Time-travel

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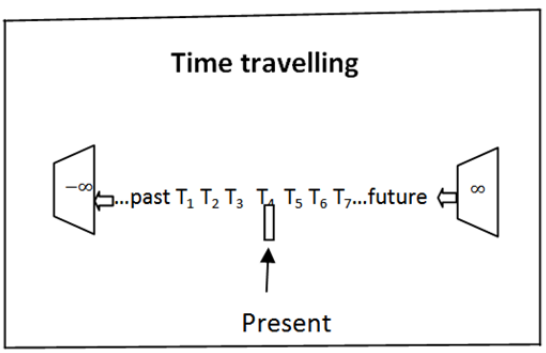
Abstract—*Time is an observed phenomenon, by means of which human beings sense and record changes in the environment and in the universe. It is basically used to define the velocity of any moving or travelling object. The great scientist Albert Einstein was the first person who has defined time in his famous books "General theory of relativity" and "special theory of relativity". According to him space is 3 dimensional and time is 4th- dimensional, however in this paper, we are defining time in different form.*

It is proposed in this paper that time has different points of positioning from -∞ to∞ (T_1 T_2 T_3 T_4 T_5 ……) which is flowing at constant velocity in one direction and behaving like a flowing river.



1. INTRODUCTION -:

For thousands of years philosophers and scientists have struggled to understand the phenomenon of time. We have known for the last one or 200 hundred years about time. I am presenting here a clear solution to the enigma of time which brings to light the reason behind many predictions of Special and General Relativity. I am presenting here time in different phenomena. Time is different point of positioning and this point of positioning is always changing and behaving like a flowing river .It is also proposed that there is no existence of present and how the time is relative .

2. TIME-:

Time is the indefinite continued progress of existence and event that occur in apparently irreversible succession from the past though the present to the future we are assuming time is the set of infinite irreversible point and this point is traveling at constant velocity like a flowing river

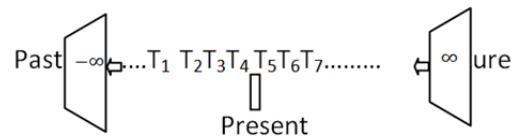
$T = \{-\infty \;\; T_1 \;\; T_2T_3T_4\,T_5T_6T_7 \;\; \ldots\ldots\ldots\infty \}$

Here T is the set of different infinite point . Where T_1 $T_2T_3T_4$ $T_5T_6T_7$ are the members of the set T

Just consider a point like T_4which is our present where we live so we see that T_3 was our past and T_5 will our future .

Now assume $T_n - T_{n-1} = T_{n-1} - T_{n-2}$

If T_2 is present then $T_1$is past and T_3 is future it means Time is continuously changing with a definite rate .

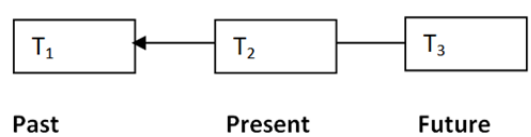


How time is travelling-:

Hence it is a true fact that time is travel without time traveling nothing possible .

we consider three point T_1 T_2T_3

Here **present** T_2 is a point where futureT_3 is changing in past T_1



Hence it is a true fact that time is travel without time traveling nothing possible .

Why not time travel is possible and Conditions for travel in past .

Here we considering v is velocity of running time. T is the present time ΔT is the point where want go. v' is the velocity to you travelling in past

So time taking during the travelling. $\Delta \mathbf{T} = \frac{Tn - Tn-1}{V'}$

=

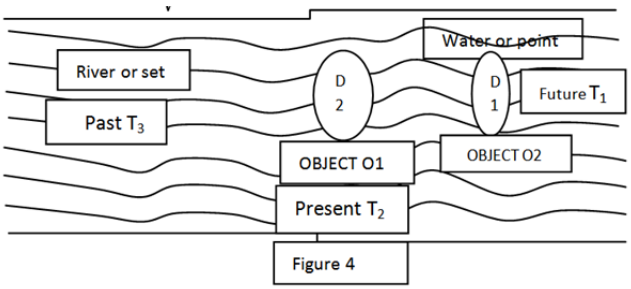


Figure 4

velocity of objec by which can travel from present to past

V is the current velocity of time .

ΔT= time taken by object in reaching at time T_{n-1}

To travel from T_n to T_{n-1} in shorter time then the rate of change of time the V'>V

Time is travelling like a flowing river

Consider a flowing river which is a set of point (shown in fig 4) . Also consider three point T_1, T_2 ,& T_3 The surface of the river.

An object is placed at the point T_2. The molecule of water passing through T_1 is the future for the object O .

If the same molecule reacts the point T_2, it represent present of the object O. shown in fig. 4 In same way T_3 represent past of the object.

Now we consider two spherical object O_1 and O_2such that O_1 larger then in size than O_2 (which diameter is D_2).

It can be observed clearly that a molecule of water moves with constant velocity takes more time in passing through object O_1then the object O_2 so here

= D α T_P

T_P= present time or point of present time

3. TIME IS RELATIVE

Time is relative because it value depend on average life of object. one can understand with the help of example. The average life of an ant is i.5 month (approx.). The average life of an elephant is 60 year (approx.).

It can be calculated that the time clock is slower for ant as compared to elephant.

1 If my object is a ant so life of a ant is very small they live only 1.5 month (average life)so time is very fast with respect to ant .

4. MATHEMATICALLY:

A common equation used to determine gravitational time dilation is derived from the Schwarzschild metric, which describes space time in the vicinity of a non-rotating massive

spherically symmetric object. The equation is:

$$t_0 = \frac{tf\sqrt{1-2GM/rc2}}{}$$

where

_ *t*0 is the proper time between events A and B for a slow-ticking observer within the gravitational field, *tf* is the coordinate time between events A and B for a fast-ticking observer at an arbitrarily large distance from the massive object (this assumes the fast ticking observer is using Schwarzschild coordinates, a coordinate system where a clock at infinite distance from the massive sphere would tick at one second per second of coordinate time, while closer clocks would tick at less than that rate), _ *G* is the gravitational constant,_ *M* is the mass of the object creating the gravitational

field,_ *r* is the radial coordinate of the observer (which is analogous to the classical distance from the center of the object, but is actually a Schwarzschild coordinate),_ *c* is the speed of light, and

$$t_0 = \frac{tf\sqrt{1-2GM/rc2}}{}$$

in this case rαD

$t_0$is inversely proportional to the square root of diameter D

$$\boxed{t_0 = (1/\sqrt{D^2})}$$

Time is relative

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(5) Wikipedia