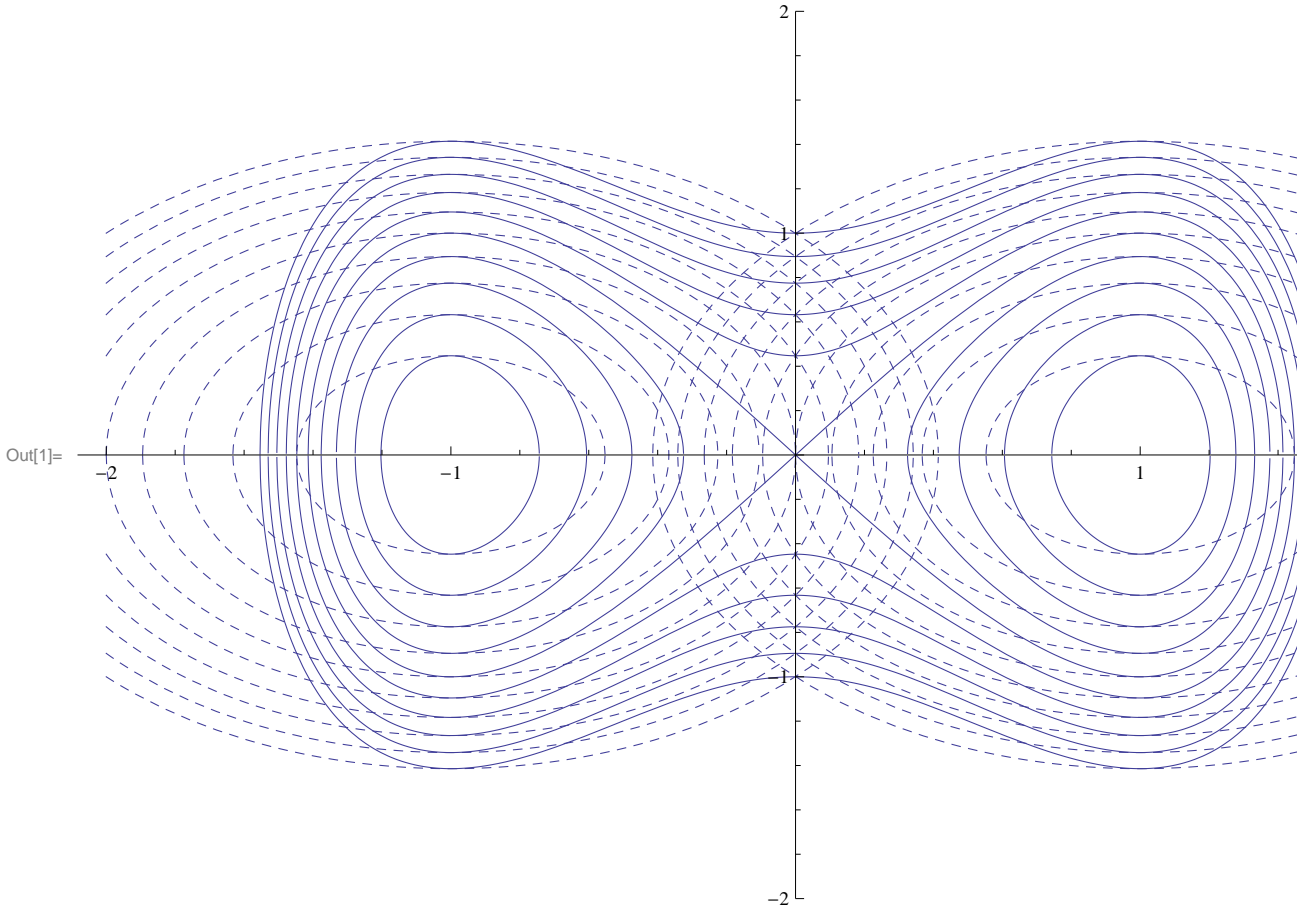


```

In[1]:= Show[Plot[Table[ $\frac{\sqrt{-1 + 2 e + 2 x^2 - x^4}}{1}$ , {e, 0, 1, 0.1}], {x, -2, 2}, PlotRange -> 2],
Plot[Table[- $\frac{\sqrt{-1 + 2 e + 2 x^2 - x^4}}{1}$ , {e, 0, 1, 0.1}], {x, -2, 2}, PlotRange -> 2],
Plot[Table[Sqrt[2 e - (x - 1)^2], {e, 0, 1, 0.1}], {x, -2, 2}, PlotStyle -> Dashed],
Plot[Table[-Sqrt[2 e - (x - 1)^2], {e, 0, 1, 0.1}], {x, -2, 2}, PlotStyle -> Dashed],
Plot[Table[Sqrt[2 e - (x + 1)^2], {e, 0, 1, 0.1}], {x, -2, 2}, PlotStyle -> Dashed],
Plot[Table[-Sqrt[2 e - (x + 1)^2], {e, 0, 1, 0.1}], {x, -2, 2}, PlotStyle -> Dashed]]

