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Fig. 1.1 Two quantum states with n particles in the lower state with energy ϵ_1 and n particles in the upper state with energy ϵ_2 .

In SI units, the temperature, T , is in kelvin and energies are expressed in joules. The constant of proportionality, the Boltzmann constant, k , takes the value $1.38 \times 10^{-23} \text{ J K}^{-1}$.

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