In[ ]:=
```
ContourPlot[r^2/2 - 1/(4 π) (z/Sqrt[r^2 + z^2] + 1), {z, -1, 4}, {r, -1, 1},
 ColorFunction → ({Opacity[#], ColorData["TemperatureMap"][#]} &), AspectRatio → 1 / 2,
 Contours → 50, Mesh → None, WorkingPrecision → 30]
```

In[ ]:=
```
ContourPlot[z - 1/(4 π) 1/Sqrt[r^2 + z^2], {z, -1, 4}, {r, -1, 1},
 ColorFunction → ({Opacity[#], ColorData["TemperatureMap"][#]} &), AspectRatio → 1 / 2,
 Contours → 70, Mesh → None, WorkingPrecision → 30]
```

In[ ]:=
```
ContourPlot[r^2/2 - 1/(4 π) (z/Sqrt[r^2 + z^2] + 1) == 0, {z, -1, 4}, {r, -1, 1}, Frame → None, AspectRatio → 1 / 2,
 ContourStyle → {Black, Thick}, PlotPoints → 50]
```

Out[ ]=