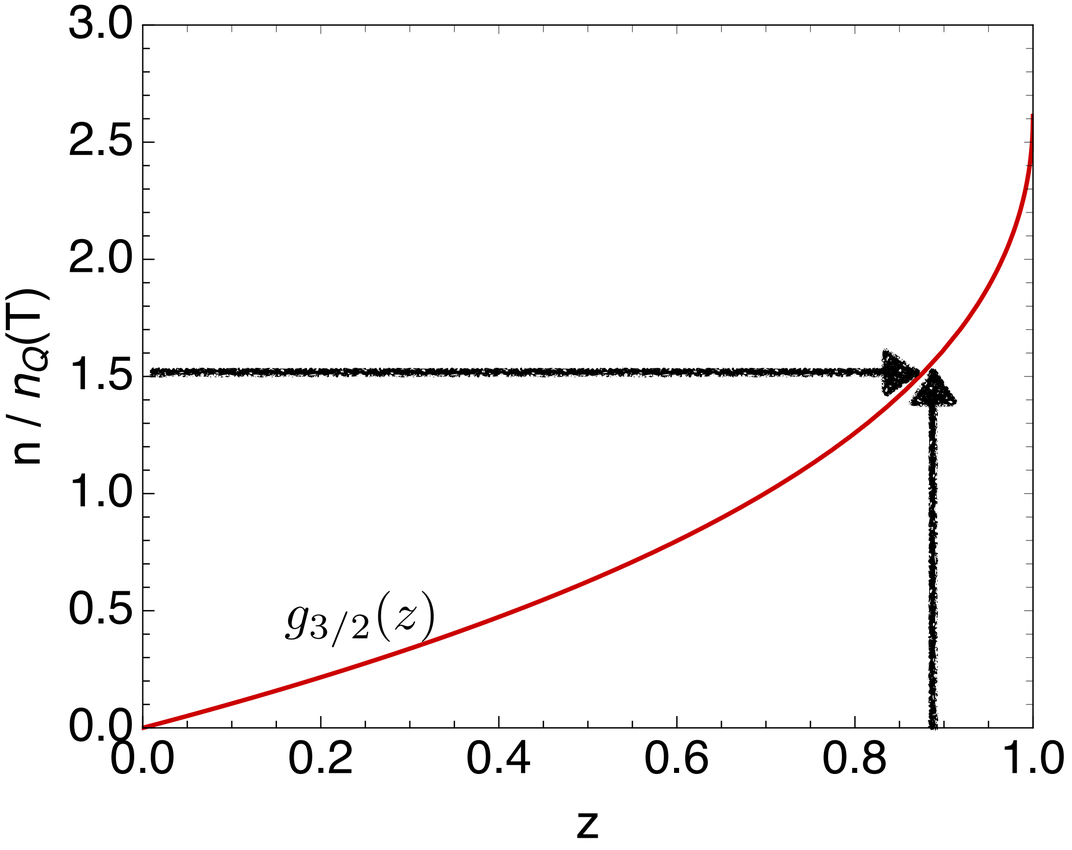
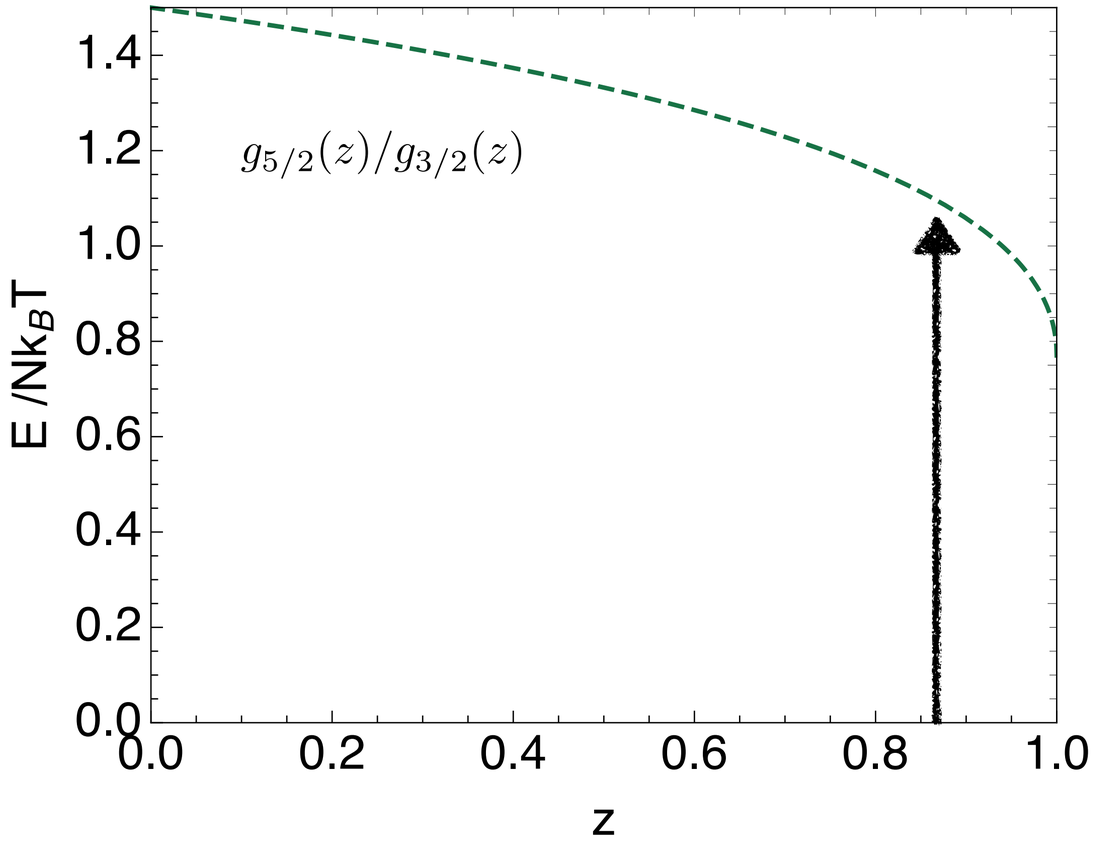
Bose Gas: A Graphical Solution