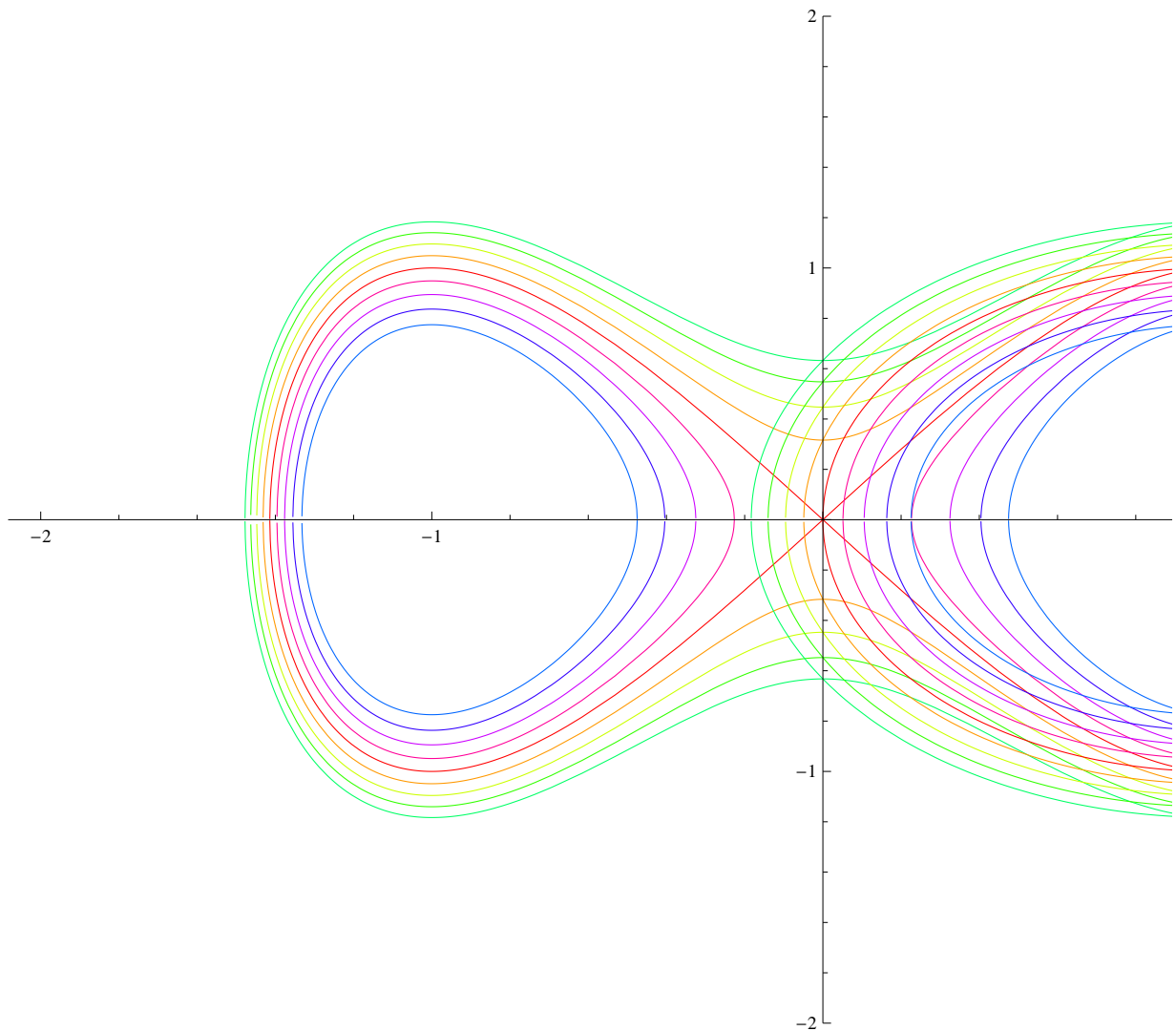
```



```
eilist = {e, 0.3, 0.7, 0.05}
```

```
{e, 0.3, 0.7, 0.05}
```

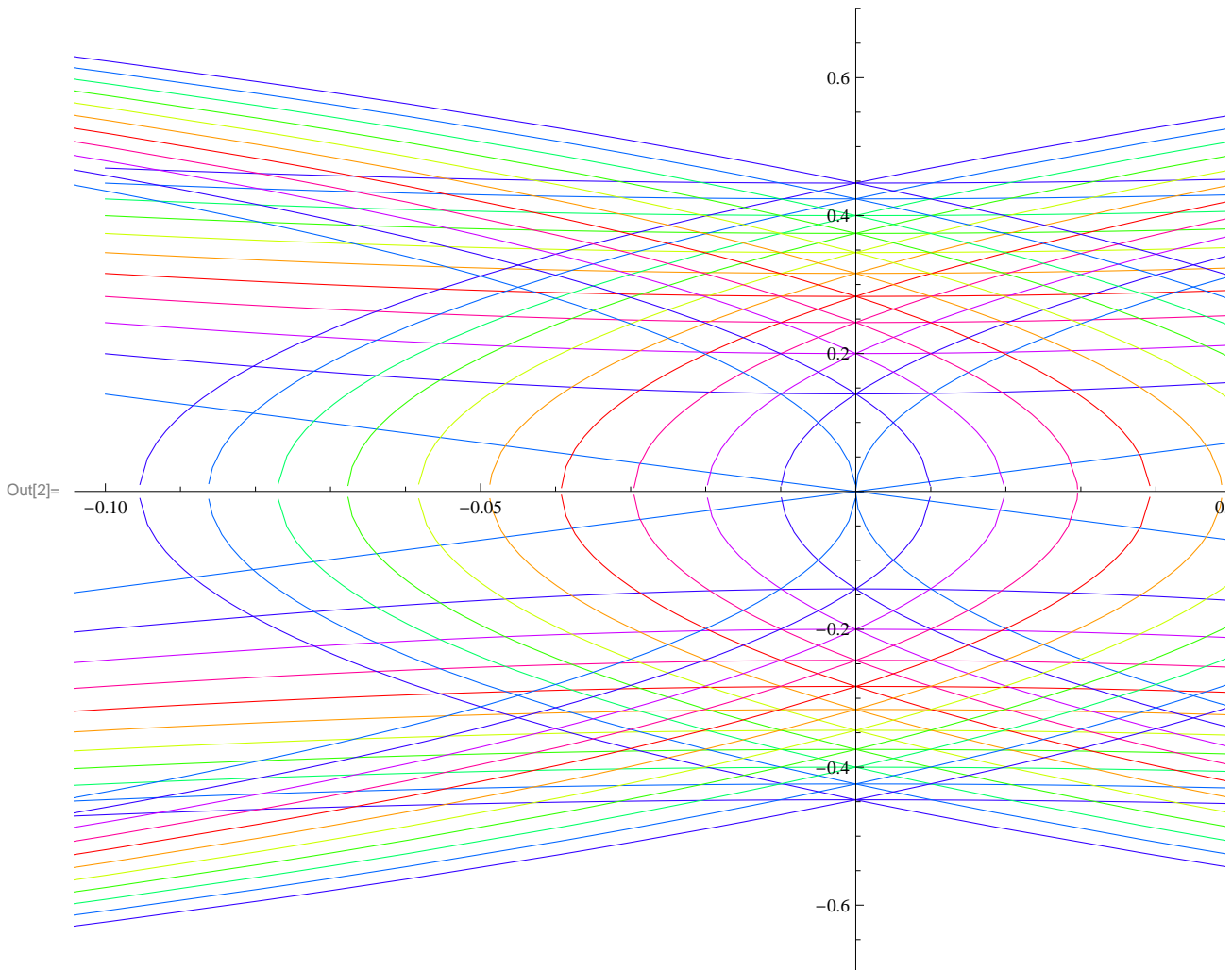
```
Show[Plot[Evaluate@Table[ $\frac{\sqrt{-1 + 2 e + 2 x^2 - x^4}}{1}$ , {e, 0.3, 0.7, 0.05}], {x, -2, 2},
  PlotRange -> 2, PlotStyle -> Table[Hue[2 * e], {e, 0.3, 0.7, 0.05}]],
Plot[Evaluate@Table[- $\frac{\sqrt{-1 + 2 e + 2 x^2 - x^4}}{1}$ , {e, 0.3, 0.7, 0.05}], {x, -2, 2},
  PlotRange -> 2, PlotStyle -> Table[Hue[2 * i], {i, 0.3, 0.7, 0.05}]],
Plot[Evaluate@Table[Sqrt[2 e - (x - 1)^2], {e, 0.3, 0.7, 0.05}],
  {x, -2, 2}, PlotStyle -> Table[Hue[2 * i], {i, 0.3, 0.7, 0.05}]],
