

The Different Orientations of Spatial Coordinates Gave Birth to the Evolution and Hence, the Physical Time, Free Space, Energy and Matters have their Own Evolution, Hence, Their Own Individual Time

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Abstract: *The different orientations of spatial coordinates can explain absolute free space (if any, although hypothetical), real free space, matter and energy. These three spatial coordinates can also explain the evolution, in other words, the physical time. Basically, the coordinates associated with space are length, width and height. Any position can be located with these three spatial coordinates in the Universe. The photon would behave like an ordinary matter particle, if it would interact with the Higgs field for resistance. The photon would have infinite mass at the speed of light if it would behave like ordinary matter particle, and it would be impossible for photon to attain the speed of light, the Universal speed limit of the Universe because of infinite mass at that speed. Even if photons interact with the Higgs fields, because two successive Higgs fields have opposite rotations to keep their original individual identity, if one Higgs field decelerates photon, the other successive one will accelerate the photon. Because Higgs fields are weak small individual evenly distributed in the Universe, the photons have almost even speed in any path which is 3, 00, 000 kilometers / second or 1, 86, 000 miles / second. But photons have wavy path because one Higgs field bends it in one direction and the successive Higgs field bends it to the opposite direction with respect to the reference frame. The matter particle has a normalized three dimensional existence in space where as energy has normalized two dimensional existence in space. Absolute free space, if any, has no normalized dimensions or it has a normalized zero dimensional existence only. Evolution and hence, time exists only for asymmetric arrangements of three dimensional space coordinates. The evolution for a particular particle is directly proportional to the degree of asymmetry of the spatial coordinates for that particle. Thus, every particle has its own measure of evolution and hence, its own measure of time. Time is never a dimension, it only indicates the rate at which evolution occurs or rate of change of states for a particular particle which indicates the speed of time for that particle. The evolution is rate of change of state of particle only, either force carrying particle or ordinary matter particle. The entropy is in the highest range for solids, less in liquid compared to solid, even less for gases. Entropy is zero for ideal free space. Entropy is almost zero for real free space. Entropy is marginal for energies. Entropy also contributes to the evolution.*

Keywords: Normalized Three or Two Dimensional Existence in Space, Photon and the Speed of Light, Asymmetric Arrangements of Three Dimensional Space, Higgs Field, The Rate of Change of States of Matter-Evolution and entropy.

1. Introduction and the Theories

Theory 1: The evolution of a particular particle is directly proportional to the degree of asymmetry of the spatial coordinates for that particle. Thus, every particle has its own measure of evolution and hence, its own measure of time. Time is never a dimension, it only indicates rate of change of states of matter only.

Theory 2: Photons have wavy path because one Higgs field bends it in one direction and the successive Higgs field bends it to the opposite direction, thus, it is wavy with respect to the frame of reference.

Theory 3: The matter particle has normalized asymmetric three dimensional existences in space, whereas energy has normalized asymmetric two dimensional existences in space, real free space has almost symmetric or almost normalized one dimensional existence in space and hypothetical ideal free space has total symmetric or normalized zero dimensional existence in space.

Theory 4: Density of matter is directly proportional to the squeeze of the three dimensions. For black holes, all the three dimensions so squeezed that they overlap on each other to break the three dimensional existence of matter, thus, physical laws break down there. For Black holes, all

dimensions have zero angles among them. Ideal free space (if any) is hypothetical which consists of zero mass and zero energy in it [1, 2]. All the three dimensions are 120 degree apart in it. Thus it has equal positive part and negative part which is in absolute symmetry or has zero normalized dimensions. Because of this, evolution is zero for ideal free space. Hence, time does not have any meaning. To have evolution, one should possess either positive asymmetry or negative asymmetry and evolution is directly proportional to the degree of asymmetry of spatial dimensions. Thus, ideal free space would be infinitely stable. Time has no meaning for zero evolution.

