezentat numai cu drepte *)
```

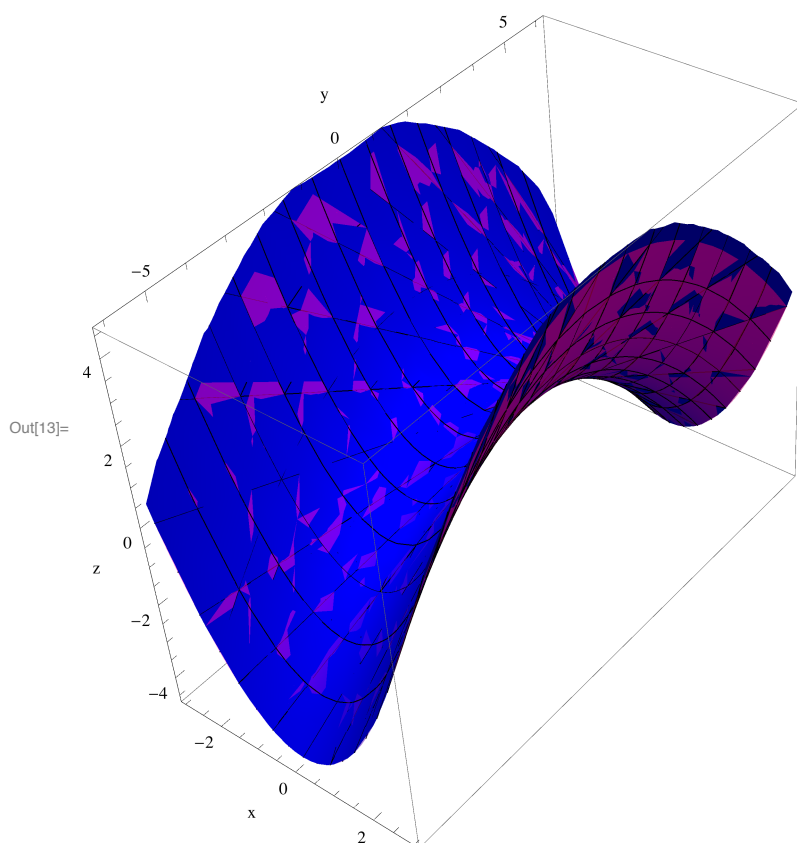
```
In[11]:= dr1 = ParametricPlot3D[{a (2 λ + t), b t, 2 λ (λ + t)},
    {t, -k2, k2}, {λ, -3, 3}, PlotStyle → Blue, AxesLabel → {x, y, z}]
```

Out[11]=



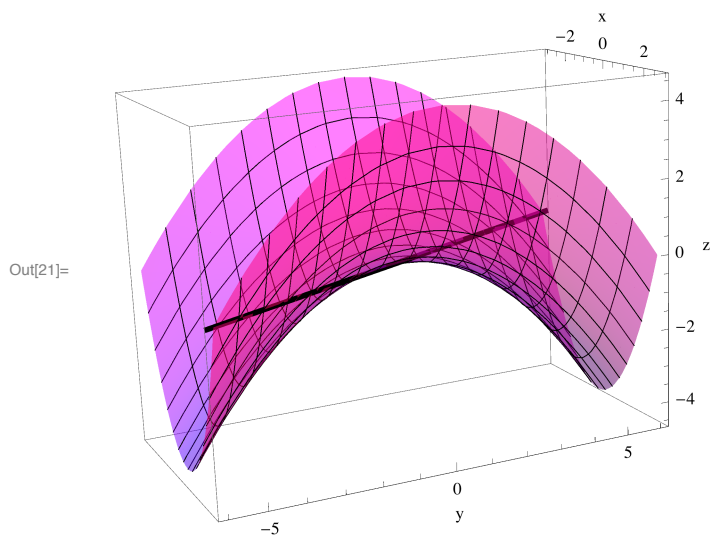
```
In[12]:= (* suprapunere *)
```

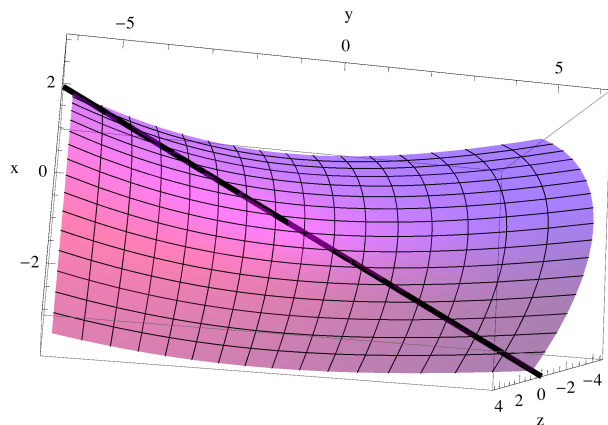
In[13]:= **Show[QPH, dr1]**



In[20]:= **dr0 = ParametricPlot3D[{-a t, b t, 0},**
{t, -10, 10}, PlotStyle -> {Black, Thickness[0.01]}];

In[21]:= **Show[QPH, dr0]**





(* a doua familie de generatoare *)

```
In[19]:= dr2 = ParametricPlot3D[
  {{a (2 / μ + t), b t,  $\frac{2}{\mu} (1 / \mu + t)$ }, {a (-2 / μ + t), b t,  $\frac{2}{\mu} (1 / \mu - t)$ }},
  {t, -10, 10}, {μ, 0.5, 10}, PlotStyle → Yellow, AxesLabel → {"x", "y", "z"}];
```

```
In[22]:= Show[QPH, dr2]
```

