Particles and the Spacetime Continuum Interact

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Reimagining the Spacetime Continuum

We were all taught in high school that you can regard light as either particles or waves, but not both at the same time. This introduced a serious duality problem in physics.

Our understanding of physics has been evolving and perhaps will be evolving indefinitely, if so simply due to the fact that we are a part of what we perceive, what generates us and our perceptions, and as such we can't prove that what generates us and our perceptions.

The spacetime continuum used to be seen as the great emptiness that formed the facilitator for interaction between different types of matter. It didn't move, it didn't change.

That's what we thought, until Einstein through his modern interpretation of Newtonian physics, allowing any reference system to be entered into the derivative equations provided by the General Theory of Relativity, showed us in a way we could comprehend that space was amenable to change. It is variable. It can expand, contract, remain the same, and its shape is largely defined by the force of what we perceive as gravity.

Einstein's equations showed how the macro-model of the spacetime continuum worked, but it was unable to work on the micro-level, also known as quantum physics.

Quantum physics itself as taught on a university graduate level focuses on applying statistics to the behavior of particles, leading to the most outrageous popular scientific explanations of how particles act and interact. The fact that we have to use statistics is because we can't perceive anything on the sub-atomic level.

As of today, physicists assume that single particles don't exert any influence on the spacetime continuum by themselves worth noting.

They are wrong: they assume that the properties of the spacetime continuum that they witness are actually a property of the particles themselves, but it's the way they interact with the spacetime continuum that they actually witness.

So what does spacetime look like and what's a particle? Any kind of particle?

Particles Are Strings Contained in the Hollow Spacetime String

In the May 2005 edition of Scientific American, Bernard J. Carr and Steven B. Giddings wrote an article called "Quantum Black Holes" which baffled me, because they argued about firing particles at each other, causing these particles to extinguish in an infinitesimally small moment, creating a quantum black hole, after which they exploded into other smaller particles in all directions.

That's not what I had learned black holes were. I had learned that they were infinitely heavy point masses drawing everything in. I had learned a mistaken view of reality, but it really got me to think as to what a black hole really is and whether this also applies to these quantum black holes.

A quantum black hole contains the mass equivalent of the two particles fired at each other in the particle accelerator, a mass my scale at home wouldn't even pick up if you were to drop it on there.

Black holes in space are so heavy they suck everything in, but they aren't point-masses: otherwise they would suck in mass from all directions, eating up all mass until the universe is gone or at least until the potential energy becomes thus great that they explode much like spacetime as we know it did during the big bang.

Black holes suck everything in, fully disintegrate the matter they suck in, and ejaculate everything on the other side with a bright jetstream. If black holes were point masses, they wouldn't do this, so the concept of a black hole in space is vastly different.

A macro-level black hole is a gargantuan open ended whirlpool formation of the gravitational field, the spacetime continuum. This means that its shape approximates a tangent.

The rest of spacetime perceives a seemingly infinitely heavy mass through the dent it creates in space on one side. On the other open ended side it actually acts like a spike. The spike translates to an infinitely heavy push in the same direction exiting the black hole as the entering direction of that same black hole, forcing the through the whirling pressure now disintegrated mass to continue in the same direction.

This is something completely different from what you actually witness in the particle accelerator. When you assume the macro-level black hole is a point mass, then and only then could you compare the micro-level quantum black hole, which is a point in space phenomenon, to it. This view, however, is wrong.

This doesn't mean that the quantum level black hole, an entity onto itself, is any less interesting to study.

How can two particles counter each other's waveform, extinguishing each other completely like on a guitar string, yet hit each other in such a way that they explode, like completely separate entities can? They can't.

It isn't the fluctuation of the particle that we witness extinguish, but the fluctuation of the spacetime continuum that extinguishes on a micro-level. That's the new quantum physics reality we need to learn to deal with.

Imagine the spacetime continuum being like a hollow higher dimension guitar string that's infinitely flexible in fluctuating with the particle strings fluctuating inside of it. Now, when the particle accelerator fires two particles at each other, the spacetime continuum fluctuates with the particle strings contained in it.

When they arrive at the same point in spacetime, with the exact and opposite phase waveforms determining the shape of the particle strings, this causes the fluctuation of the spacetime continuum to extinguish, while at the same time the two particles collide, causing them to explode within the spacetime continuum, with the smaller energy parts they are made up of exploding in all directions.

This also means that there's no need for the duality principle of light: light is also made up of particle strings contained in the hollow string of spacetime that fluctuates with the fluctuation of the light particle strings, causing a rippled waveform throughout the spacetime continuum.

Scientific Models and Predicting Outcomes

What's interesting is that even though there is no other particle mass around, a single particle on itself exerts at least an influence as big as itself on the spacetime continuum that contains it. Previously, we assumed only large masses exerted any kind of influence on the spacetime continuum with functional dents, zero-points, peaks, and slopes in it as a result.

What we now need to model is both the particles and the spacetime continuum that contain them and their interactions. This introduces interesting questions.

What happens to the fluctuation of particle strings when together particles form a larger mass? Do they fixate?

Based on past experience, we would have to conclude that they do fixate, partially or at zero Kelvin temperatures completely, unless the temperature becomes thus high that they fluctuate normally so the mass disintegrates into separate particles that can no longer react.

When you think about it, this also illustrates why zero Kelvin can't be reached, because that's a zero energy level, which means mass disappears. So, when you freeze mass, does it become lighter, considering the energy level is lower? It should, notably when nearing the zero Kelvin temperature. It will be difficult to measure, because your scale freezes up also.

In between, when heated, there are many stages particle masses can go through causing different kinds of chemical reactions. These reactions may very well be related to the synchronization of the separate particles that make up a larger particle that we like to call an atom.

Also, what happens to the spacetime continuum's shape when you add up the influence of relatively fixated strings, that together form a mass, to each other? Does the combined influence all of the separate particles by themselves have on a micro-level account for the same macro-level space deformation we perceive as gravity?

There will never be a theory of all, since we can't explain what for instance created the energy the particle strings are made up of, or what energy itself consists of.

To us, energy equals mass and vice-versa, but it's just a perception of our reality, that in itself has proven itself to us individually to be reality, but still we don't know and will never know what generates it and the fact that we perceive it.

If we could, we would also be able to explain the highest language we speak: the qualitative experiences we have, seeing red as red, rather than as a computational number; but as proven in my 2018 essay "Plain Logic", a logical language can't be proven within itself: it's the highest logical language we can perceive, every other being a subset of it.

Literature

Bernard J. Carr and Steven B. Giddings (May 2005) "Quantum Black Holes" : Scientific American.

Emile M. Hobo (2018) "Plain Logic" : www.emilehobo.nl.