# Projection of time dimensions

#### Abstract

As we all know in space dimension we have

distance, speed and time. According to einstein general theory of relativity space and time are related to each other. But einstein theory also say that time and space are depending on each other.

instead of assuming time as quantity we take it as dimension . according to Hilbert space we have n dimensional space means it have x1,x2,x3....xn co ordinate. similarly we can have time dimension which have co ordinate t1, t2, t3. tn.

a well proved fact projection of 3 dimension can be taken in two dinensions(space.). similarly we are living in projection time.

our time is projection 6th dimension time co ordinate.

so time and space dimension can be independent of each other under following conditions.

\*\*\* if velocity of space is very high.

we live in time dimension, as time is constant

\*\*\* if velocity of time is high we live in space dimension which is what we are living.

so from above time dimension is inversely proportional to time dimensions.

T,=1/S

or

D=exp(T)

## INTRODUCTION

As we all know that today's greatest challenge is to bind up the classical ,quantum and other theory in one single theory. So scientist postulated new theory **STRING THEORY**. In this theory it is assumed that a string can travel in more than 3 dimension. So in order study more than 3 dimension at macroscopic level we can study 4<sup>th</sup> dimension only by obtaining it's projection in 3 dimensions. All the properties of 4<sup>th</sup> dimension can be studied. If it is possible may be we can able to device a machine which can move more than speed of light. Though according to einstein postulate speed of light is constant in frame of reference. But if we move 4<sup>th</sup> dimension than speed of light will be 3 times more than what is in 3 dimension.

# **PROCEDURE**

Let us assume that

Vt = velocity of time

Vs =velocity of space

Ds =distance of space

Dt =distance travelled by time

## Case 1

#### Vt<<<<Vs

Distance =Dt

If a body travel with speed of light then every thing around it got freezes

.No body will seem to move around. So we are travelling in time.

Body is in time dimension.

Time length can be retraced back.

### Case 2

Vt>>>Vs

Distance = Ds

Body is in space dimension

We can trace space path.

# **RESULT**

## From the above two cases

Vt=Ds/Vs

If velocity of time is high

Then velocity of space is less

So we are in space universe.

Vs =Dt/Vt ... 2

If velocity of space is high

Velocity of time is less

So time universe

## Conclusion

- 1.time and space can be independent at some situation as discussed
- 2.projection of 3d can be obtaining in 2d.
- 3. similarly time dimension can have many co ordinary as time dimension
- 4.projection of time dimension can be obtained

