

Physicist

by Hans van Leunen

Retired physicist

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Summary

Current physics contains many inconsistencies that can be solved.

Interest

Out of curiosity, I became a physicist. It has always fascinated me to find out why things behave as they do. The nature around us is extremely complicated and sometimes seems chaotic, but on closer examination, there appears to be a great coherence and unlikely high predictability. To become a physicist, you have to go to a university of physics to study. In my area, this possibility did not exist. There was a college where applied physics was taught. That is not the place where they delve deep into the essence of physical reality. I decided to follow this study and to finish it as deeply as possible. For my specialization, I chose theoretical physics. The college has now become a university, but at the same time, the study towards theoretical physical physics has been abolished. After this study, I opted for a field that interfered with the behavior of the smallest particles. I joined a group that developed image intensifiers. Much of the required theory had to be worked out even further. Image intensifiers are devices that can be used to visualize the behavior of photons and other particles directly. One thing I noticed immediately. The particles behave only as particles and never manifested as waves. This contradicts what was learned in the lessons of the university.

Practice

Photons and electrons should manifest themselves both as particles and as waves. So, they didn't! What is wrong? It turns out that in large swarms the particles show interferences and thus wave behavior. These waves are probability waves. The probability of the detection of a particle behaves like a wave package. The particle itself does not behave like a wave package. It seems as if the particle does not exist as long as it is not actually detected. As long as the particle is not detected, the probability wave can represent the particle. The physicists have further worked on this by sticking the concept of wavefunction onto the particle. This step has brought many people into total confusion. A completely different statement is possible. That statement is given by a stochastic process that generates potential detection locations. These are not the places where the particle will be detected, but the places where the particle CAN be detected. The particle appears to hop around along these locations. After some time, the hop landing locations have formed a coherent hop landing location swarm. A location density distribution describes this swarm. The swarm is equal to the square of the modulus of the wavefunction of the particle. The stochastic process causes the swarm to be coherent. This means that it continually pursues the same location density distribution. It is curious that physics is stuck in the concept of the wavefunction and has never made the step to the stochastic process that is responsible for the shape of the wavefunction. The above story applies to the behavior of elementary particles. Elementary particles are elementary modules, and together they combine in all the modules that can be found in the universe.

The stochastic process proves to be a combination of an original Poisson process and a binomial process. The binomial process is implemented by a spatial point spread function. This can be verified

by using an RMS meter and a DC Meter to measure the signal to noise ratio in a low dosed bundle of elementary particles.

The location swarm moves as a single unit and represents the elementary particle.

The stochastic process possesses a characteristic function that is equal to the spatial spectrum of the location density distribution of the produced hop landing location swarm.

Modules are also controlled by a stochastic process, and this process also has a characteristic function. This characteristic function is a dynamic superposition of the characteristic functions of the stochastic processes that control the components of the module. The superposition coefficients implement displacement generators and in this way determine the dynamic internal location of the components. The module also moves as a single unit, and the stochastic process thus ensures the binding of the components of the module.

This is a different rationale than the one that current physics follows.

Current physics tries to explain the binding of elementary particles with all kinds of forces and force carriers. The explanation through stochastic processes seems simpler and more insightful.

Current physics is also driving on the skewed ice skating with its interpretation of photons. These particles have a color associated with an internal frequency, but they are not waves. They are beaded cords of small packets of energy. In their emission, all the photons have a fixed spatial length and exhibit a shared emission duration. This is reflected in the Einstein-Planck Relationship $E = h \nu$. Current physics continues to claim that the photons are electromagnetic waves. However, photons can take a trip of many millions of years through free space without losing their integrity, while waves very quickly lose their amplitude and spread over space. The carrier of the photons is the field that forms our living space and is always and everywhere present. Electromagnetic waves rely on the proximity of electrical charges.

It appears that the energy packets correspond to special solutions of the wave equation that have been known for more than two centuries. They are one-dimensional shock fronts. Their effect is so minimal that they can never be noticed as loose objects. They manifest themselves in long chains of equidistant energy packages.

There are also spherical shock-fronts that can never be noticed as loose objects. These are also solutions of the wave equation. In huge swarms, they manifest themselves as the elementary particles described above.

So long-standing knowledge still contains unexplored terrain that is essential to understanding important parts of physics. It is curious that current physics passes so lightly on these facts and lingers on old established ideas.

Details

TheStructureOfPhysicalReality. pdf; <http://dx.doi.org/10.13140/RG.2.2.10664.26885>

BehaviorOfBasicFields. pdf; <http://dx.doi.org/10.13140/RG.2.2.15517.20960>