Thermal Physics - PH441

Day 14 Date: May 2, 2018

John Waczak

More on Chemical Potential

Last time for an ideal gas we had $n=n_Qe^{\beta\mu}$. This tells us increasing the chemical potential increases the density. Particles flow (sort of spontaneously) from high chemical potential to low chemical potential. This recovers the idea that if we have two boxes connected by a small hole with unequal densities then the higher density will equilibrate with low density. Of course, this is only for an ideal gas...