



**NORTHERN
ARIZONA
UNIVERSITY**

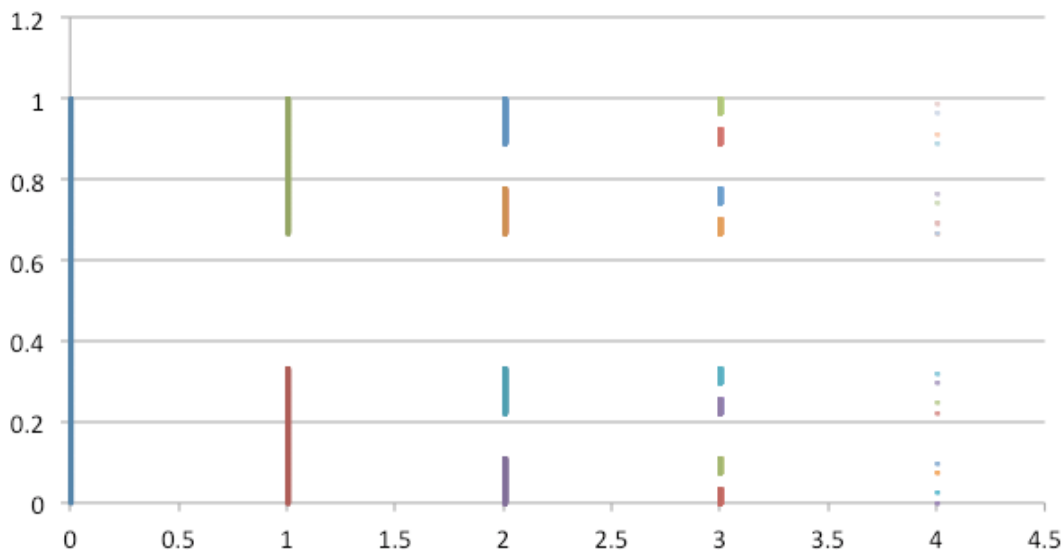
On this day in 1924, Benoit Mandelbrot born in Warsaw, Poland. He coined the term "fractal". His book, *The Fractal Geometry of Nature* (1982), not only popularized fractals, but helped convince mathematicians and scientists of their importance.

FAMUS: November 20, 2015

Friday Afternoon Math Undergrad Seminar meets on Fridays at 3:00-4:00pm in Room 164 of the Adel Math Building. Refreshments are always served!!

Iterated Function Systems & Their Attractors **Speaker & Guest: Dr. Todd Wolford (NAU)**

We will look at the effect of applying an Iterated function system to geometric figures in \mathbb{R}^n . We will begin by looking at the results that can be achieved by applying a couple of linear functions repeatedly to a line segment in \mathbb{R} . We will see that a line segment, $[0,1]$, can be turned into the famous Cantor Set. Does the result we get depend on our choice of line segment? What happens if we apply linear functions repeatedly to 2-dimensional or 3-dimensional objects? Attend this talk if you want to see the exciting and beautiful answers.



**ALL MATHEMATICS MAJORS ARE ENCOURAGED AND
EXPECTED AND ENCOURAGED TO ATTEND**