$$U \ll \lambda \;\; {
m Mutation \; regime}$$
 : "Weak U"

 $U\gg\lambda~$  Mutation regime : "Strong U"

1 mutational step

Arbitrary number mutational step

Stochasticity: Evolution, Demography, Mutation Stochasticity: Evolution, Demography, Mutation

ER probabilty from  $\frac{de\ novo}{dR}$  mutations  $P_R = 1 - exp(-N_0\,\omega_R^{DN})$ 

ER probabilty from *de novo* mutations and standing genetic variance

$$P_R = 1 - exp(-N_0 \,\omega_R^{DN} \,(1 + \phi_R^{SV}))$$

$$\omega_R^{DN} = U f(r_D, r_{max}, \lambda, n)$$

$$\phi_R^{SV} = g(r_D, r_{max}, \lambda, n)$$

$$U \ll \lambda$$
 Mutation regime : "Weak U"

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  $\omega_R^{DN} = f(r_D, r_{max}, \lambda, n, U)$ 

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$$U \ll \lambda$$
 Mutation regime : "Weak U"

 $U \gg \lambda$  Mutation regime : "Strong U"

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Stochasticity: Evolution, Demography, Mutation Stochasticity: Evolution, Demography, Mutation

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ER probabilty from *de novo* mutations and standing genetic variance

$$P_R = 1 - exp(-N_0 \,\omega_R^{DN} \,(1 + \phi_R^{SV}))$$

$$\omega_R^{DN} = U \,f(r_D, r_{max}, \lambda, n) \qquad \vdots \qquad \omega_R^{DN} = f(r_D, r_{max}, \lambda, n, U)$$

$$\phi_D^{SV} \equiv q(r_D, r_{max}, \lambda, n)$$
  $\phi_D^{SV} = q(r_D, r_{max}, \lambda, n, U)$