

# Introducing the Photon as String

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In previous articles, we had introduced the structure of electrons, protons, and neutrons, stating that electrons are like a shell on hollow spheres, protons are dense spheres, and neutrons are a combination of the two – a solid sphere within a spherical shell – all of which are constructed from photons. We also elaborated on the reasons for this structure's validity.

Furthermore, we verified the photon's physical parameters and demonstrated that it is a particle with a constant mass. However, when this particle with a constant mass is emitted from an electron and travels individually, it moves in a nested helical path. This path results from the rotational motion of the photon's source, the electron, around itself and the nucleus.

In this article, we address the significant point that, considering the nested helical motion of photons, we can describe  $5 + 5 + 1$  dimensions of movement for them. The nested or double helical motion comprises two helices. Movement along the first helical path requires 5 degrees of freedom, thus allowing 5 dimensions of movement to be attributed to it. Similarly, five degrees of freedom, or dimensions of movement, can also be attributed to the second helix. Combined with the photon's rotational motion around itself, a total of  $10 + 1$  movements can be defined for the photon. Therefore, the photon could be a suitable candidate to be introduced as a string.

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