

# Defining Space, Time and Dark Energy

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**August 2017**

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## **Abstract**

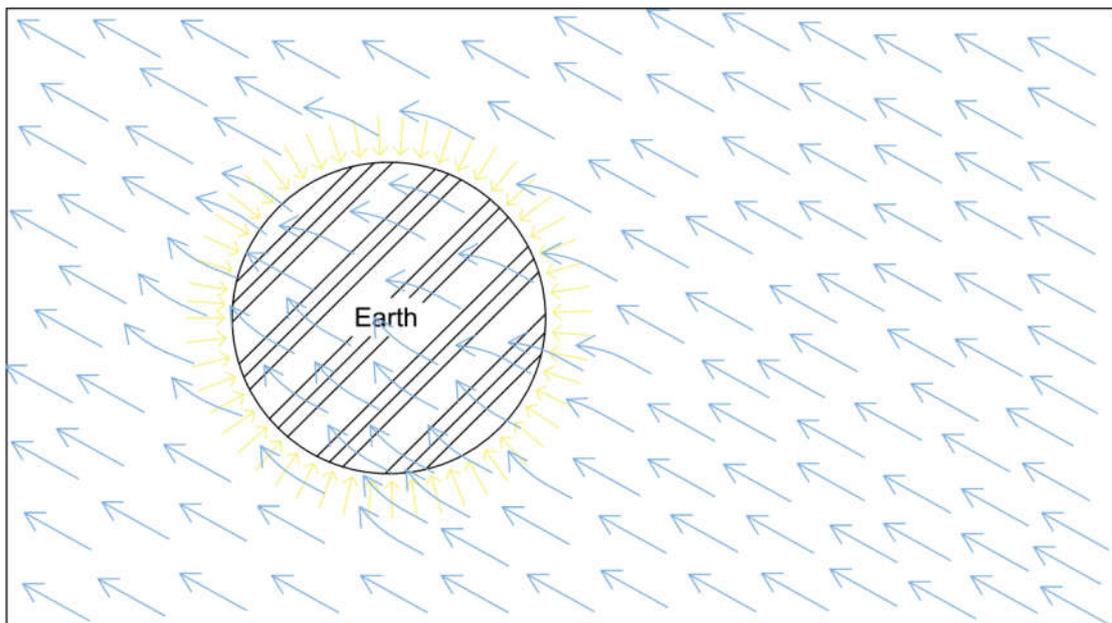
Figuring out the mystery of expanding universe seems a mandatory question for today's physicists. The space, time and dark energy are also all the same thing as we found out that the space and time are the same. Looking at observations and findings take us to one result which is consisted with specifications and behaviors of space that; anti-gravitation field named as anti-neutral field is space-time itself. This anti-neutral field expands in 3 dimensions

We generally look down after seeing stars seem like countable and watching sight just some if there is moonlight inside the deep darkness when we look up at sky at night, i guess we think as it's unreachable or there are so much unknown. It is true that we have a lot of unknown and it's so interesting that the biggest one is that darkness itself which stands right in front of us but majority doesn't feel any needing to question it at all. Maybe this darkness which majority is not interested in because of seeing simple as saying maybe like "it is just emptiness, nothing itself. What can i question, The Nothingness!" must be the research subject which we should brighten and be lightened. This subject must be the main subject which needs to be solved especially for the physicists if we want learn the universe better.

The dark energy is called to specify the unknown type of energy caused this condition of the dark space which we detected accelerating expanding. If we hold this dark energy just responsible for the expansion of the universe and think that it has no other effects, we would think wrong. Maybe that's the main reason why we can't explain. Consistent solutions to brighten the darkness of universe will be represented with finding answers to unsolved questions of today's physics in this article which i indicated to explain in my previous article[1] that i cited, and these solutions will show us what the right way is to reach the new horizons some day.

