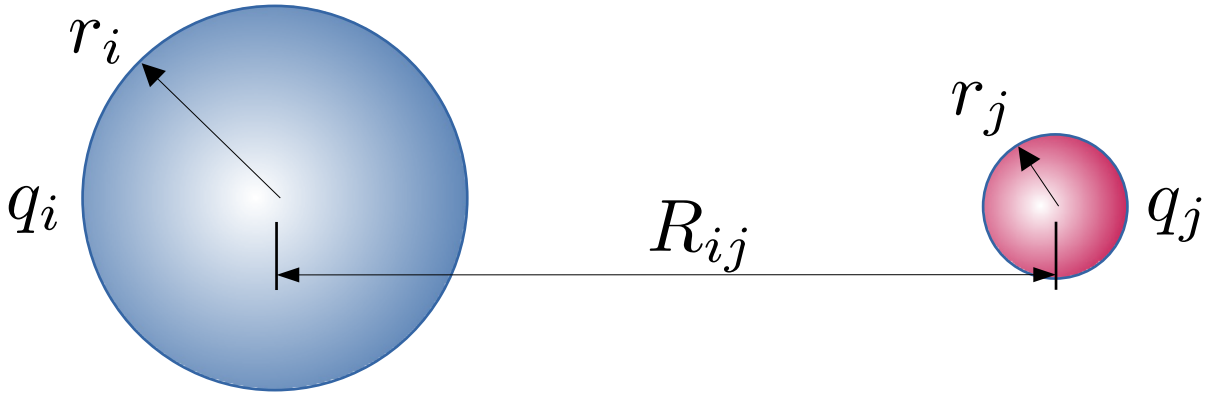
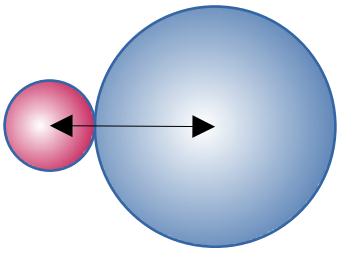
Particles : i, j *With Charges :* q



Interact via potential : $U_{total} = U_{Yukawa} + U_{Lennard-Jones}$



$$\sigma = r_i + r_j$$

Inverse Screening Length : k *Energy minima depth :* ϵ

$$U_{ij} = \frac{q_i q_j e^{-kR_{ij}}}{R_{ij}} + 4\epsilon((\frac{\sigma}{R_{ij}})^{12} - (\frac{\sigma}{R_{ij}})^{6})$$