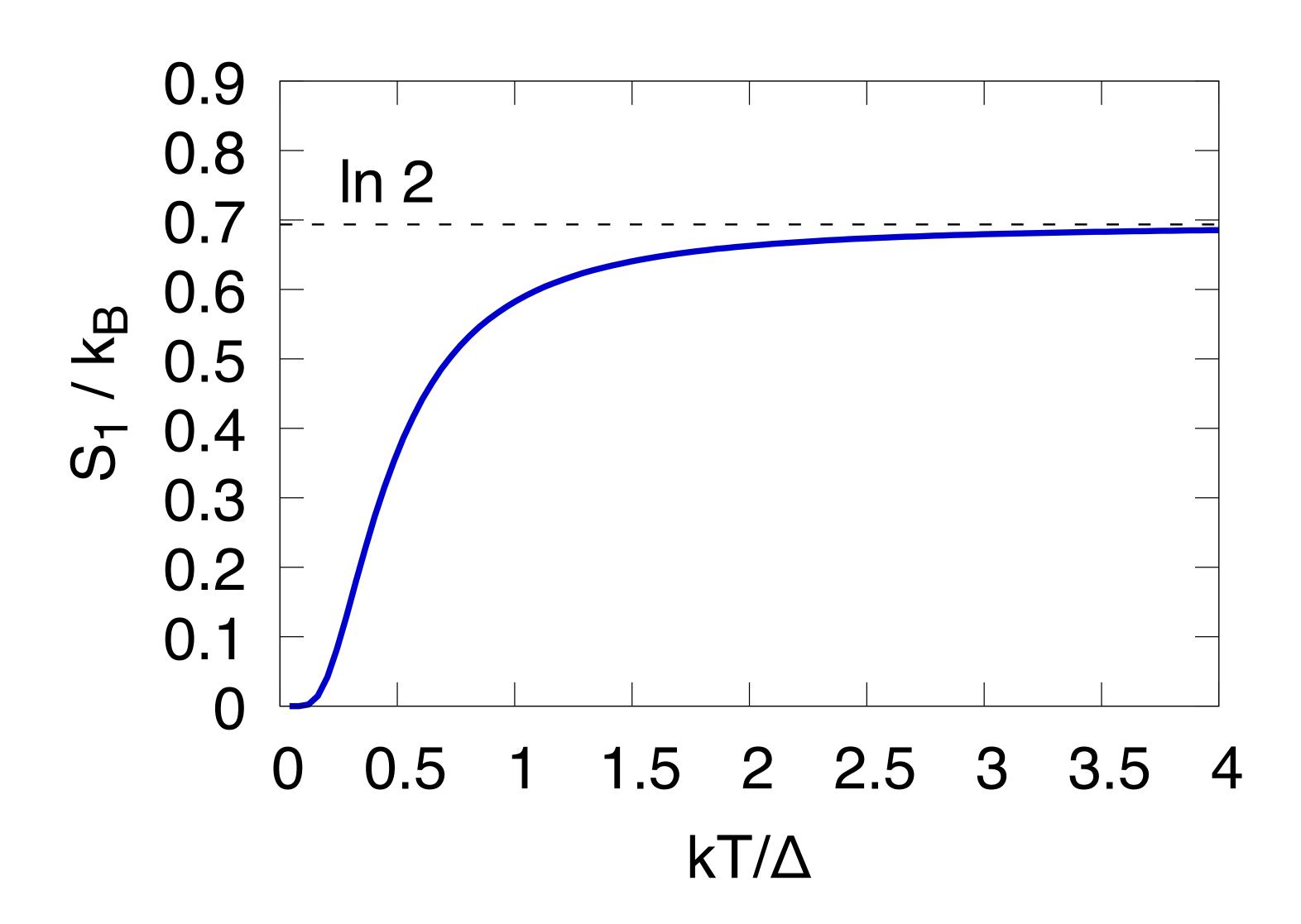
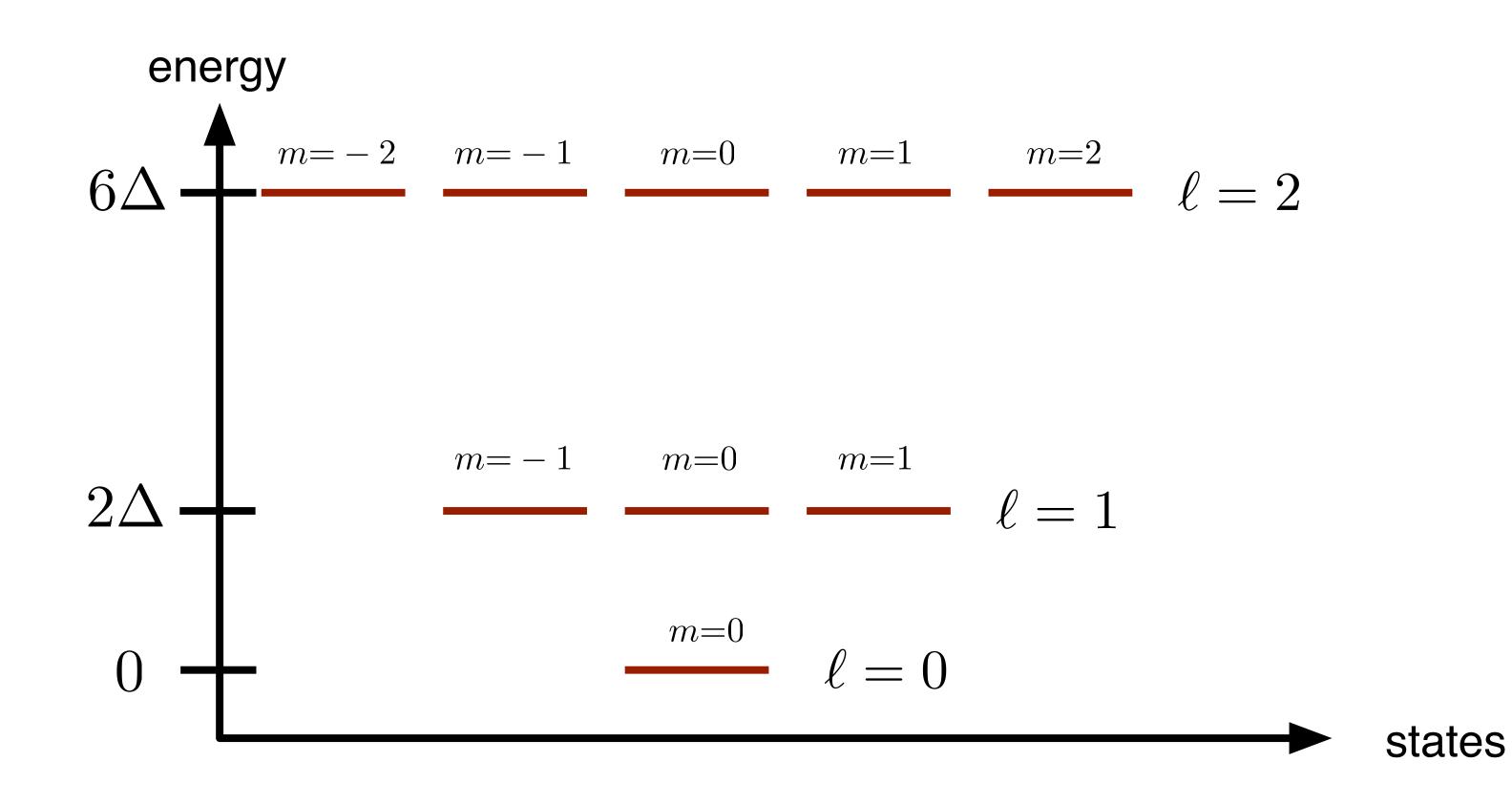
## Entropy of Two State System



## Energy Levels of Rotation:



For example for  $\ell=2$ :

$$\epsilon_2 = \ell(\ell+1)\Delta = 6\Delta$$