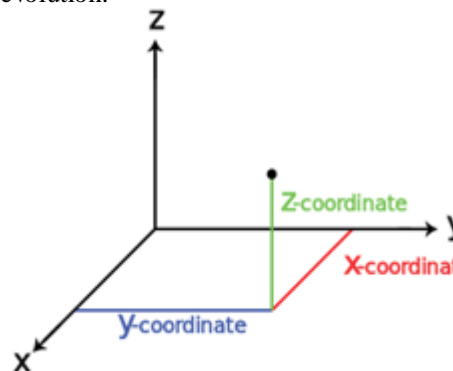


Figure: Spatial coordinates are ideally symmetric for Ideal Free Space

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Real free space consists of zero mass or negligible mass and very little energy (mainly Higgs field) in it [3, 4]. All the three dimensions are close to 120 degree apart with little asymmetry in it. Thus it has almost equal positive part and negative part which is in approximate symmetry or has little normalized one dimension (either net positive one dimension or net negative one dimension). Net positive one dimension is called positive real free space and negative one dimension is called negative real free space (or anti-real free space). Because of this, evolution is close to zero or too slow for real free space. Hence, time is too slow [5, 6]. Thus, real free space is very highly stable [7, 8]. It can be stable for billion years [9, 10].

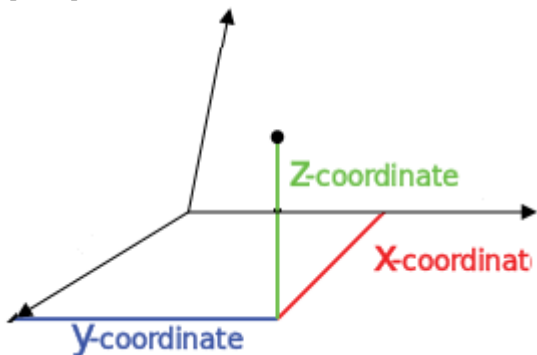


Figure: Spatial coordinates are almost symmetric for real Free Space

Energy consists of almost zero mass or negligible mass and very high energy density (like gravitational field) in it [11, 12]. All the three dimensions are further more asymmetric compared to the real free space. Thus, it has larger imbalance between positive part and negative part. The further asymmetry in three dimensional coordinates creates normalized two-dimensional existence of energy (either net positive or net negative). If two dimensional existences are positive, it is called positive energy or energy only [13, 14]. If two dimensional existences are negative, it is called negative energy (or anti-energy) [15, 16]. Because of the further imbalance in spatial coordinates (with either net positive or net negative), evolution is faster compared to the real free space. Hence, time is little faster for energy. Thus, energy is marginally stable. It can be stable for million years. Different types of energy have different asymmetries.

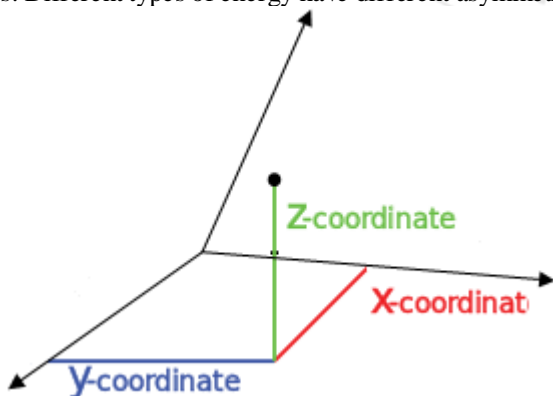


Figure: Spatial coordinates are further asymmetric for energy

Matter consists of high density mass and negligible energy (like electro-magnetic force that binds matter particles) [17, 18]. Electromagnetic force is the reason that matters clump

[19, 20]. All the three dimensions are further more asymmetric compared to energies. Thus, matter has larger imbalance between positive part and negative part. The further asymmetry creates normalized three-dimensional existence of matter (either net positive or net negative). If three dimensional existences are positive, it is called positive mass or mass only. If three dimensional existences are negative, it is called negative mass or anti-mass. Because of the further imbalance (with either net positive or net negative), evolution is faster compared to the energies. Hence, time is faster for matter. Thus, matters are unstable or conditionally stable. It can be stable for thousands of years. Different types of matter have different asymmetries. Liquid has more asymmetry compared to gases; similarly, solid has more asymmetry compared to liquid etc. Even there are different types of asymmetry among different types of gases, liquids and solids. Because we, the human being, are changing in space, evolution has a particular velocity, hence, time exists for us and we get aged.

