Journal of Theoretics
Volume 6-3, June/July 2004

Proving that Space Density Theory is Different and More Complete than Spacetime

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Abstract: For most situations Space Density theory will have the same observable results as spacetime theory, but in this paper an example will be presented that will show an observable difference. Thus the more correct theory can be proved through a similar experiment.
Keywords: space density, laws of space and observation, spacetime, special relativity, general relativity.

Relativity theory holds that time will slow down in a gravitational field while the Laws of Space and Observation [1,2] states that time is constant but that distance will be decreased to a distant observer.[1] For the most part these theories are indistinguishable though their implications are great since spacetime does not reveal any underlying etiology while Space Density theory does [3]. Space Density theory proposes that Space physically exists and that gravity is the result of Space being displaced by mass.

The key points to the Laws of Space and Observation (LSO) are [1,2]:

1. All objects are at rest relative to themselves.
2. The only "real" or "true" measurements of an object are those which are done in the same existence state as the object itself.
3. All energy has mass (the ability to displace Space).
4. Time and "true mass" are the only constants between the observer and the object being observed. “True mass” is the mass that an object in the same existence state as the mass would observe.
5. Distance is inversely proportionally to relative velocity and Relative Space Density (RSD).

To summarize, the alteration in the course of a photon as it passes by a gravitational body is called the Angle of Photon Deviation (APD) and is converted into Relative Space Warp (RSW) by correcting the observers angle and dividing it by 360° or 2π. The Relative Space Density of space (RSD) is then determined in relative terms by 1-RSW or by dividing an object’s observed length by its true length. The absolute

[1] In references [1,2] the RSD should be equal to the observed distance (d_{obs}) divided by the objective distance (d_{obj}). Also d_{obs}= RSD_{mde} x RSD_{vel} x d_{obj} where mde stands for “mass deviation effect”. Also Figure 10 of reference [1] orbit B has an ASW=0.1 and an orbital radius of 9.38km while point A has an ASW=0.01 with an orbital radius of 93.8km.

reference for this theory is a black hole horizon which is given a space density equal to 0 since the angle of photon deviation is 360°.[1,2]

This problem was proposed as a way to differentiate Space Density theory from that of Minkowski spacetime [4]. Using Figure 1, a pulse of light is sent out simultaneously down two different pathways from point A would reach point B at the same time according to spacetime but according to the LSO pathway 1 would arrive after pathway 2. This is assuming that the two equal gravitational bodies are equidistant and centered on a line that is perpendicular to pathway 1. Also the top two mirrors are equidistant from point A and the bottom two mirrors are equidistant from point B.

