# Bifurcation Diagrams of other Chaotic Maps
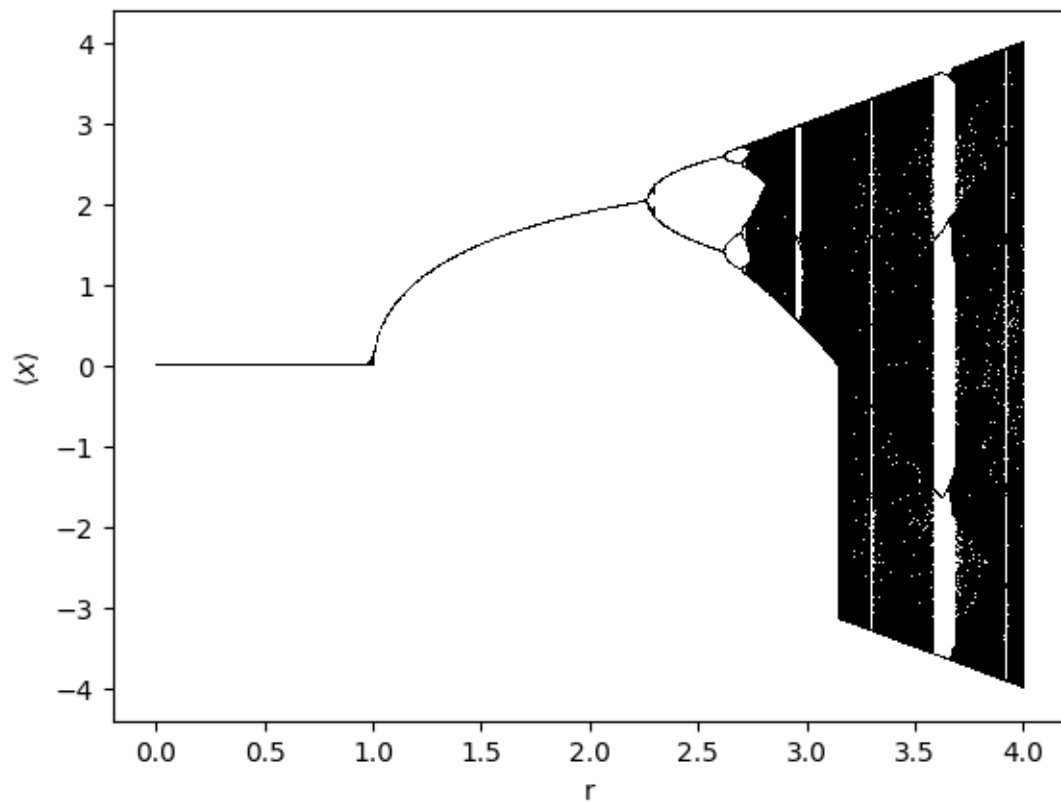


**Figure 1**: Bifurcation diagram for $x_{n+1} = r \sin(x_n)$. The ratios between successive bifurcation width is the same as the logistic map, i.e. the Feigenbaum constant

These maps have been produced using the code found in the Appendix except for Figure 3.
