Figure 1

$$y' = \frac{dy}{dt} = ky \left(1 - \frac{y}{b}\right)$$

$$y(t) = \frac{bCe^{kt}}{b + Ce^{kt}} \qquad C = \frac{y_0}{\left(1 - \frac{y_0}{b}\right)}e^{kt_0}$$

$$t_{\text{switch}} = \frac{\ln\left(\frac{b}{y_0} - 1\right)}{k} + t_0$$

b

Switchers

 $t_{\text{start}} < t_{\text{switch}} < t_{\text{end}}$

C

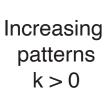
Accelerators

 $t_{\text{switch}} > t_{\text{end}}$

d

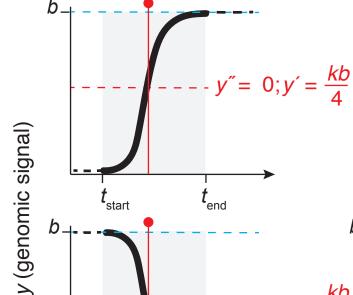
Decelerators

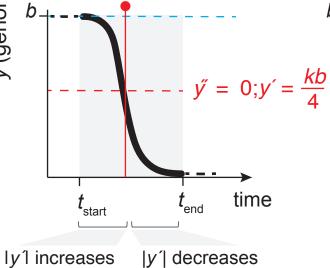
t_{switch} < t_{start}



a

Decreasing patterns k < 0





|y'| decreases

