



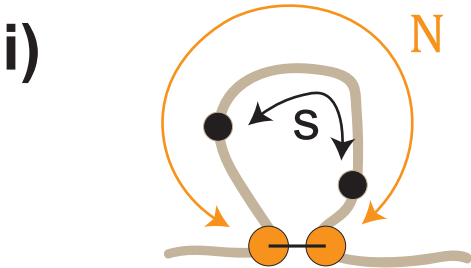
Effective distances from the shortest connecting paths

$$P_c(s) \propto (s_{eff})^{-\frac{3}{2}}$$

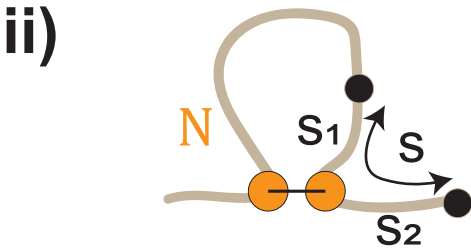
loops of length: N
genomic distance: s

 SMC loop extrusion complex

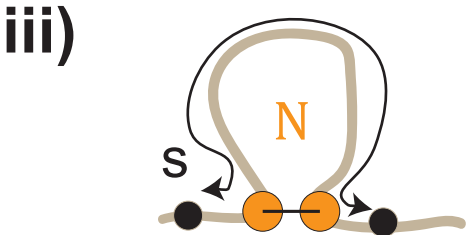
 DNA fiber



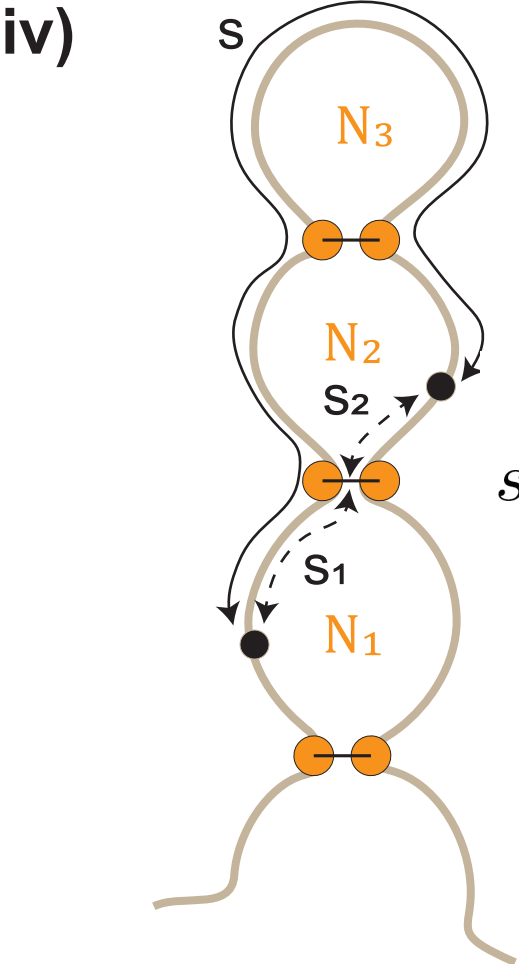
$$s_{eff} = s \left(1 - \frac{s}{N} \right)$$



$$s_{eff} = s_1 \left(1 - \frac{s_1}{N} \right) + s_2$$



$$s_{eff} = s - N$$



$$s_{eff} = s_1 \left(1 - \frac{s_1}{N_1} \right) + s_2 \left(1 - \frac{s_2}{N_2} \right)$$