Title:

Gravity doesn’t exist at infinite distances: Mathematical equation

Abstract:

The article aims to provide a mathematical equation for my new discovery .

Link to my new discovery : http://vixra.org/abs/1904.0013

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Article:

See first my new theory: Gravity doesn’t exist at infinite distances

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The idea of infinity is always wrong except for space and time since these concepts are fundamental .They are Newtonian thoughts, things like Infinite speed of objects , infinite speed of gravity and gravity is everywhere and available at infinity. They are all Newton's thoughts I presented a new solution based on GR and violating Newton thoughts of infinite extend of gravity , Gravity being everywhere until infinity is a Newtonian thought left unchanged by GR what I did is completing GR without violating any part of it and without violating modern physics.

Infinity is unreachable : in time in distance in spreading in mass by mathematics it is clear So how there should be gravity available at infinity if it is unreachable?

Mathematical equation:

My equation is the same as Newton's gravitional equation multiplied by this quantity:

(1-vt/cT) in which:

vt : is the same as r represented by speed v of object and time t It is represented so because we have only two options for two masses whether masses are in each others' range then an object can't exceed range since it can't move with v faster than light or they are out of range then the equation won't work anyway.

c : is the speed of light.

T : is the time measured since the mass came from nowhere

cT: is the changeable range.

According to the equation both range cT goes to infinity and distance vt goes to infinity.

According to the equation as range increases or as time time T increases gravity in general increases a little bit according to the equation because there would be more space curved behind the mass.

The quantity vt/cT is is always less than or equal to 1 t is measured after or exactly at mass existence so t will never be greater than T if so and v is always less than or equal to c then vt/cT is always less than or equal to 1.

In such case " vt is greater than cT " masses will be out of range and gravity" mathematically " is supposed to equal negative but the equation won't apply for masses out of range and negative gravity doesn't exist.

Notice I didn't consider the other mass range since Inside range means both masses are inside each other's range or at least one is inside the other's range

The force between masses is mutual one mass attract another mass with a force the other mass attracts with the same force. each mass attracts with its own force using its own range and this force is mutual .Force is proportional with mass M and mass m.

Mathematically and according to my equation exceeding the range edge or zero gravity means negative. That also validate my equation.

v is a variable quantity just like r it is the calculations for gravity for a moving object at speed v. if v is zero then the quantity vt/cT will equal zero in such case gravity for an object at stationary is the largest amount ever while v increases gravity decreases a little bit .

t=0 only when v=0 , we start to measure t at object beginning of motion . Anyway gravity decreases with time t as well as it decreases with speed v.

I'm using speed instead of velocity the direction is not important whether towards the center or outwards the center of mass, acceleration is just changing in speed v with respect to time t if it is towards or outwards the center it would take effect "gravity change" if it is not it won't take effect.for instance an object at motion in a perfect circle around the earth its gravity won't change unless it changes distance r with some speed v whether inward or outward this object is supposed to have the largest gravity value" being at stationary" although in fact it is accelerating inwards

The effective direction is outwards or inwards center so elliptical motion of planets will change its gravity but that will not stop planets being in their orbitals

increment in v decreases gravity since an object will ruin connection between space and matter when at motion