



Department of Mathematics and Statistics Colloquium

Tuesday, February 26, 2019

AMB 164 4:00 pm

Dynamical Systems Art

Jim Swift

NAU Maths/Stats

Abstract

This talk is about the mathematics and programming behind four of my pieces of art. The first story is about the huge version of the bifurcation diagram for the logistic map $x_{n+1} = ax_n(1-x_n)$ that didn't get printed at the LMC. The second story is about the image of a cross section of the Menger Sponge that has been in the halls of Adel Math Building. The third story is about an image of a chaotic strange attractor with square symmetry. The fourth story is about the beautiful non-chaotic trajectories of a particle under gravity from two fixed centers. If time permits, I will discuss ideas for future artwork.

Refreshments at 3:45