PARTICLE DENSITY

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Particle density:

p ρ = q/f (for point particles) and,

p ρ = m/f (for protons and neutrons)

• Particle density for point particles is charge/frequency of the particle.

• Particle density for particles with mass is mass/frequency of the particle.

• The charge (**q**) or mass (**m**) of a particle divided by it's frequency (**f**) tells us about the density and stability of the particle. (Higher density equals higher stability)

P [(↑ρ = ↓f) (↓f = ↑I) (↑I = ↓t)]

↑ρ = ↓f

High density equals low frequency.

↓f = ↑I

Low frequency equals high information storage capacity.

↑I = ↓t

Higher the amount of information slower the motion of time.

↑ρ = ↓t

Higher the density slower the flow of time will be. Or,

t ∝ 1/ρ

Time is inversely proportional to density.

So in a condition where in the universe the frequency of energy is so high or so low that matter cannot exist, there will be no time but there still could be space where no matter exists, inside a black hole for example, there could be space but no matter. Similarly when there is no density to pull more energy towards itself from the outside, there wouldn't be no curvature of the fabric of space and hence no time will exist.

• We can take maximum frequency of gamma rays (2.2×10^{28} hz) and minimum **ULF** (ultra-low frequency) (10^-3 hz) as the upper and lower limit of frequency at which matter (particles) can exist.

It tells us that there is no time without the curvature of space, and there's no curvature of space without density. So matter/energy (with positive charge) attracts more energy/charge towards it causing gravitation and as we already discussed that time is inversely proportional to density, therefore, there is no time without density.

Example: Before there was no matter in the universe, there was no time either, and when the universe spreads out so far apart that it has insufficient charge to form any particles it will have no time.

This concludes that,

• Gravitation and time dilation or the existence of time is due to density.

• Increasing density increases gravitational influence.

• Density inversely affects the motion of time.

So when particles like protons and neutrons come together with electrons and other theoretically massless particles, they attract more energy towards themselves causing gravitation and because time is inversely proportional to density,

Density (**ρ**) determines the speed, motion and dilation of time (**t**) around an object in space

• On the basis of this we can explain how gravitation works on a quantum mechanical level.

• But since most particles have negligible charge/mass, individual particles do not exhibit any calculable gravitational influence and are unobservable.

• Another conclusion we reach is that particles pop in and out of existence in space because they reach energy levels high enough to form a particle but for a very tiny period of time. This confirms that the fabric of space is made up of energy.

Density and frequency

↑ρ = ↓f

Considering high density (**↑ρ**) means low frequency (**↓f**)

We can determine the nature of particles (or an object) in space more accurately. It is already proven by the fact that protons and neutrons have lower frequencies when compared to that of point particles with lower rate of charges, masslessness and higher frequencies

We can also determine the stability of the particle by looking at it's density and frequency. The hypothesis suggests that higher the density and lower the frequency more stability the particle will have, which in turn means that a dense particles will have a longer life span when compared to lighter / massless particles.

•The evidence to this is the life span of protons when compared to electrons. Physicists say that an electron has a decay rate which keeps an electron stable for 6.6×10^{28} years or 66,000 yottayears where as the life of a proton before decaying away is 6×10^{39} years, you do the math.

We can predict that dark matter is made up of high density particles that have very low frequency and are opposite to photons (light) in nature. Because of their high density they hold the universe together as said by astrophysicists.

Frequency and information

↓f = ↑I

Low frequency (**↓f**) is equal to high information storage capacity

A particle that has low frequency is more stable compared to that of a high frequency and low charge particle. A stable particle can store and manage information better as it has a more fixed position in space and is more balanced due to high charge and fewer oscillations (frequency). This tells us that elements and molecules with high density can store more information in them.

• On this basis, we can also predict the frequency of hard to observe celestial objects like black holes and dark matter.

• It also tells us that the stability and chances of entropy of an object in space can be calculated on the basis of density and frequency of the object.

Information and time

↑I = ↓t

Particles, waves and everything in the physics realm is made up of information, considering information as a state of matter we can explain time dilation and the speed of time using information.

Imagine that time is an empty car that you're driving with a speed constant (s).

Now imagine you're driving the car but this time it is filled with heavy weights and you're accelerating with the same force regardless of the increased mass . It is obvious that when weight will be increased but the force applied remains constant the speed of the car will be reduced and it's speed reduction is calculable.

The particle is like the car with constant force applied outwards, the high information is added weights to the car, hence the speed/frequency of the particle will be lowered.

Information, just like matter affects time.

Example: Black holes are made up of virtually infinite amounts of information and hence stop the motion of time around them.

Time is inversely proportional to density

↑ρ = ↓t

Higher the density slower the flow of time will be. Or,

t ∝ 1/ρ

Time is inversely proportional to density.

This tells us that time will move slower around an object in space that has high density, and faster around an object in space that has low density.

Using this we can tell that in voids and super voids in the universe time cannot be experienced, time dilation cannot be experienced because there is no matter with observable density. We can predict the motion of time inside a black hole by studying the density of the inside of a black hole.

Note: These rules apply both on a galactic scale as well as on quantum level, the rate of time dilation is also proportional to the size of the matter we are observing, put simply, massless/point particles and quantum states have unobservable amounts of time dilation.

Matter as a magnet

An object in space with detectable density and positive energy would attract energy from space towards itself. The pulling force (gravitation) it applies on space will be proportional to it's density and the amount of charge it stores.

Imagine that an object in space removes energy from inside in the form of radiation like light et cetera and has a frequency of vibration inversely proportional to it's density, the same object attracts energy from outside itself using it's density and positive charge to balance out the output of energy. This is similar to how a magnet shoots electrons from one side of it and pulls inwards electrons from outside on the other end of it. An evidence to this is that our earth itself is a gigantic magnet which we refer to as **Geodynamo**.

Conclusion

• Particle density:

p ρ = q/f (for point particles) and,

p ρ = m/f (for protons and neutrons)

Particle density equals it's charge/mass divided by it's frequency.

• Higher density particles have low frequency and are more stable.

• Dense matter can hold high amounts of charge and information as it has high stability.

• Information has same effects on time as matter and it's density does.

• Time is inversely proportional to density.

• Gravity, time and time dilation are a result of dense matter attracting energy from the space into itself.

• The gravitational influence of an object on space is proportional to the density and frequency of the object.

• In a space without matter and density there will neither be gravitation nor time which in turn means that space exists regardless of time and matter and gravity, as they all are an effect of energy in a dense state.

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