

TIRED LIGHT THEORY AND DARK MATTER

Bobby Dee Ticer

Tired Light and Big Bang theories are different interpretations regarding the discovery of redshift in starlight per distance. Big Bang interprets it as expansion of matter in the universe in relation to the Doppler principle whereby such energy as light and sound decrease or increase motion of mass moving either towards or away from them. Tired Light interprets redshift according to a slight loss of internal energy in ratio to distance light moves from its origin.

Further opposition to Tired Light is with regard to there being no observance of scattered light from its interaction with visible mass. It is also claimed that no blurring has been observed of distance galaxies. However, there is an obvious factor overlooked in favor of it. It is according to how internal mass-energy is contained. Containment radiation needs to be contrary to the Doppler principal in order for relative motion of mass to continue through vacuum space consistent with theory. There is also possibility, as according to wave theory, of invisible effect except for the decrease of incoming starlight as its primary source.

In accordance with wave theory, light waves moving in opposite directions at speed c can superimpose to become mass m by becoming thicker to reflect other waves. Opposite momenta mc of containment radiation becomes kinetic energies $\frac{1}{2}mc^2$ in opposite directions to combine additionally as internal energy mc^2 .

There is also a relativity paradox in relation to light-speed c . Mass moving at speed c becomes of zero length along with its internal interaction occurring within an infinite time interval. Similar effect is the Black Hole condition of no possible escape occurring at an upper limit of gravitational escape speed.

Einstein originally opposed Black Hole theory with regard to such a paradox, but he only proposed a counter force in accordance with mathematical integration. Consistency of containment radiation with other theory explains it.

Einstein was awarded the Nobel Prize for his contribution to the probability condition of wave theory. Moreover, waves can superimpose according to different states of existence. They can be invisible in analogy to ocean waves not changing momenta after passing over the surface, but can be massive by changing momentum of something else floating on the surface.

How does starlight decrease in energy per distance? Can it be invisible to other light superimposing from various directions?

Reduced energy of starlight could become another form of energy. Consider how light from our sun is brighter during daytime than is starlight during night. How does internal energy of stars not appear to

decrease as such? Have more distant stars of a longer past decreased as such as well. Could not reduced energy of starlight per distance convert into another form of containment energy? Along with providing stars and planets with more energy, such other form of invisible radiation, as partly being containment radiation, could allow such other radiation to escape as gravitational vacuum effect.

Such gradual conversion in comparison to that of electromagnetism could also be of far less energy. Simply stated, light merely converts to gravity in accordance with Tired Light theory, but it must also be such that there is not enough noticeable effect of interference with other light. Its possibility could be in accordance with a particular equilibrium state of existence.

Although such assumption is speculative, it has historical support. Further development of wave theory preceded the establishment of quantum and electromagnetic theories. In the year 1800, William Herschel (1738–1822) used lenses of different color to discover light filtered through them at various temperatures, as at one-degree higher just beyond the red-end of the visible spectrum of infrared. Eventually, as in 1859, Gustav Kirchhoff (1824–1942) proposed a particular condition of black-body radiation applies to all mass regardless of its material composition.

There is also a decrease in gravitational energy along with an increase in mass. It is indicative of the Schwarzschild metric whereby light-speed becomes one-half as much if escape-speed-squared equals one-half-light-speed-squared in accordance with the relativistic factor squared, as being of shorter length and slower time. Locally, however, relativistic effects of slower light speed and slower orbital speed are negated since measuring rods and clocks of local observers are affected by the same relativistic factors. Still, there is the condition apart from local observation that there is more energy lost than gained above this one-half-light-speed limit. As for its conservation, light is simply converted to gravity.

A more recent determined value of the Hubble constant as decrease in light energy per distance is about 70 kilometers per second per million parsecs, which approximates as 2.27×10^{-18} times per second. In relation to gravity and electromagnetism is the equation

$$\frac{Hr_n}{c'} = \frac{H_3(2r_n)}{c} \cong \frac{Gm_p m_e}{e^2} = 4.4 \times 10^{-40}$$

The Hubble constant multiplied by the nucleus of the hydrogen atom per one-half-light-speed thus seems to equal the ratio of gravity to electromagnetism of the product of proton multiplied by electron.

Calculation depends on theory. More distant sources of starlight being more of the past should appear denser according to Big Bang. However, Tired Light is more complex depending on whether the universe is finite or infinite, and as possibility of it being a particular finite part of an infinite universe.

If all mass were evenly distributed throughout the universe, then all gravity would cancel out. Furthermore, twice mass at twice radius

is of the same gravitational attraction, but, overall, only half as much. Surface $\cong \cong \cong \cong$ area per volume is also half as much, as with surface area being one-fourth as much compared to volume being one-eighth as much. However, electromagnetic charge is the exact opposite. It stays the same with decrease in radius per increase in mass. A proton, for instance, is about 1836 times more massive than the electron with a radius of about 2836 times shorter than the radius of the hydrogen atom itself.

Alexander Friedmann (1888–1925) along with other astronomers determined a Hubble Constant value in more complex manner according to Einstein's gravitational field theory. They came up with a red-shift frequency value of $H = 2,2476 \times 10^{-18}$ per second.

Another approximate numerical value is $G/c = (6.67 \times 10^{-8})/(3 \times 10^{10}) \cong 2.24 \times 10^{-18}$. Although the numerical values of light speed c and Newton's gravitational constant G depend on chosen unit values, they cancel out in terms of centripetal force and are comparable in relation to differences in mass densities. In relation to centripetal force, $Gm/r^2c = v^2/rc$, ratios are of the form $r^2/rt^2 \div r/t = 1/t$.

By substituting G/c for H , the former equation becomes

$$\begin{aligned}\frac{G(2r_n)}{c^2} &\cong \frac{Gm_p m_e}{e^2} \\ e^2 &= \frac{m_p m_e c^2}{2r_n} \\ \frac{H(2r_n)}{c} &\cong \frac{Gm_p m_e}{m_e m_p c^2 / 2r_n} \\ H &= \frac{G}{c}\end{aligned}$$

Such various values of H could possibly relate to how internal components of atoms absorb or reflect particular light frequencies.