

Information is Displayed by the Interaction Between Space and Time at Present: The Interaction Makes 2D Space Hologram Into 3D Structure Incorporated With 1D Time- Why Hawking's Radiation Exists

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Abstract: All atoms look the same unless they are arranged in a particular order that displays information. Information is the typical arrangement of atoms that gives typical structure and each structure has a bunch of information. All temporal events are the same unless they are divided into good-bad, worse-better, worst-best psychologically that displays information about the event. Only at present, space interacts with time to display the information. In that sense, present is the display board of information. The interaction between space and time makes 2D spatial hologram (without any time) into 3D space incorporated with 1D time. The extra dimension of space and single dimensional time are both absolutely necessary to sustain life. Evolution came into existence because of 3D space with 1D time. There are primarily two invaluable reasons why Hawking's radiation must exist. This paper will analyze with proper reasoning about the space-time interaction and Hawking's radiation.

Keywords: 2D Spatial Hologram, 3D Space and 1D Time, Interaction, Hawking's Radiation, Evolution

1. Introduction and the Theories

Theory 1: Information is pre-loaded in future, stored for the past but displayed in the present only.

Theory 2: Information is never created nor destroyed. Information is a conserved force only. It can be loaded, stored and displayed only.

Theory 3: Anti-particle itself directly and indirectly produces Hawking's radiation.

Theory 4: The interaction between space and time makes 2D spatial hologram into 3D space with 1D time. Both the dimension is absolutely necessary for evolution.

All atoms look exactly the same, it is the arrangement of atoms that displays information at present time [1, 2]. Although information is loaded ahead of time in future so that it can be displayed at present and can be stored for the past [3, 4]. Information is never created nor destroyed because information is a conserved force. It can only be loaded, displayed and stored. Without any temporal dimension, everything is just like 2D spatial hologram revolving at the speed of light. It is the Higgs field that put limit on ordinary matter to revolve much less than the speed of light to create extra dimension of space to make it 3D space structure with single temporal dimension to sustain evolution of everything which are absolutely necessary to sustain life.

2. On the 2D Hologram, 3D Space and 1D Time

Everything can be explained by space-time, provided time exists. Matter and energy are the deformations of space and time, thus, matter and energy can be explained by space and

time only. If something enters into the black holes, it becomes 2D hologram and permanently stored into the surface of the black holes unless some disturbances occur. Nothing can escape from the black holes because the surface of the black hole revolves at its own axis at the speed of light. Thus, time does not have any meaning inside the black hole. Time is zero in magnitude and direction inside the black hole. Thus, everything looks like 2D hologram for an observer at the speed of light with no temporal dimension exists. The photon is also a 2D hologram at the speed of light unless it enters into the Earth. For an observer on Earth, everything looks like 3D because, time exists there on Earth. Thus, photon looks like 3D particle for an observer on Earth. To be in 3D shape, one has to avoid the speed of light and the observer has to observe where time is non-zero. The photon loses its speed of light when enters into the Earth, makes it 3D for an observer on Earth. Thus, for an observer from Earth, everything looks like 3D that has speed other than the speed of light. The Higgs field interaction with ordinary matter makes it to have speed much less than the speed of light which actually creates time for that ordinary matter. Thus, time has a speed and direction proportional to the difference in speed of the object compared to the speed of light. The extra dimension of 2D hologram makes it 3D spatial structure with 1D time, both is absolutely necessary to sustain evolution and life.

3. Temporal Perception from Psychological Point of View and from Time's View

Future cone is the thinking process about time in future by psychology. At point O, the definite present exists. Definite present in the sense, whatever is happening at present, only one thing happens at a time at present. Below point O, everything is past and permanently stored, thus, it is definite

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past. But psychology believes that future can be probabilistic [5, 6]. The farther the future from point O, the more probability comes into play and the surface of future cone is larger. The nearer the future from point O, the less probability of happening many things, thus the surface area become less of future cone. If anything happens exactly expected, the event lies on the real time axis. If anything happens totally unexpected, it lies on the imaginary time axis. The closer to the real time axis, the more expected to occur and the closer to the imaginary time axis, the more unexpected to occur. If event is below the real time axis up to the positive arc, the good things to happen and above the real time axis up to the negative arc, the bad things to happen. The degree of goodness and badness is directly proportional to the distance from real time axis up to the maximum limit up to either positive arc or negative arc.

