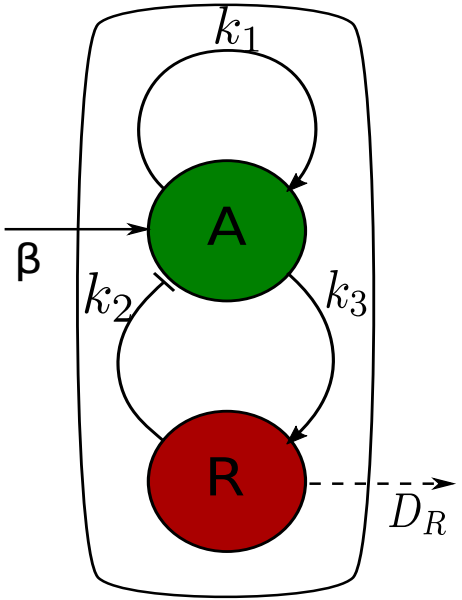

$$\frac{\partial A}{\partial t} = \Phi\left(\frac{k_1 A - k_2 R + \beta}{1 + k_1 A - k_2 R + \beta}\right) - A$$

$$\frac{\partial R}{\partial t} = \frac{k_3 A}{1 + k_3 A} + D_R \nabla^2 R - R$$