



1 refs

Logistic Map: Iteration

$$L_{i+1} = rL_i(1 - L_i)$$

$$i = 0: L_0 \rightarrow L_1 = r L_0 (1 - L_0)$$

$$i = 1: L_1 \rightarrow L_2 = r L_1 (1 - L_1)$$

$$= -r^3 L_0^4 + 2r^3 L_0^3 - r^2(1+r)L_0^2 + r^2 L_0$$

$$= rL_0(1-rL_0)(1-rL_0(1-rL_0))$$

$$= r_{L_0}(1 - r_{L_0})(1 - r_{L_0}(1 - r_{L_0}))$$



Logistic Map: Iteration

$$L_{i+1} = r L_i (1 - L_i)$$

$$i = 0: \quad L_0 \rightarrow L_1 = r L_0 (1 - L_0)$$

$$\begin{aligned} i = 1: \quad L_1 \rightarrow L_2 &= r L_1 (1 - L_1) \\ &= r r L_0 (1 - L_0) (1 - r L_0 (1 - L_0)) \\ &= -r^3 L_0^4 + 2r^3 L_0^3 - r^2(1+r)L_0^2 + r^2 L_0 \end{aligned}$$

Logistic Map: Parameter

$$L_{i+1} = r L_i (1 - L_i)$$