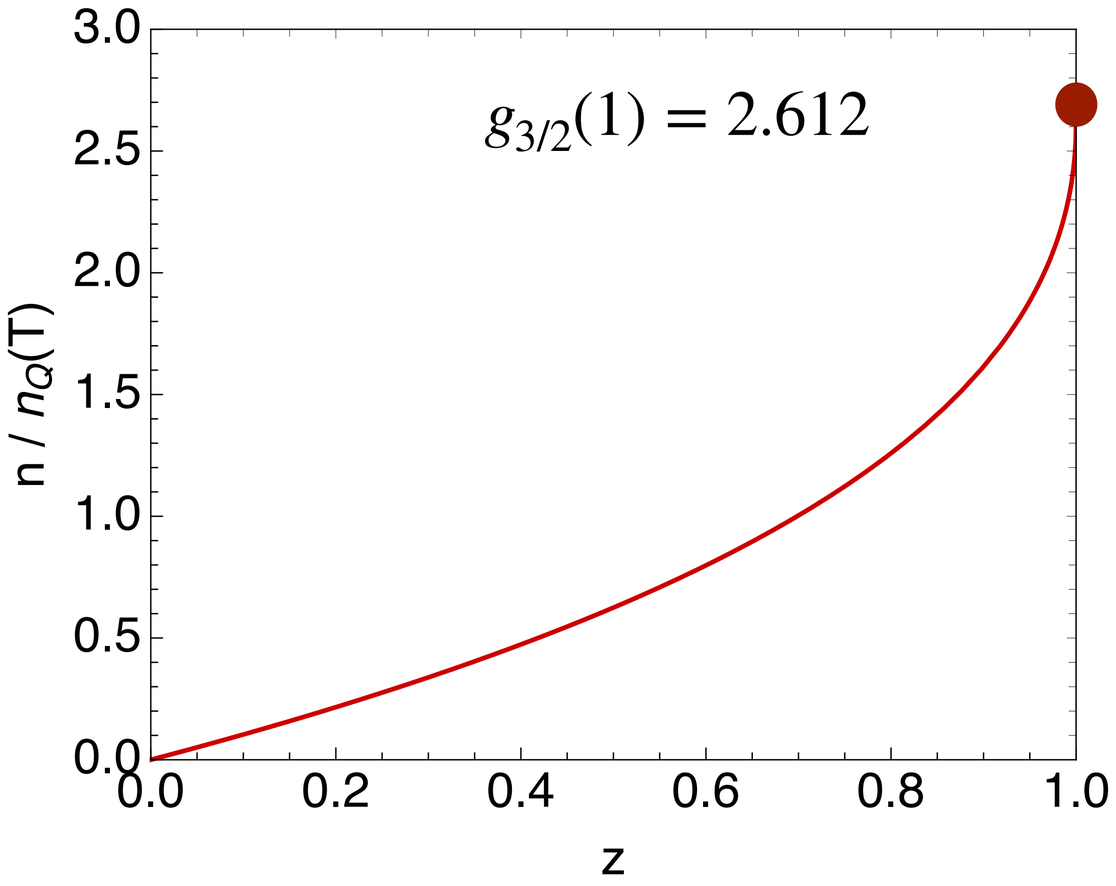




The density (in units of the concentration) determines the fugacity $z = e^{\beta\mu}$,

which determines E/Nk_BT

The condensation point



For any given temperature T, there is a critical density, $n_c = 2.612\, n_Q(T)$.

Or vice versa there is a critical temperature for any given density. Solving

$$kT_c = \frac{h^2}{2\pi m}\left(\frac{n}{2.612}\right)^{2/3}$$

When $z \to 1$