

BLACK HOLE REINTERPRETATION

Stephan Hawking (1942-2018) and Albert Einstein (1879-1955) independently argued against black-hole theory, but neither of them provided an acceptable alternative. A possible one is here proposed according to a slight modification of relativity theory along with a different interpretation of the Schwarzschild metric.

As with present theory, there is a paradox with light speed being only itself an upper limit of relative motion. If mass accelerates to light speed, then its quantity becomes infinite along with its length becoming zero while moving within an infinitely slow time interval. Einstein's proposed solution of this paradox assumes a counter force exists to prevent continual increase in gravity. Further analysis here merely supports his proposal according to a more correct analysis of the Schwarzschild metric along with a slight modification of special relativity as well. Regarding the latter, the counter force relates directly to an outside force containment of the internal energy of mass. Regarding the former, outside energy converting to internal energy is also conditional to vacuum effect resulting in gravitational effect.

Further analysis of the Schwarzschild metric, from which the black hole became interpreted as such, indicates another upper limit could be one-half light speed whereby an increase and decrease in both internal mass-energy and gravity balance out. Above this upper limit there can be more decrease than increase in internal energy.

How can internal energy mc^2 be maintained? There somehow needs to be an outside force to maintain it. Such an outside force could also be contrary to the Doppler principle whereby light or sound coming from either emission or reflection of an approaching mass is of greater frequency energy than if coming from a mass moving away from the observer. In being

contrary to the Doppler principle, conservation of momentum applies along with explaining how relative motion in free space is maintained. To maintain relative motion along with internal energy, the outside containment needs to be the same from all direction. If it is contrary to the direction of relative motion, then it needs to be somewhat invisible, such as to pass through mass by means of superimposing through it in the manner of wave action.

The containment energy being contrary to the Doppler principle is explainable according to how relative motion maintained according to conservation of momentum. If internal energy of mass is maintained by a particular source of radiation, then less of it needs to be reflected in the same direction of relative motion than in the opposite direction of relative motion. There is also internal motion of internal energy to consider as well. Internal energy being in relation to light speed squared, light energy reflecting backward from the direction of relative motion is of less energy of light energy reflecting backward from the opposite direction of relative motion. If relative motion is v and less than light speed c , then the impact of $(c - v)$ on internal mass-energy in the direction of relative motion is less than the impact of $(c + v)$ on internal mass-energy in the opposite direction of relative motion. There is thus less need to reflect containment energy coming from the opposite direction of relative motion than that coming from the same direction of relative motion.

Containment energy is thus the exact opposite of the Doppler principle whereby light and sound coming from either emission or reflection of an approaching mass is a higher-more frequent energy than if coming from a mass moving away from the observer.

Mass energy itself is assumed to consist as wave packets of superimposing waves, and there is the Higgs Mechanism whereby light can either be massive or massless also according to wave action. Ocean waves, for instance, are massless in the sense momentum is the same before and after they pass over the surface, but they are massive if something else besides water on its surface is moved by them.

It is further noted that both Newtonian Mechanics and Relativity Theory have not predicted results of cosmic observation with sufficient accuracy for more than a century. Even Big-Bang theory has come up with observable results contrary to theory. Existence of dark matter and dark energy have been assumed to comply with observable results.

Further note is with regard to unification of field theory. That none has been accepted by the establishment is beyond mathematics. Gravity, electromagnetism and Quantum mathematically interrelate. The only difference between the electromagnetic unit of charge e -squared and the Planck constant is the former is the product of parameters $m \cdot v^2 \cdot r$ and the latter is the product of parameter $m \cdot v \cdot r$. Their ratio is thus the fine-structure constant of velocity v whereby mass m and radius r cancel out. Similar, but somewhat different, the ratio of electromagnetism to gravity is the ratio e^2/G equal to $(mv^2r)/(rv^2/m) = m^2$. There is thus a particular quantity of mass m with a particular radius r whereby the electromagnetic charge of e^2 equates to the gravitational constant G . As for determining the length r , it is according to the Planck constant whereby the product of the parameters of mass m and radius r is constant due to v representing the fine-structure-constant.

Unification of field theory thus depends more on explanation of how they interrelate instead of just mathematical equivalence. Gravity has been excluded from unification because of it not being predict cosmic results instead of mathematical equivalence.