

All universe is composed of particles of same mass.



Physics

KEYWORDS: A relation between velocities & distance of any astroparticles.

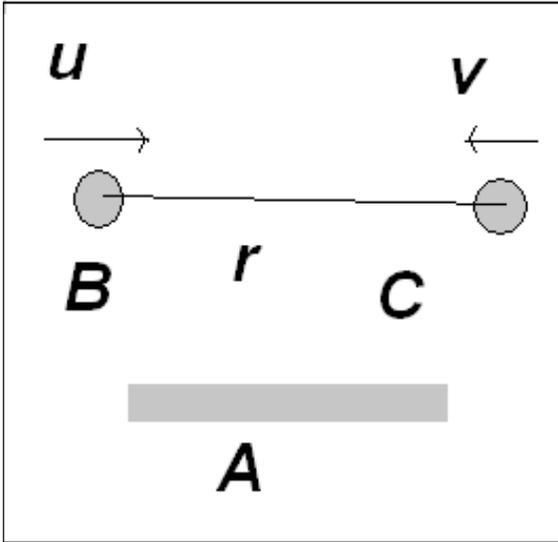
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ABSTRACT

If two astroparticles(B & C) (separated at a distance 'r' respect to thereference frame 'A') move to their due to gravitational field and a man sited in 'A' reference frame measures their velocities as 'u' & 'v'.So in these two equ tions we get two types relations among u,v& r. That is not possible So $m_0 = m_0'$. Example: Hardons are made of same mass particle up & down quarks/antiquarks

Methodology:(Part 1)



If two astroparticles(B & C) (separated at a distance 'r' respect to the reference frame 'A') move to their due to gravitational field and a man sited in 'A' reference frame measures their velocities as 'u' & 'v'. Now I will consider that 'C' is moving at a speed 'X' respect to 'B'. Then at a time t respect to A, a person sited at B will observe that C closer to a distance $x(t = \frac{r}{\sqrt{1-\frac{v^2}{c^2}}}$ respect to B)

Next a person sited at A will observe that the distance between B & C would be decreased by (u+v)t. Then we have to consider two reference frame (A & C). Here A will observe that this distance moved at a velocity v (not u+v then it may be greater than C) and the distance is attached to C. Now a person sited at C will observe that A is moving but the distance is fixed. So in this time if we consider the distance respect to C that will be

$$\{(u+v)t\} / \sqrt{1-\frac{v^2}{c^2}} \text{ [Because according to C,}$$

A is moving at a speed v]

At last if we transform this length respect to

$$B, \text{ it will be } \frac{(u+v)t}{\sqrt{1-\frac{v^2}{c^2}}} \sqrt{1-\frac{x^2}{c^2}}.$$

At last we can write

$$xt' = \frac{(u+v)t}{\sqrt{1-\frac{v^2}{c^2}}} \sqrt{1-\frac{x^2}{c^2}}$$

$$\text{or } x = \frac{(u+v)}{\sqrt{(1-\frac{u^2}{c^2})(1-\frac{v^2}{c^2})+\frac{(u+v)^2}{c^2}}}$$

Part 2:At first I will consider that rest masses of B & C are & According to the Ayan Banua's theory, force acting on C according to B will be $-\frac{m'_0}{(1-\frac{x^2}{c^2})^{\frac{3}{2}}} \frac{d}{dt} \frac{dr}{dt}$

[As r is decreasing]

Then the gravitational force on C according to B will be $F \propto \frac{1}{r^2}$ [If F does not depend upon 'r', then it will happen that x does not depend on 'r'. That is impossible.][As B is stationary respect to B]

$F \propto f(r)$ [Suppose]

Then

$$-\frac{m'_0}{(1-\frac{x^2}{c^2})^{\frac{3}{2}}} \frac{d}{dt} \frac{dr}{dt} = \frac{km'_0 m_0}{\sqrt{1-\frac{x^2}{c^2}}} f(r) \frac{dr}{dt}$$

$$[k \text{ is a constant}] [\frac{d}{dt} \frac{dr}{dt} = a']$$

$$\text{Or } \frac{dr}{dt} \frac{d(\frac{dr}{dt})}{(1-\frac{x^2}{c^2})} = f(r) dr \text{ km}_0$$

Integrating both side, we can get

$$C^{\wedge} 2 \ln \left[\frac{1}{(1-\frac{x^2}{c^2})} \right] = b f'(r) \text{ km}_0 + k$$

[k=I.C. & b=cont]

At a distance $r = \infty$, we get $x = 0$ and

$$k = -b f'(\infty) \text{ km}_0$$

So the final equation is

$$C^{\wedge} 2 \ln \left[\frac{1}{(1-\frac{x^2}{c^2})} \right] = b f'(r) \text{ km}_0 - b f'(\infty) \text{ km}_0$$

$$\text{Where } x = \frac{(u+v)}{\sqrt{(1-\frac{u^2}{c^2})(1-\frac{v^2}{c^2})+\frac{(u+v)^2}{c^2}}}$$

Now the gravitational force on B according

To C will be $F' \propto$

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$F' \propto f(r)$ [As gravitational force does not depend upon the medium, and we are considering one type of problem so $f(r)$ will be same]

Then we will find same type of equation

$$C^{\wedge} 2 \ln \left[\frac{1}{(1-\frac{x^2}{c^2})} \right] = b f'(r) k' m_0 - b f'(\infty) k' m_0$$

$$\text{Now } k = \frac{a'}{m_0(1-\frac{x^2}{c^2}) f(r)} \text{ [k is not I.C.]}$$

And $k = \frac{a}{m \cdot (1 - \frac{v^2}{c^2}) f(r)}$

Then $a = f(r) f(x) a^0$ [Parabolic

Function]

And $a = f(r) f(x) a^0$

At $r = \infty$, we get $\frac{a^0}{m_0} = \frac{a^0}{m_0}$

So $k = k^0$

As we are considering same type of problem, so are same. So in these two equations we get two types relations among u, v & r . That is not possible. So in conclusion I will say that if Theory of Relativity & Gravitation are true then whole universe is made of particles with same mass.

Example: 1. Hadrons are made of same mass particle up & down quarks/antiquarks. 2. Higher mass quarks immediately break into small quarks after generation. (As there is no gravitational force between different mass particles). 3. Particles & Antiparticles have the same mass.

REFERENCE

Relativity-The Special and General Theory | by Albert Einstein | Einstein's Theory of Relativity | by Max Born |