The Ultimate Secrets of the Universe

Fundamentals Series

4: Computing General Relativity.

General relativity is the theory of how the presence of mass-energy ‘curves’ spacetime, and how curved spacetime affects the motion of objects within it. It accurately predicts both but is unable to explain *why* mass-energy curves spacetime.

The reason why is simply explained by a revolutionary new theory that says *masses ARE simply fields of intrinsic spatial velocity in the form of ultra fine vibrations of spacetime itself*. No longer do we have the problem of *how masses create* gravitational fields. Masses are themselves the fields they were thought to create in a new form. This simplifying new insight also reveals an entirely new model of curved space that produces identical mathematical results.

Thus, the presence of masses creates fields of intrinsic spatial velocity experienced by objects within them that slow their clock time in the same manner as linear spatial velocity does. This accounts for *gravitational time dilation* by the same mechanism as that of special relativity so that the total velocity of everything through the 4 dimensions of spacetime always remains equal to c.

This new theory also provides the missing reason *why* mass-energy is conserved. All forms of mass-energy are just various forms of spatial velocity, and the conservation of mass-energy is simply the conversion of equivalent amounts of spatial velocity from one form to another. Even potential energy is just some form of potential spatial velocity.

**So the basic plan of the universe*: Everything continuously moves through the 4 dimensions of combined space and time at the speed of light c. And all velocity in space is some form of mass-energy. By definition *mass-energy is spatial velocity and spatial velocity is mass-energy*. And since everything moves through combined space and time at c, everything continuously moves the *same distance* through spacetime and this same distance is the *current universal present moment* within which the entire observable universe exists!

This new model also replaces the curved spacetime of general relativity with a much simpler but topologically equivalent flat 4-dimensional spacetime in which spacetime curvatures are replaced by equivalent fields of intrinsic spatial velocity. This model is also enormously easier to understand and easier for the universe to compute than curved spacetime.

This model can be visualized by compressing lengthwise every curved geodesic path through a gravitational field until it’s straight and the entire field becomes a flat uncurved 4-dimensional space. This crumples the geodesics along their lengths into hyper fine sinewaves with the amplitudes of the sinewaves proportional to the original curvature. Then setting these sinewaves into motion gives the field its intrinsic spatial velocity.

When we do this in all directions along all possible geodesic curves the result is a field of ultra fast hyper fine spherical pulsing's with amplitudes proportional to the original spatial curvature at every point. These intrinsic spatial velocity gravitational fields produce identical mathematical results as the old curved space fields and also explain *why* mass curves space and are much easier to understand and compute.

Within an intrinsic spatial velocity gravitational field, the gradient of spatial velocities results in *velocity vectors toward the center of mass* which are the source of gravitational attraction. And objects traveling up and down along the sinewaves also travel the same distance in the same time as along the previously curved geodesics, and thus they are mathematically equivalent.

The entire universe is now seen as a single flat 4 dimensional field with varying densities of intrinsic spatial velocity gravitational fields. Objects within these fields experience their intrinsic spatial velocity and this reduces their velocity through time. This is the source of gravitational attraction and gravitational time dilation in our new model.

This new model of general relativity reveals all sorts of further insights into the deepest secrets of the universe. For example, If mass is intrinsic vibrational spatial velocity and gravitation is fields of intrinsic spatial velocity then the intrinsic spatial velocity of these fields can never exceed the speed of light.

This would mean that *black holes have no central singularities* but instead are uniformly dense spheres of maximum possible c valued intrinsic spatial velocity within which the velocity of time is zero. This is consistent with the principle that it's impossible for a computational universe to compute a contradiction such as a black hole singularity. This hypothesis may be testable.

This is how the computational universe computes an observable universe that automatically includes both special and general relativity, and leads to profound new insights into the ultimate secrets of the universe.

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