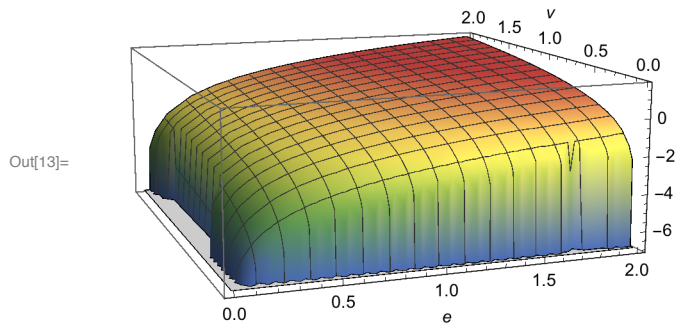


```
In[6]:= s[e_, v_] := 3 / 2 Log[e] + Log[v];
```

```
In[13]:= Plot3D[s[e, v], {e, 0, 2}, {v, 0, 2},  
ColorFunction -> "DarkRainbow", AxesLabel -> Automatic]
```

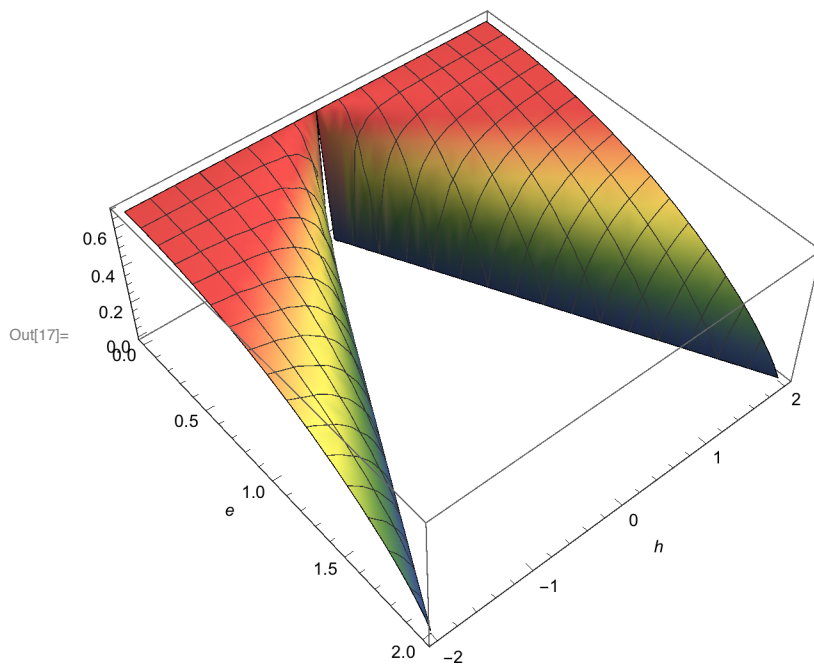


```
In[14]:= Export["entropy_idealgas.jpg", %13]
```

Out[14]= entropy\_idealgas.jpg

```
In[15]:= s[e_, h_] := -(1 + e / h) / 2 Log[(1 + e / h) / 2] - (1 - e / h) / 2 Log[(1 - e / h) / 2]
```

```
In[17]:= Plot3D[s[e, h], {e, 0, 2}, {h, -2, 2},  
ColorFunction -> "DarkRainbow", AxesLabel -> Automatic]
```

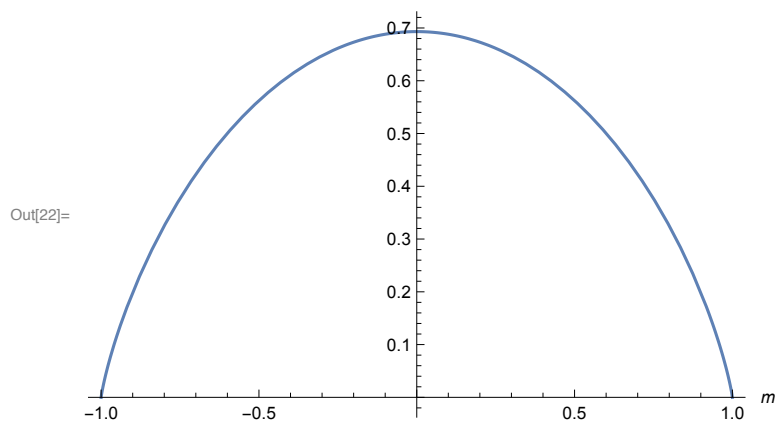


```
In[18]:= Export["entropy_paramagnet.jpg", %17]
```

Out[18]= entropy\_paramagnet.jpg

```
In[19]:= s[m_] := -(1 + m) / 2 Log[(1 + m) / 2] - (1 - m) / 2 Log[(1 - m) / 2]
```

```
In[22]:= Plot[s[m], {m, -1, 1}, AxesLabel -> Automatic]
```



```
In[24]:= Export["entropym_paramagnet.jpg", %22]
```

Out[24]= entropym\_paramagnet.jpg