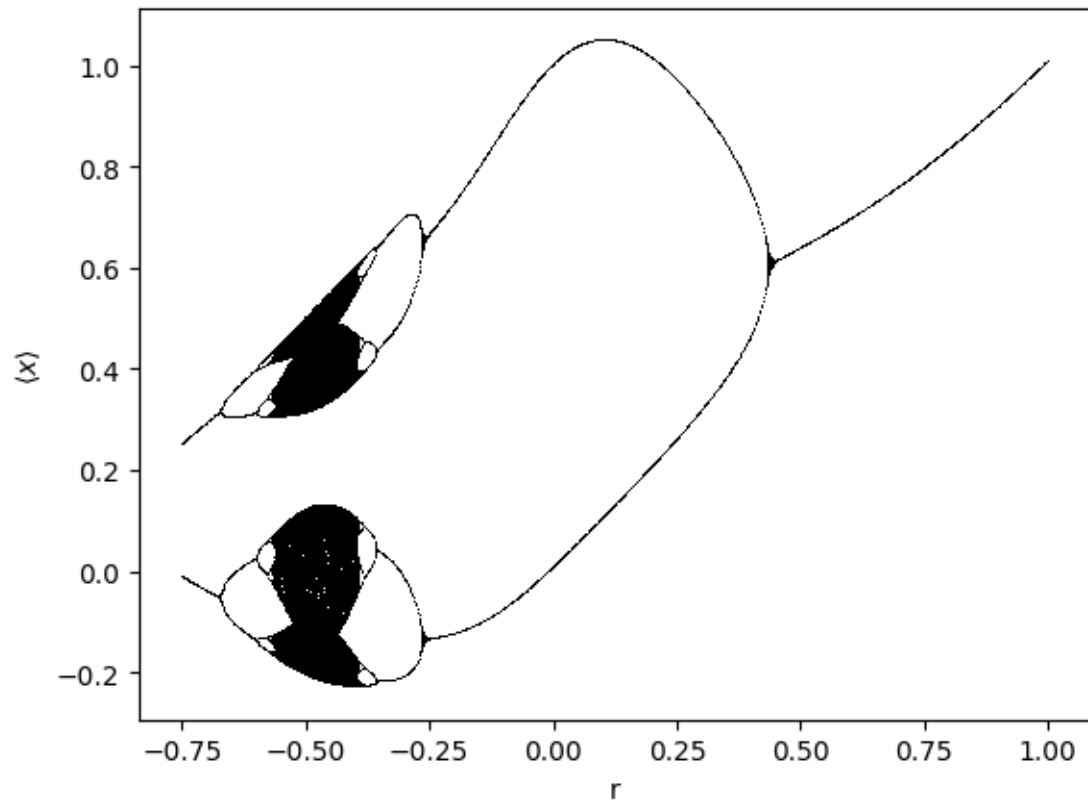
**Figure 2**: Bifurcation diagram for the Gaussian map - this is the discrete recurrence relation of the Gaussian distribution, it has $2$ parameters. $x_{n+1} = \exp\left(-\alpha x_n\right) + \beta$
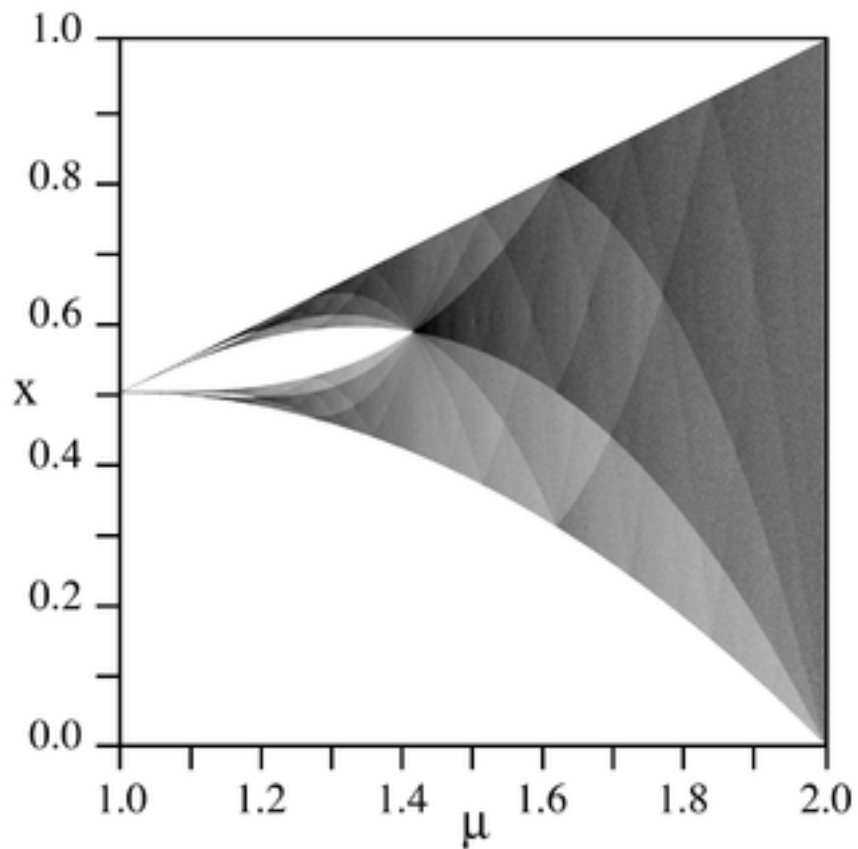


**Figure 3**: Bifurcation diagram for the Tent map, the