## Instruction notes

woensdag 27 mei 2020

16:24

The factor  $\frac{1}{8}$  comes from the fact that we only consider positive values for  $n_x$ ,  $n_y$  and  $n_z$ . Thus, the half of the half of the half of the total (positive and negative n-space in 3 dimensions) is taken as valid.

Closed system  $\rightarrow$  Helmholtz free energy Isolated system  $\rightarrow$  Entropy/internal energy Isothermal & isobaric (both) system  $\rightarrow$  Gibbs free energy Open system  $(\mu, T, V \text{ fixed}) \rightarrow \Phi = F - \mu N$ 

In general, choose the thermodynamic potential which depends on