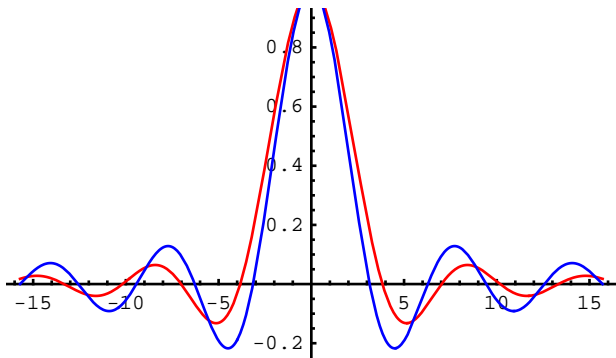
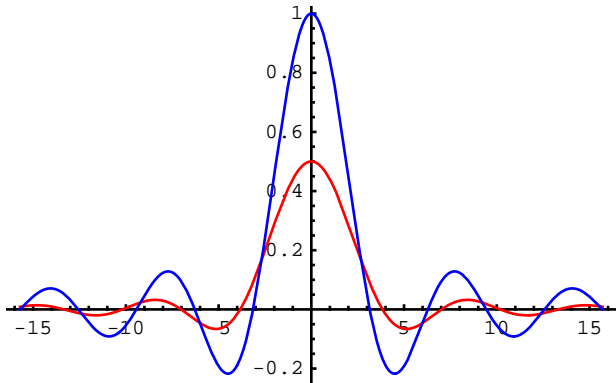


```
Plot[ { 2  $\frac{\text{BesselJ}[1, x]}{x}$ ,  $\frac{\text{Sin}[x]}{x}$  }, {x, -5 \pi, 5 \pi},
PlotRange -> All, PlotStyle -> {RGBColor[1, 0, 0], RGBColor[0, 0, 1]}]
```



- Graphics -

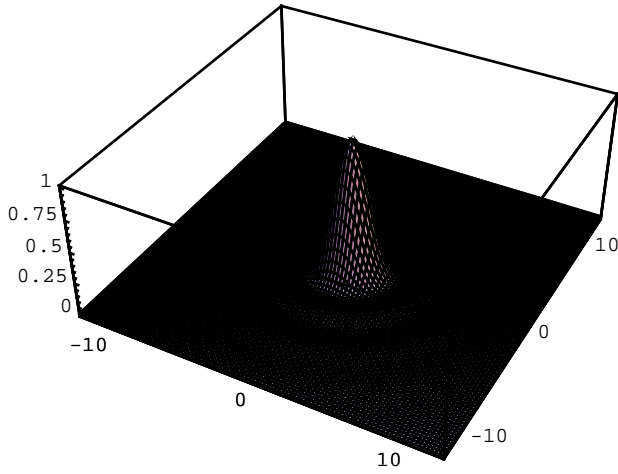
```
Plot[ {  $\frac{\text{BesselJ}[1, x]}{x}$ ,  $\frac{\text{Sin}[x]}{x}$  }, {x, -5 \pi, 5 \pi},
PlotRange -> All, PlotStyle -> {RGBColor[1, 0, 0], RGBColor[0, 0, 1]}]
```



- Graphics -

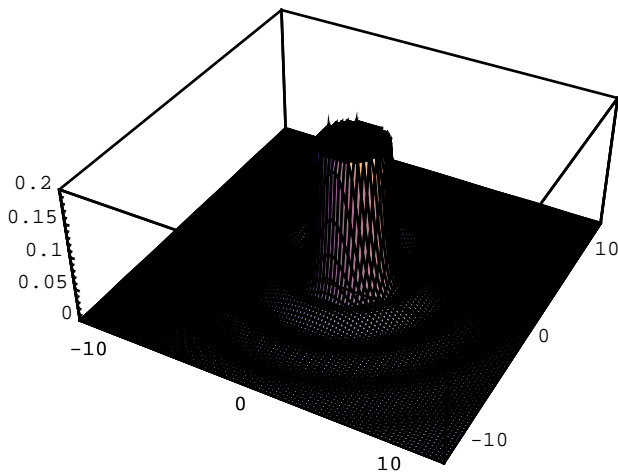
**Now look at the Airy disk or Airy Pattern:**

```
Plot3D[(2 BesselJ[1, Sqrt[x^2 + y^2]] / Sqrt[x^2 + y^2])^2,
{x, -4 Pi, 4 Pi}, {y, -4 Pi, 4 Pi}, PlotPoints -> 100, PlotRange -> All]
```



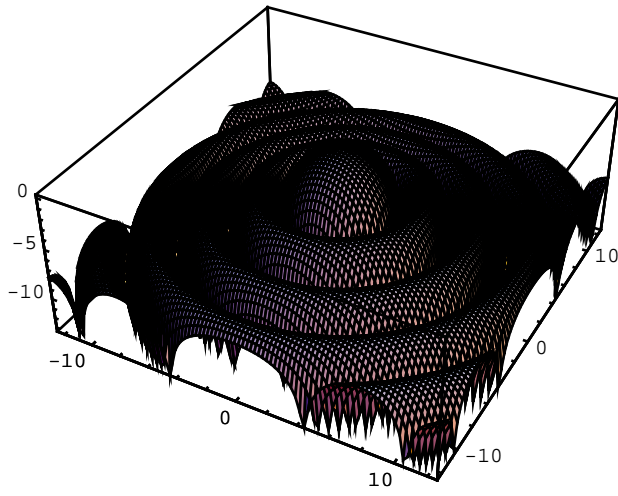
- SurfaceGraphics -

```
Plot3D[(2 BesselJ[1, Sqrt[x^2 + y^2]] / Sqrt[x^2 + y^2])^2,
{x, -4 Pi, 4 Pi}, {y, -4 Pi, 4 Pi}, PlotPoints -> 100, PlotRange -> {0, 0.2}]
```



- SurfaceGraphics -

```
Plot3D[Log[(2 BesselJ[1, Sqrt[x^2 + y^2]] / Sqrt[x^2 + y^2])^2],  
{x, -4 π, 4 π}, {y, -4 π, 4 π}, PlotPoints -> 100]
```



- SurfaceGraphics -