Undergraduate Math and Physics Seminar

Calculus on Fractals

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Abstract:

Fractals are strange sets that are often difficult to study using the traditional tools from Calculus. One interesting fact about fractal sets is that they often do not have integer dimension, the way a line, a square, or a cube does. That’s right, there is such a thing as a \( \log(3)/\log(2) \) dimensional set. In this talk we will see many examples of fractal sets and see how one can do calculus on these sets.

When: Monday, September 25, 2017, 4:30-5:20 pm  
Where: CSUCI, Del Norte 1530

Sierpinski gasket (left), harmonic Sierpinski gasket (center), stretched Sierpinski gasket of parameter \( a \) (right).