

```
In[1]:= SetDirectory["~/KappaLib/"];
<< kappaLib-1.1.m
<< helper.m

KappaLib v1.1

Loading helper.m..
```

```
In[5]:= vars = {x0, x1, x2, x3};
```

```
(* font size *)
fSize = 6;
```

```
(* size of plot region *)
dim = 1;
```

```
(* see Plot_I1b.nb *)
```

```
g1[x0_, x1_, x2_, x3_, b1_] := (b1 (x0 - x1) (x0 + x1) -  $\sqrt{1 + 4 b1^2} (x2^2 + x3^2)$ )
```

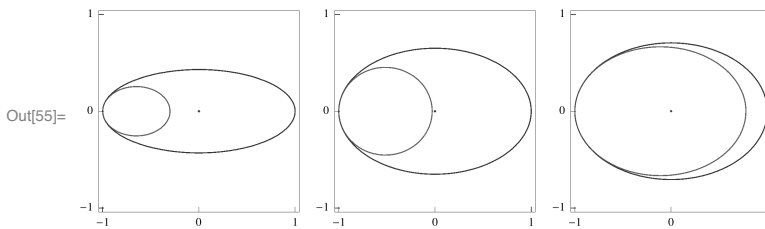
```
g2[x0_, x1_, x2_, x3_, b1_] :=
(b1 (x0 - x1) ( $(-2 + \sqrt{1 + 4 b1^2}) x0 + (2 + \sqrt{1 + 4 b1^2}) x1$ ) - (1 + 4 b1^2) (x2^2 + x3^2))
```

```
In[51]:= draw[newB1_] := Module[{p1, p2, sub2},
```

```
plot1 = ContourPlot[
{
g1[-1, x1, x2, 0, newB1] == 0,
g2[-1, x1, x2, 0, newB1] == 0,
x1^2 + x2^2 - 0.0001 == 0
},
{x1, -dim, dim},
{x2, -dim, dim},
FrameTicks -> {
{{-1, 0, 1}, None},
{{-1, 0, 1}, None}},
FrameTicksStyle -> Directive[Black, fSize],
ContourStyle -> {
Directive[GrayLevel[0.2], Thickness[0.0072 * 0.8], Opacity[1]],
Directive[GrayLevel[0.3], Thickness[0.0072 * 0.8], Opacity[0.9]]}
]
]
```

```
In[52]:= pp1 = draw[0.2];
pp2 = draw[0.8];
pp3 = draw[8];
```

```
Show[GraphicsGrid[{{pp1, pp2, pp3}}]]
```



```
In[56]:= Export["Tri.pdf", %, ImageResolution -> 2000]
```

Out[56]= Tri.pdf