

Title:

Gravity doesn't exist at infinite distances

Abstract:

The article aims to prove the non-existence of gravity at infinite distances and prove gravity has a limited range this range is extendable by the speed of light c .

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Article:

If gravitational force at infinity equals zero then we have a real number "zero" assigned to unreachable quantity "infinity" making it reachable. The gravitational field is real and it has an end equals zero there should be an end for infinite space. I believe that infinity is unreachable and mass existed at a specific moment and spread its gravity and still spreading its gravity towards infinity.

Even though in reality you can't reach infinity it could be a thought experiment that is if gravity effects decreases continuously we have a limit for that decrement which is zero effect then gravity effect in fact has a limit but space doesn't so what happens at that limit when gravity force equals zero space would still be increasing.

It's only if gravity still spreading into space and didn't reach infinity and still spreading.

For each mass it has a real number range of gravity, beyond that its gravitational force doesn't exist and it is still spreading out and making curvature to space
Mass curvature for space is a process it starts at the existence of mass continues with the speed of light c and will never reach an end.

Also mathematically we can't assign an infinite value to the gravity equation resulting in zero value for infinity.

The universe started at a moment in the past and all masses existed at a moment. Infinity doesn't have a limit it is continuous if mass bend continuous space, an event "mass existence" can't start and have its effect at infinite distance "no limits" space can't be bent infinitely because infinity is unreachable mass can't bend a point in space at infinite distance since this point can't be reached.

A mathematical explanation:

In the gravitational equation the force is inversely proportional to the distance, as the distance gets bigger and bigger the force approaches zero. We can notice that force approaches zero "a real number" but space approaches infinity "unreal number"

In the number line when moving to the right from for instance the number 3 to the number 4 there is a possibility of infinite numbers greater than 3 and less than 4 instead of reaching 4 a moving object could move infinitely to reach 4 and will never reach it. it will move for instance from 3.4 to 3.49 to 3.499 to infinity regardless its speed it won't reach the 4 an object will jump from a number to a nearby number gravity jumps to zero while space continues to infinity.

Then gravity approaches zero without reaching it is not logical .gravity jumps from value to value if it is not, a value of for instance 3g won't reach 2g since it would move to 2.9999999→infinity without decreasing to 2g if gravity jumps from number to number it would jump to zero while space continues to infinity

An object can't exist at infinite distance but there still exists zero effect of gravity for that object although there is not a place for it to obtain zero effect. So there is non-existence of gravity at a point in space" logically gravity decreases and that has an end which is the smallest number for gravity i.e the zero" but if space is infinite where is this point of non-existence of gravity ?

Think of a number line of 1 meter length it is divided into units it starts from 4 at the beginning and zero at the end. Let's imagine gravity value close to mass being 4 and at some distance being zero or the end of gravity range. Now think of another number line a bigger line of 4 meters length also has an end point of zero unit. The existing fact means we have a number line of length infinity and two ends one is a specific number and the other is the zero this is impossible a number line equals infinite length doesn't have end points gravity has end points one of them equals zero.