Tent map is used in understanding chaos in economics, $\mu \equiv r$, taken from https://en.wikipedia.org/wiki/Tent-map
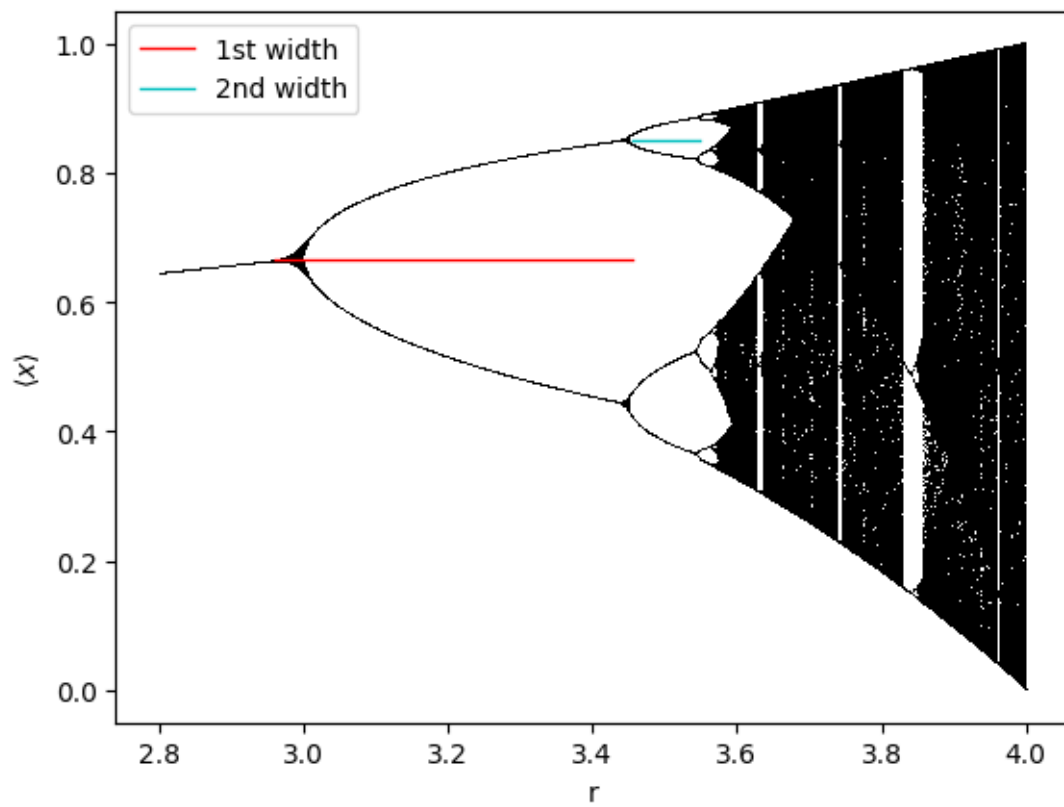
**Figure 4**: The bifurcation diagram of the logistic map, the feigenbaum constant can be estimated by the ratio of the width of the red line to the width of the cyan line