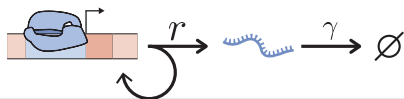


(A)

NONEQUILIBRIUM MODELS

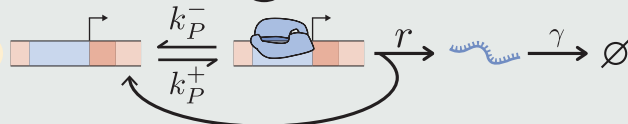
FANO FACTOR

1



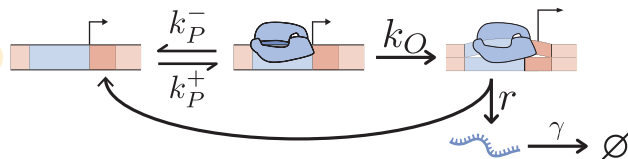
$$\nu = 1$$

2



$$\nu = 1 - \frac{rk_P^+}{(k_P^+ + k_P^- + r + \gamma)(k_P^+ + k_P^- + r)} < 1$$

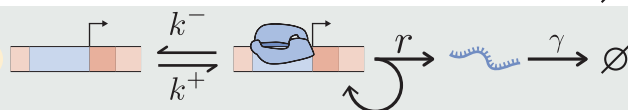
3



$$\nu = 1 - \frac{rk_P^+k_O}{\mathcal{Z}} \frac{k_P^+ + k_P^- + k_O + r + \gamma}{\mathcal{Z} + \gamma(k_P^+ + k_P^- + k_O + r) + \gamma^2} < 1,$$

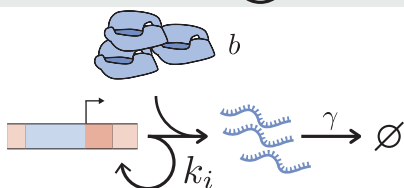
$$\mathcal{Z} = r(k_O + k_P^-) + k_P^+(k_O + r)$$

4



$$\nu = 1 + \frac{rk^-}{(k^+ + k^- + \gamma)(k^+ - k^-)} > 1$$

5



$$\nu = 1 + b > 1$$

(B)