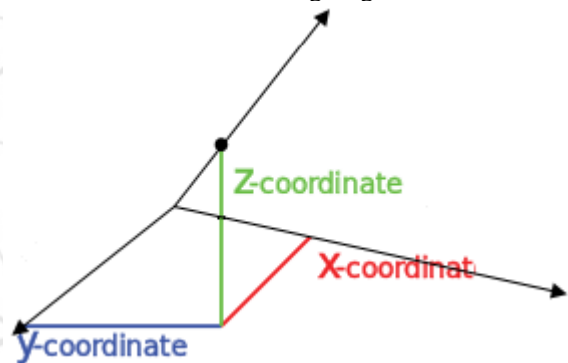


Figure: Example of Spatial coordinates which are further asymmetric for matters (Gases < Liquids < Solids) with lowest asymmetry is gas and highest asymmetry is solid.

2. Why We Collide With Solid Violently And With Gas Gently

Being solid by nature, we have three dimensional existences. We collide with only three dimensional existences [21, 22]. The matters which have asymmetry within the specific range of limit (higher or less) compared to us; we collide violently with these matters (like metal). The matters which have very less asymmetry compared to us, we collide gently (like any liquid). Gases have further less asymmetry compared to liquid, thus, we collide with gases further gently (like air). But we do not collide with energies because these are not normalized three dimensional existences rather these are normalized two dimensional existences. Energy can accelerate us or decelerate us only. Energy also can transcend us. Even real free space which has normalized single dimensional existences cannot even accelerate or decelerate us, we need to apply energy to accelerate or decelerate us in the real free space. If we would get ideal free space, time would have no meaning there. To push or pull matters, normalized two dimensional existences are necessary which energy possess but not real free space.

3. Why Black Holes Are So Black

For black holes where asymmetry is at the highest level, all three dimensions collapse on each other nullifying three

dimensional existences any more. Evolution is highest there because of highest possible asymmetry. But nullifying three dimensional existences breaks the law of physics there. The spatial coordinates are so asymmetric there that mass and energy both are trapped inside, thus isolates itself from the rest of the Universe. The stars like sun can trap all masses but cannot trap all energies. Thus information exchanges by sun with photons [23, 24]. Because of no emission of photon, black holes look really black [25, 26].

4. When Time Will Be Reversed

For matters, if three dimensional existence becomes negative (at least if one dimension goes negative will make three dimensional existence negative), the evolution will be reversed and hence, time will be reversed. For energies, if two dimensional existence become negative (at least if one dimension goes negative will make two dimensional existence negative), the evolution will be reversed and hence, time will be reversed. The real free space's one dimension has to be reversed for reversal of time. Ideal free space does not have any meaning of time.

5. Conclusion

The evolution of particle is directly proportional to the degree of asymmetry of the spatial coordinates of that particle. Hence, every particle has its own measure of evolution and thus, its own measure of time. Photons have wavy path because one Higgs field bends it in one direction and the next successive Higgs field bends it to the opposite direction, thus, it is wavy with respect to the frame of reference. If one Higgs field decelerates photon, the other successive one will accelerate the photon (because every two successive Higgs fields have opposite rotations). Because Higgs field are weak small individual evenly distributed in the Universe, the photons have almost even speed in any path which is 3, 00, 000 kilometers / second or 1, 86, 000 miles / second. The matter particles have normalized asymmetric three dimensional existences in space, whereas energy has normalized asymmetric two dimensional existences in space, real free space has almost symmetric or almost normalized one dimensional existence in space and hypothetical ideal free space has total symmetric or normalized zero dimensional existence in space. Because no space is an ideal space, evolution does exist for real free space, hence, time exists. Entropy contributes to the evolution. The entropy is highest solid and lowest in the real free space. No entropy in the hypothetical ideal free space.

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