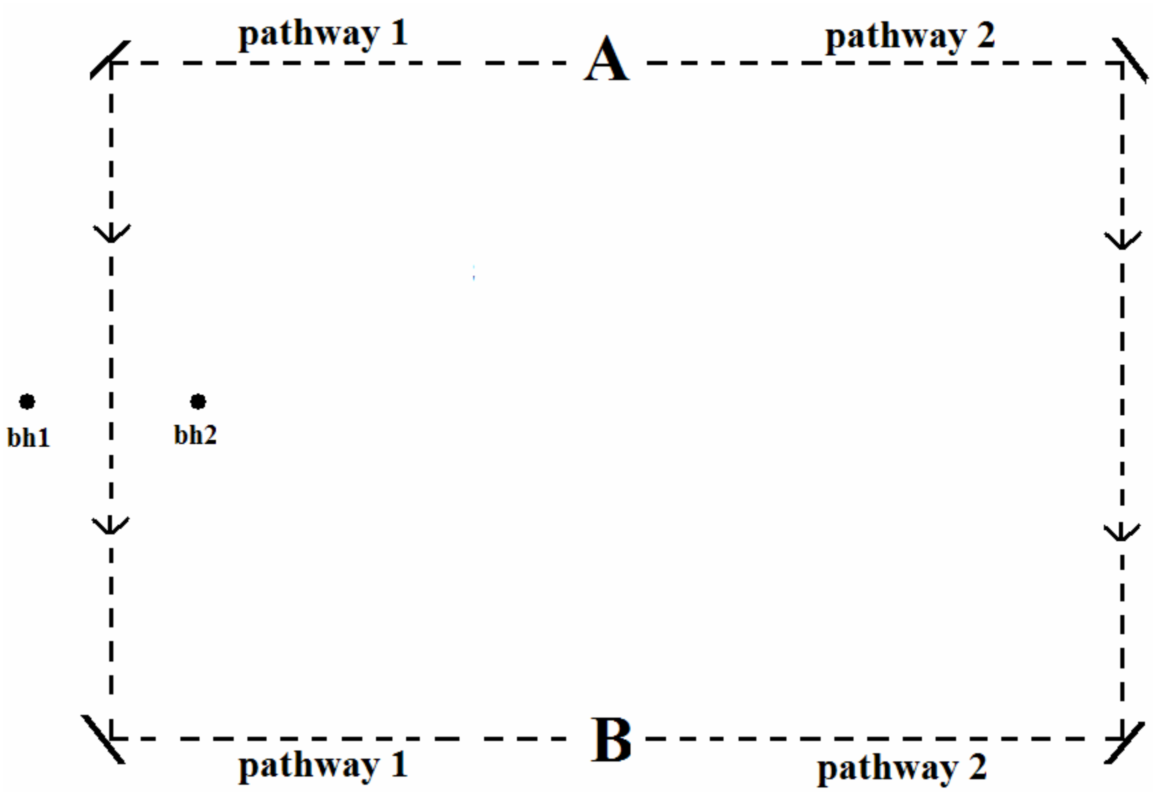

Figure 1. Diagram for the Space Density theory versus spacetime theory problem.

To make this thought experiment easier, the two gravitational bodies will be black holes of 1 solar mass whose centers are 93.8km from the pathway 1. Also of note, the LSO would predict a different black hole horizon radius than Space Density theory which predicts that it would be 0.938 km and that the gravity there would be 2.0E8 m/s^2 [1,2]. Therefore at 93.8km the RSW=0.01 and the RSD=0.99 since RSD=1-RSW. Since RSD is the observed distance divided by the objective (actual) distance we can say that RSD=c_{obs}/c_{obj} where c is the speed of light. Therefore at 93.8km from the center of a 1 solar mass black hole, the speed of light would be 2.97E8 m/s rather than 3.0E8 m/s. This all gets a little more confusing with two black holes but according to spacetime theory the gravitational force would be zero between the two black holes and all though Space Density theory would say the same, it would also say that RSW = RSW_{bh1} x RSW_{bh2} =

0.0001 so the photons traveling down pathway 1 when between the centers of the two black holes would slow to 0.9999c since RSD=1-0.0001=0.9999. Therefore the light traveling down pathway 1 would be significantly delayed compared to pathway 2 according to the Space Density theory of the LSO.

Conclusion

This paper has therefore shown that there are significant differences between the Space Density theory of LSO and spacetime theory. In the thought experiment presented, Space Density theory of LSO would have the light pulse down pathway one being delayed compared to pathway 2 while spacetime theory would not.

This gives us a means for future experimentation albeit not an easy experiment to do. If this thought experiment or another differential experiment [1] is proved to be correct then the Space Density theory of LSO will supplant spacetime theory.

References

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Addendum

LSO Formulas

RSW=APD/360°-(sin(AGI)xAPD/360°)

g_x=SC x RSW_x

RSD=1-RSW= $d_{obs}/d_{obj}=c_{obs}/c_{ob}$

RSW=RSW_x xRSW_y

d_{obs}= RSD_{mde} x RSD_{vel} x d_{obj}

mass/radius :g : RSW

Because m/r: RSW, the following equation can be set up:

$$RSW_1/RSW_2 = (m_1/r_1)/(m_2/r_2)$$
$$0.01/1 = (1 \text{ solar mass}/r_1)/(1 \text{ solar mass}/0.938 \text{ km})$$
$$r_1 = 93.8 \text{ km}$$

Received May 2004