



Colloquium Series



The Monsters Lurking Between Dimensions n and $n + 1$

Andrea Arauza Rivera

Cal State East Bay

Abstract: Many of us have an idea of what it means to be a 1, 2, 3, even 4 dimensional object, but what does it mean to be a 1.58496... dimensional object? What sort of monstrous sets lurk between dimensions n and $n + 1$? In this talk we will confront the monsters that live between integer (larger than -1) dimensions and explore a few ways to define such dimensions. We'll also talk about how the notion of dimension 1.58496... may be useful in applications.

Keywords: fractals, fractal strings, geometric zeta functions, non-integer dimension

Wednesday February 24, 1:05 – 1:50pm