

# Without any External Disturbances, The Higgs Fields have a Shape and Direction, So as the Physical Time. Time has a Shape and a Meaning Everywhere in the Universe

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**Abstract:** *There are five known fundamental fields in the Universe - Higgs field, electromagnetic field, gravitational field, strong nuclear field (also referred to as the strong field) and weak nuclear field. Strong nuclear field is an attractive field that binds together subatomic particles named quarks to form nucleons (proton and neutron to form nucleus of an atom) – it exhibits clumping nature of sub-atomic and atomic particles. Weak nuclear field is a fundamental field of nature which underlies some forms of radioactivity, governs the decay of unstable subatomic particles such as mesons, and initiates the nuclear fusion reaction that fuels the Sun. The electromagnetic field binds atoms to form molecules which display clumping nature of atoms and molecules to produce elements and compounds. A stronger electromagnetic force clumps very strong, for example, solid. A little lesser electromagnetic field binds little less rigid, for example, liquid. A further less electromagnetic field binds further less, for example, gas. All fundamental fields are produced by force carrying particles, for example, Higgs Boson or God particle is responsible for Higgs field, graviton is responsible for gravitational field etc. In this paper, I will show that there is no absolute free space in the Universe. I will also show that the physical time has a shape and a meaning everywhere in the Universe and will describe that how the shape of the physical time changes with interaction of fields with masses which implies that there are changes in the meaning of the physical time too under the influence of mass.*

**Keywords:** Fundamental Fields of Nature, Unstable Subatomic Particles, Higgs Field, Graviton and Higgs Boson (God Particle) as Force Carrying Particles, Absolute Free Space

## 1. Introduction and the Theories

**Theory 1:** Without any external disturbances, the Higgs fields have a shape and direction. Little deviation from the ideal circle gives birth of temporal differences among all points of the Higgs Field to have a temporal direction constantly maintained by the Higgs Field. Thus, Higgs Field and time have a shape of half-arc symmetric ellipse and time has a direction similar to the direction of the Higgs Field.

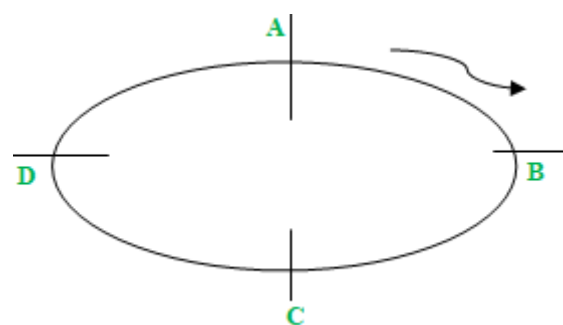
**Theory 2:** The elliptical shape of Higgs field implies that the force is attractive because the Higgs field curved in to be elliptical. Thus, time is also attractive in nature (positive direction – the present direction of the time arrow of the Universe). Attractive nature of time causes the Universe to be more relaxed, almost calm and cool, almost flawless, almost perfect and accurate, almost ordered with the positive passage of time.

**Theory 3:** The Universe is never absolute perfect or accurate or ordered because of the little deviation of shape of time from the ideal circle which introduces temporal flow in the Universe.

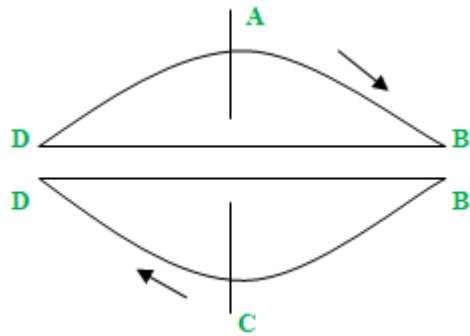
**Theory 4:** The interaction of mass with Higgs Field introduces variations in the temporal flow in a local area of isolation in the Universe.

**Theory 5:** Without any external disturbances, astronomical body travels always a same distance in a straight line, only temporal variations makes the variations in speed and the path looks curved in.

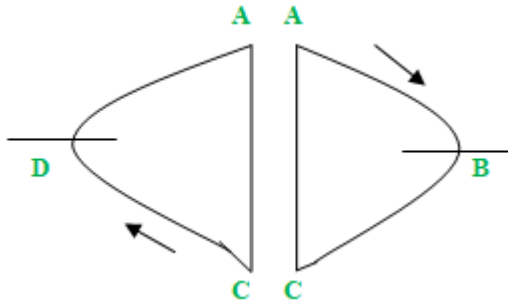
Higgs fields are small elliptical fields with slightest deviation from the ideal circle. Higgs fields have little deviation from the ideal circle to have temporal differences among adjacent points to sustain unidirectional temporal flow. If the Higgs fields would be ideal circle, the physical time would be same at all the points on the circle, there would not be any direction of the physical time, then, the Higgs Boson particles would be at absolute stagnancy with no evolution with time. This hypothetical situation of the Universe can be termed as absolute free space devoid of energy and mass. Hence there would not be any motions of the Higgs Boson particles to create fields, thus ideal circle never exists in the Universe; it is that little deviations are always allowed to run the system incorporating the physical temporal movement. Let us take an example of a Higgs field –



**Figure 1:** An elliptical shaped Higgs Field with time flows slowest in point A and C whereas time flows fastest at points B and D with respect to the inertial frame of reference.



