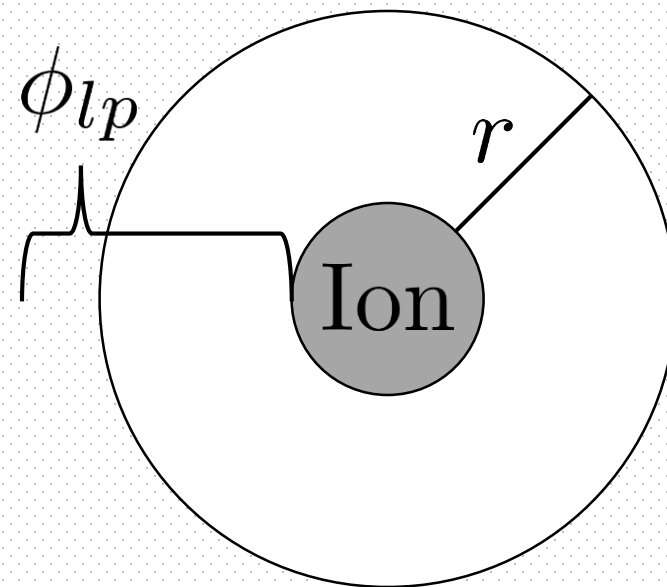
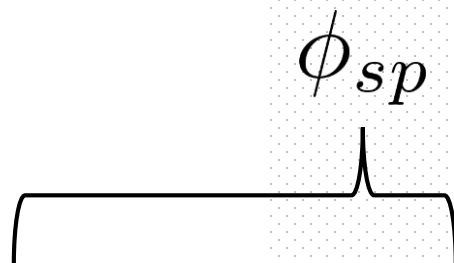


Medium 1

Medium 2



$$\begin{aligned}\mu_{\text{real}}^{ex} &= \mu_{\text{is}}^{ex} + \mu_{\text{pk}}^{ex} + \mu_{\text{os}}^{ex} \\ &= \mu_{\text{bulk}}^{ex} + q\phi_{np}\end{aligned}$$

$$\phi_{np} = \phi_{sp} + \phi_{lp}$$