

Abstract Submitted  
for the NES09 Meeting of  
The American Physical Society

**Darwinian Evolution and Fractals** PAUL H. CARR, AF Research Laboratory Emeritus — Did nature's beauty emerge by chance or was it intelligently designed? Richard Dawkins asserts that evolution is blind aimless chance. Michael Behe believes, on the contrary, that the first cell was intelligently designed. The scientific evidence is that nature's creativity arises from the interplay between chance AND design (laws). Darwin's "Origin of the Species," published 150 years ago in 1859, characterized evolution as the interplay between variations (symbolized by dice) and the natural selection law (design). This is evident in recent discoveries in DNA, Mandelbrot's Fractal Geometry of Nature, and the success of the genetic design algorithm. Algorithms for generating fractals have the same interplay between randomness and law as evolution. Fractal statistics, which are not completely random, characterize such phenomena such as fluctuations in the stock market, the Nile River, rainfall, and tree rings. As chaos theorist Joseph Ford put it: God plays dice, but the dice are loaded. Thus Darwin, in discovering the evolutionary interplay between variations and natural selection, was throwing God's dice!

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Date submitted: 03 Apr 2009

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