**Figure 2:** An elliptical shaped Higgs Field is a half-wave symmetry around the points B and D with time flows slowest in point A and C whereas time flows fastest in point B and D with respect to the inertial frame of reference.



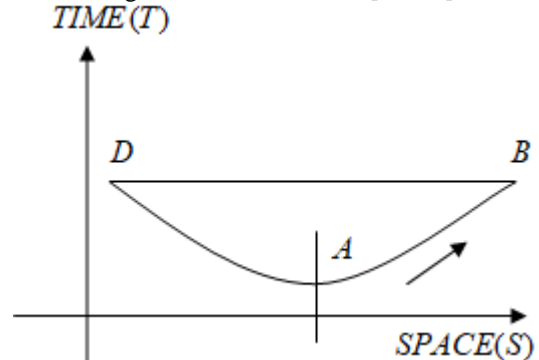
**Figure 3:** An elliptical shaped Higgs Field is a half-wave symmetry around the points A and C with time flows slowest in point A and C whereas time flows fastest in point B and D with respect to the inertial frame of reference.

Every adjacent Higgs fields have opposite rotations to make them identical. Because of the opposite rotations, a repulsive force generated so that Higgs fields can preserve their own individual identity without any external disturbances like mass. Thus, free space has highest degree of stability [1, 2].

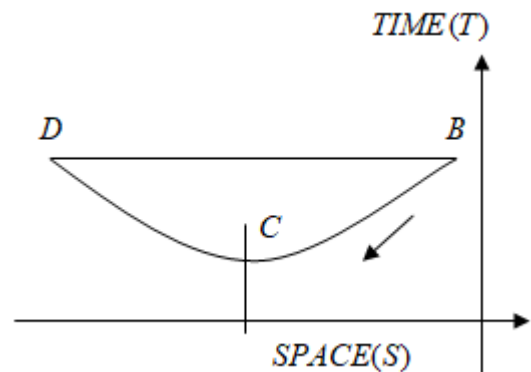
## 2. The Shape of the Physical Time

Without any external disturbances, the Higgs fields are elliptical with little deviation from the ideal circle. This is the reason the physical time is different with respect to inertial reference frame at each point of Higgs field just to run the system with respect to the physical time. Thus, time has a shape similar to the shape of Higgs field. Because the Higgs field is half-arc symmetry around A and C or B and D, the physical time also has half-arc symmetry in the same way. It implies that without any external disturbances, time has the same speed at A and C (lowest) or B and D (highest) with respect to the inertial frame of reference. Time is getting higher speed from A to B and from C to D; time slows down from B to C and from D to A. The temporal direction is similar to Higgs field direction A-B-C-D with little difference as space can go negative in x-direction (x-axis) [3, 4] but time is always positive (y-axis) [5, 6] at the present state of the Universe. Thus, time occupies first and second quadrant in space-time as coordinates of space can be allowed to be negative [7, 8] but time is positive only [9, 10]. Thus, time follows Higgs field shape and direction or Higgs field follow time's shape and direction. Because the Higgs field is curved in [11, 12], it is an attractive force like gravity [13, 14]. It implies that the physical time is also curved in and thus, attractive too. So, the positive direction of time arrow (as it is in the present Universe) is attractive.

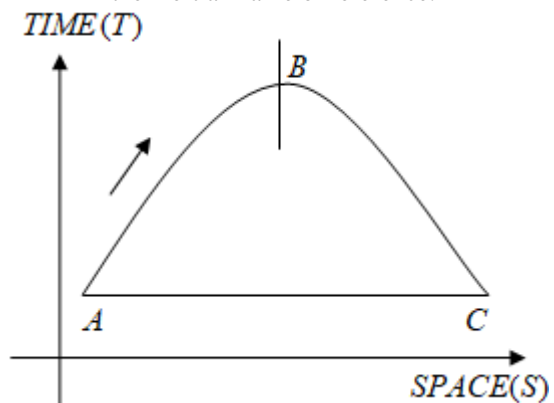
That is the reason why the Universe is calm, cold, almost flawless, almost even in all directions, almost perfect, accurate and ordered although the Universe is made of very destructive forces [15, 16] and sub-atomic/atomic particles [17, 18]. But the Universe is never all absolute perfect or accurate or ordered [19, 20]. If it would be absolute perfect or accurate or ordered, everything would have been at absolute rest as time would have been at absolute rest, thus, time would not have any movement, no evolution would have been there, time would not have any meaning. Slightest of impurity in the perfect circle made the Universe and time the way these are now. Thus, we are always at the knife edge accuracy [21, 22], not in absolute accuracy [23, 24]. Slightest of change in the knife edge accuracy can make a whole new ball game for the Universe [25, 26].



