

1. Plot the bifurcation diagram of the sine map $f(x)=a*\sin(Bx)$. ($0<a<1$). What are the similarities with the bifurcation diagram of the logistic map?
2. Using the sine map, approximate Feigenbaum's constants δ and α .
Tip: you need to calculate the bifurcation points first. Tip 2: you can actually use α to approximate the bifurcation points and the values of a when a point of the attractor cycle=0.5 (superstable orbits).