Model Idea #1
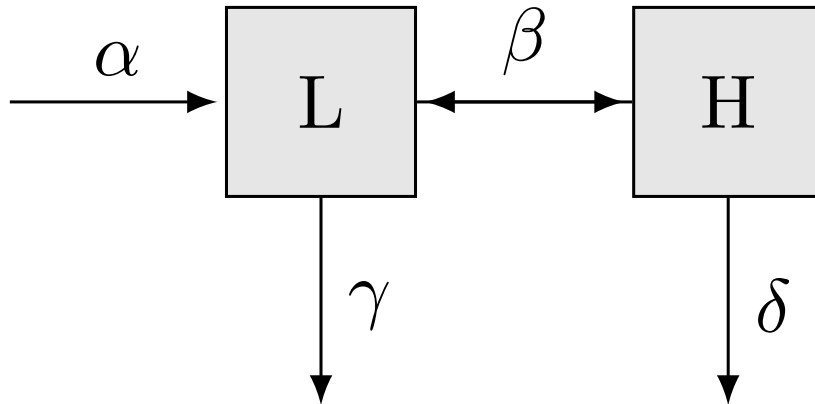
Charles Marks

$L(t+1) = L(t) + \alpha(L(t), H(t)) - \beta(L(t), H(t)) - \gamma(L(t))$
$H(t+1) = H(t) + \beta(L(t), H(t)) - \delta(H(t))$

$\alpha(L, H) : L * \lambda_L + H * \lambda_H$
$\beta(L, H) : \frac{L - \eta * H}{\eta + 1}$
$\gamma(L) : L * x_L$
$\delta(H) : H * x_H$
η : a set constant which $\frac{L}{H}$ maintains
λ_L = the average number of initiates for a Low-Risk Initiator
λ_H = the average number of initiates for a High-Risk Initiator
x_L : "death" rate of L population
x_H : "death" rate of H population