Plot[Evaluate@Table[-Sqrt[2 e - (x - 1)^2], {e, 0.3, 0.7, 0.05}],
  {x, -2, 2}, PlotStyle -> Table[Hue[2 * i], {i, 0.3, 0.7, 0.05}]]]
```



```

In[2]:= Show[Plot[Evaluate@Table[ $\frac{\sqrt{-1 + 2 e + 2 x^2 - x^4}}{1}$ , {e, 0.5, 0.6, 0.01}], {x, -0.1, 0.1},
  PlotRange -> 0.7, PlotStyle -> Table[Hue[2 * e], {e, 0.3, 0.7, 0.05}],
  Plot[Evaluate@Table[- $\frac{\sqrt{-1 + 2 e + 2 x^2 - x^4}}{1}$ , {e, 0.5, 0.6, 0.01}], {x, -2, 2},
  PlotRange -> 2, PlotStyle -> Table[Hue[2 * i], {i, 0.3, 0.7, 0.05}],
  Plot[Evaluate@Table[Sqrt[2 e - (x - 1)^2], {e, 0.5, 0.6, 0.01}],
  {x, -2, 2}, PlotStyle -> Table[Hue[2 * i], {i, 0.3, 0.7, 0.05}],
  Plot[Evaluate@Table[-Sqrt[2 e - (x - 1)^2], {e, 0.5, 0.6, 0.01}],
  {x, -2, 2}, PlotStyle -> Table[Hue[2 * i], {i, 0.3, 0.7, 0.05}],
  Plot[Evaluate@Table[Sqrt[2 e - (x + 1)^2], {e, 0.5, 0.6, 0.01}],
  {x, -2, 2}, PlotStyle -> Table[Hue[2 * i], {i, 0.3, 0.7, 0.05}],
  Plot[Evaluate@Table[-Sqrt[2 e - (x + 1)^2], {e, 0.5, 0.6, 0.01}],
  {x, -2, 2}, PlotStyle -> Table[Hue[2 * i], {i, 0.3, 0.7, 0.05}]]]

```



```
Show[Plot[1/2*(x^2-1)^2, {x, -2, 2}], Plot[2(x-1)^2, {x, -2, 2}, PlotStyle -> Dashed],  
Plot[2(x+1)^2, {x, -2, 2}, PlotStyle -> Dashed]]
```

