Summary of lecture 9

- In “classical” limit the mean occupancy (ignoring spin) can be approximated to

$$\langle n \rangle \approx e^{(\mu-\epsilon)/kT}$$

- The chemical potential of an ideal classical gas is given by

$$\mu = kT \ln \frac{n}{n_Q}$$

$$n_Q \equiv \left(\frac{mkT}{2\pi\hbar^2}\right)^{3/2}$$