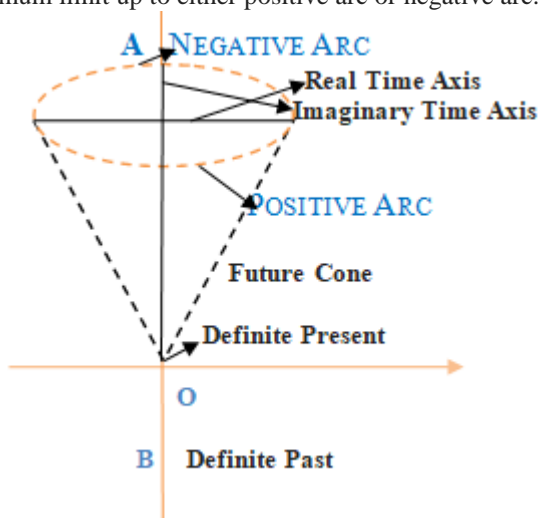


Figure: How Psychology Sees Time

But the Universe is symmetrical [7-9], thus symmetrical things exist in pair, future and past are pairs of symmetry of time. Thus, if past is definite, future is also definite. Also information is a conserved force, if information is limited to past to make past definite, the information is also limited for future too to make it definite too. Information can neither be created nor destroyed. It is preloaded by future to display at the definite present and to store for the definite past. Definite past and definite present makes it definite future too. So, probability lies only in the psychology, in thinking process. Time never sees anything probabilistic. Everything is certain does not matter, present, past or future. Also time has a linear relationship with velocity.

$$T \propto (C - v)$$

$$\tilde{T} = K(C - v)$$

Where, v is the object velocity and K is a universal constant. Generally, $v \ll C$ so that time is non-zero. Generally, v is either constant or linear for astronomical object, thus, time of that object is also linear. Thus, time sees time as a straight line from point A to O as definite future and at O, it is definite present and from point O to B, it is definite past and so on.

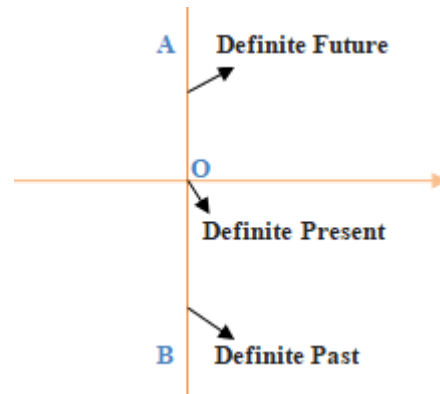


Figure: How Time Sees Time

4. About Hawking's Radiation

In the vicinity of a black hole, if particle-anti-particle pair forms, either one or both can fall into the black hole. Say both particle and anti-particle fall into the black hole with some velocity. After falling into the black hole which is revolving at the speed of light at its own axis, both the velocity added to the pair to be on the right half of the S -plane. Thus, both can escape from the black hole in terms of radiation. Generally, black holes are made up of particles, thus, generally anti-particles are attracted by black holes to fall into to become a $2D$ hologram or interact with other particle to become Hawking's radiation to come out of the black hole. If anti-particle falls into the black holes, it looks like for an observer (made of particle) that something come out of black hole in terms of radiation, it is the first cause of Hawking's radiation. Second cause is, anti-particle collide with particle inside the black hole with some velocity to be added to the velocity of light inside the black hole to be right half of the S -plane to come out of the black hole in terms of radiation. This is the second cause of Hawking's radiation. Because anti-particle has speed on the right half of the S -plane, it is highly unstable.

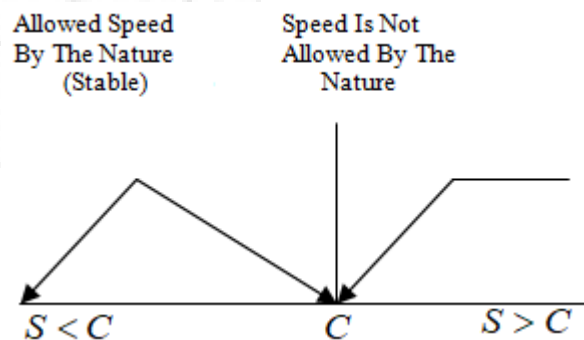


Figure: S-plane (speed plane)

5. Conclusion

Information is actually pre-loaded in definite future, stored for the definite past but displayed at definite present only. Information is neither created nor destroyed. Information is a conserved force only. It can be loaded, stored and displayed only. Anti-particle itself directly and indirectly produces Hawking's radiation. The interaction between space and time makes usually $2D$ spatial hologram into $3D$ space structure with $1D$ time. Both the dimensions are absolutely

necessary for evolution. That is the main cause to sustain life.

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