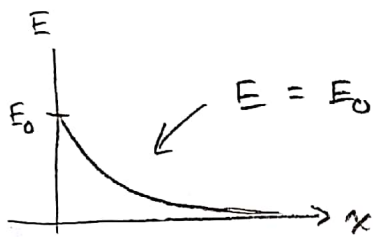


(a.) If all species are hot we recover Debye shielding:

$$0 = 1 + \sum_s \frac{1}{k^2 \lambda_{Ds}^2} = 1 + \frac{1}{k^2 \lambda_D^2}$$

$$k = \pm \frac{i}{\lambda_D}$$

(b.) Take $E(x=0) = E_0$



$$E = E_0 e^{-x/\lambda_D}$$

\Rightarrow Debye shielding.