How to Win the Nobel Prize by Finding the Mysterious and Much Maligned Aether

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The easiest way to a Nobel Prize is to find a new fundamental particle. What better particle to find than the particle that makes up space? This paper explores the idea that this particle that has eluded detection can be found and that the Nobel Prize will be yours.

1. Introduction

Who wants to win a Nobel Prize? That is the dream of many scientists, but how do you do it? Usually, you have to invent or discover some revolutionary process like LED lights to be recognized. But one of the most surefire ways to win a Nobel Prize is by discovering a new fundamental particle. Several Nobel Prizes have been awarded for things such as finding the Higgs Boson, the J/Psi particle, and W and Z particles and neutrinos. It wouldn't seem like such a big deal to find some particle, but you are virtually guaranteed to be awarded a Nobel Prize for it.

2. What's left to find?

You would think that every fundamental particle that is going to be found has been found. In the search for the Higgs Boson, they have scanned just about every possible place that a particle could be hiding and the chances of you building some machine bigger than CERN to find even more massive particles is hardly practical. I would suggest you look at the opposite end of the scale to find a much lighter particle. The lightest particle we have is the electron, so could there be something just a bit bigger than an electron? Such a light particle would be accessible to relatively modest experimental setup.

3. What about the aether?

In the history of physics, the aether was the medium that the electromagnetic wave propagated in. The trouble is, nobody has been able to find it - Yet. So, here is the golden opportunity to find a brand new particle. So, what should we be looking for? First, we should be looking for something that can actually be found. By this, I mean that whatever we think the aether particle is, it should be able to show up in our experiments. If we postulate that the aether particle is some totally different kind of matter that is different from any known particle and can't possibly be detected (like the strings in string theory), then it is generally hopeless. So, ideally, the new particle should be made out of things we know about like electrons, muons, protons, quarks, etc. and should not rely upon the invention of some new particle like a Spheriton, Circulon, FP, Fiber, or whatever. Second, if the particle is the medium of the EM wave, then it should be completely stable and be everywhere. If your particle just falls apart in a microsecond like the Higgs Boson, that is hardly a candidate for the aether. So, we are looking for a lightweight particle that is everywhere, but hasn't been detected yet.

4. What could it be?

So, we are looking for a lightweight particle made out of known matter particles which is stable and everywhere, but yet hasn't been detected. That's a tall order. Some might say this is impossible, but if it exists, it is probably just hiding under our noses and the only reason we don't see it is because we deliberately choose to ignore it. However, there is a particle that could theoretically fit the bill. That particle is a positron/electron dipole particle which I will dub the 'poselectron'. Now I know what you're thinking – positrons and electrons annihilate each other leaving nothing so that can't possibly be a particle. However, that is exactly, the choice to deliberately ignore the particle which has kept the particle hidden for the past 100 years.

5. Poselectrons fit the problem

Assuming that positrons and electrons do not annihilate, then what do they do? I suggest that when they collide, the energy of their collision is released as gamma rays and the particles combine into a newly formed poselectron particle. It is a true dipole combination and not positronium or some version of hydrogen. This combination of would very light, about the mass of 2 electrons, making it the 2nd lightest particle in the universe. In order to hide after the reaction, it would have to look exactly like empty space – which if it were filled with poselectrons would make it indistinguishable from the background. So, we would have a particle which is categorically denied by the mainstream (which prevents its discovery), it is made out of ordinary positron/electron matter which can be easily detected, and it is extremely light weight and completely stable.

6. Finding the poselectron

One of the main problems with finding the aether particle is that nobody has provided a model for what that particle is made out of. You can't find something if you don't know what you're looking for. With this paper, I have given you a plausible suggestion for what to look for. It will then take clever experimentalists to devise a unique and convincing experiment to prove beyond and doubt that this particle exists. Look for it and you will find it and garner yourself a Nobel Prize in the process.