**Figure 4:** An elliptical shaped Time is half-arc symmetry around the points B and D with time flows fastest in point B and D whereas time flows slowest in point A with respect to the inertial frame of reference.

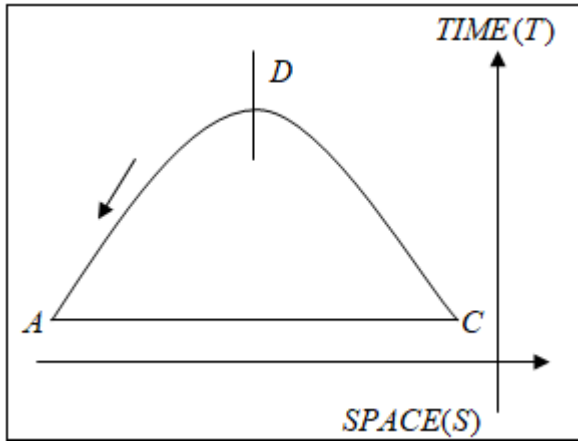


**Figure 5:** An elliptical shaped Time is half-arc symmetry around the points B and D with time flows fastest in point B and D whereas time flows slowest in point C with respect to the inertial frame of reference.



**Figure 6:** An elliptical shaped Time is half-arc symmetry around the points A and C with time flows slowest in point

A and C whereas time flows fastest in point B with respect to the inertial frame of reference.



**Figure 6:** An elliptical shaped Time is half-arc symmetry around the points A and C with time flow slowest in point A and C whereas time flows fastest in point D with respect to the inertial frame of reference.

### 3. The Impact of Mass on the Higgs Field

Under the influence of mass, the small individual Higgs fields become unidirectional and hence, additive in nature. Although every adjacent small Higgs fields are of elliptical shape and have opposite rotation with respect to each other, but under the influence of mass, Higgs fields have unidirectional orientation. Because of the additive nature of the Higgs fields under the influence of mass, slightest of deviation from the perfect circle becomes additive in nature also to show a huge gravitational field with noticeable elliptical shape, which imposes the mass to be elliptical to follow the shape of the gravity. That is why almost all astronomical objects have elliptical shape as a response of elliptical gravitational field. The astronomical objects have elliptical orbit too as a response of the elliptical gravity. Because time has definite and finite shape and direction, it has a meaning everywhere around the Universe. Even in the black hole, time has a meaning although physical laws break down there because a lot of terms are infinity. Infinity is also something finite but unrecognizable by the psychology.

At point B and D,

$$\downarrow \text{Speed} = \frac{\text{Distance}}{\text{Time} \uparrow}$$

At point A and C,

$$\uparrow \text{Speed} = \frac{\text{Distance}}{\text{Time} \downarrow}$$

Without any external disturbances, astronomical body travels always a same distance in a straight line, only temporal variations makes the variations in speed and the path looks curvy.

### 4. Conclusion

Without any external disturbances, the Higgs fields have elliptical shape and direction with little deviation from the ideal circle. Little deviation from the ideal circle gives birth of temporal differences among all points of the Higgs Field

to have a temporal direction constantly maintained by the Higgs Field. Thus, Higgs Field and time have a shape of half-arc symmetric ellipse and time has a direction similar to the direction of the Higgs Field.

The elliptical shape of Higgs field implies that the force is attractive because the Higgs field curved in to be elliptical. Thus, time is also attractive in nature (positive direction – the present direction of the time arrow of the Universe). Attractive nature of time causes the Universe to be more relaxed, almost calm and cool, almost flawless, almost perfect and accurate, almost ordered with the positive passage of time. The Universe is never absolute perfect or accurate or ordered because of the little deviation of shape of time from the ideal circle which introduces temporal flow in the Universe. If time would have been perfect circle, everything in the Universe would have been at the absolute rest with no motion and no evolution. The interaction of mass with Higgs Field introduces gravitational force that makes noticeable variations in the temporal flow in a local area of isolation around the mass in the Universe.

### 5. Acknowledgment

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