

The Circle of Physics

Richard Fiene, Ph.D.

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I want to provide a different model for thinking about physics reducing it to the simple elements of a circle.

Let's start with a circle with its basic parameters of radius, diameter, center, circumference, and area and overlay it with the physics of the ancients, Classical Physics, Relativity, and Quantum Mechanics.

We will super-impose history on this circle starting with the ancients who gave us the center of the circle to get us thinking about the universe. At that point we thought we were the center of the universe and everything revolved around us – Copernicus pointed us in the right direction. Newton came along and gave us the radius and diameter of the circle and a very linear world with space and time as absolutes. Einstein took Newton's theory and showed us how space-time is inextricably tied together and not separate entities. He gave us the circumference of the circle.

While relativity showed us the outer boundaries of the circle, quantum mechanics was showing us the microscopic nature of our circle by defining the area. By defining the area of a circle, we found a much less linear presentation as we did with classical physics and relativity where probabilities and randomness are now introduced with quantum mechanics. The area of a circle provides that opportunity because you can be anywhere within the area of the circle and not restricted to the diameter or circumference.

So we have traveled from the center of the circle exploring its inner workings to its outermost edges only to return to the center but not the center that we started with. Now we can have many entangled centers as we do our observations and find much more random and probabilistic center points.

The reason for selecting a circle, although this could be extended to a sphere for the same effect, is Pi (π) provides an interestingly constant when we begin to delve into the various theories and look at the mathematics describing the essence of these theories.