In my previous, I explained that the gravity in fact is not a geodesic event and the gravitation is caused by matter itself so the released neutral field. Supersymmetry model is a substantially true model because like the action-reaction rule the opposite of everything so the negative of every positive can be found in the universe. Standard model will improve more with these kind of extensions until we found every particle. But something can destroy themselves by the force of rules of universe without keeping own living. For example, the opposite of black holes, white holes are nonexistence because if it is existed first it would rip apart itself with pushing from inside, on top of something pushes everything wouldn't pick up enough mass to create a singularity on the contrary to pulling picking up everything. If we think the opposite situation of neutron's radiating field which is combination field of proton and electron creating gravity according to supersymmetry model, the result of anti-neutral field of anti-neutron which is combination of anti-proton and positron creating anti gravity so the anti-gravitation is reached. These anti-neutrons will not be much stable as in the explanation of white holes (i know about a neutron outside of nuclei decays in minutes), therefore this repulsion field will lead to its fragmentation with causing becoming unstable. The CPT symmetry doesn't refuse annihilation of antimatter as

seen non-existence in the universe under the circumstances of anti gravity effects. The energy of this anti-neutron so the anti-matter will not vanish according to the conservation of energy law and will continue it's existence with spreading turning to energy wave of anti-neutral field. This is as same as the definition of fact called dark energy which is space itself and causes expanding. Defining this anti-neutral field just as anti-gravitation field will be deficit and wrong. Because this field is space-time itself and it's consistent with theory of general relativity, because it's the basic explanation of working mechanisms of Einstein's field equations. This field is time itself with doing the physical explanation, because wave form radiates at the speed of light and it explains slowing of time with getting close to speed of light. The relative movement of ideational wave particles of this field is plain and at speed of light according to each other in the fields which we move with the universe so we protect inertia and have no large gravity. All the spots move away from each other with same speed, same as the example of a balloon is expanding and growing homogeneously. This anti-neutral wave with smallest structure does not include any emptiness at all. Electromagnetic waves as light can move together with this anti-neutral field, so why the waves as light can move at the same speed for the all observers can be explained. Besides warping light with the followed spacetime at the influence of gravity causing distortion of this anti-neutral field can be explained.

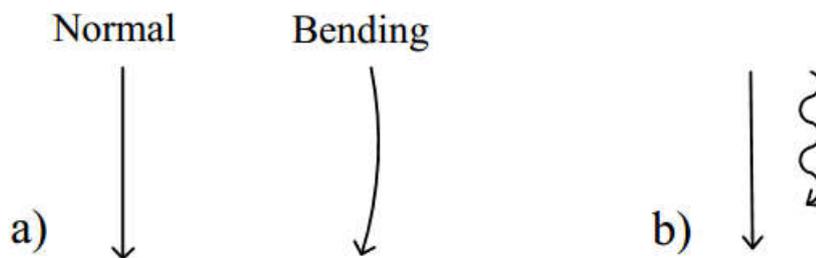


Picture 1.1 Warped way of light by bending spacetime (Symbolic)

The vacuum effect in space can be explained so like the inactive two boats are approaching each other in the sea because of crashing waves around are stronger than waves between the boats. This field which is pushing from each side must be perceived as one of the facts that is raising matter's stability and seen as one factor which provides clumping mass, creating galaxies with this pushing influence. But it must not be forgotten this anti-neuter field which passes through almost everything with being affected too little is also trying to push away objects from each other. This activity is enough small to be neglected at inner section of massive objects like planets, planetoids, meteors which include neutron and inner circle of distance which is determined according to it's mass. Actually this action can be seen easier at the fields which don't contain extra sizable mass, existing for a very long time hydrogen

nebulas seem like under the influence of both as pulling and as pushing at the same time. In my previous article, i explained that it can be considered as not being exposed to heavy gravitational effects and so surviving reason from collapsing. It can be thought that hydrogen atoms can produce neutral field with containing proton and electron but it's too small to say that it's non-existence because of there's distance as atomic radius between the proton and electron. Neutron borne gravitational neutral field shows warping by magnetic fields is not being cited cause of almost never happening.

Every mass causes distortion in anti-neutral field which we call space-time according to it's size like refraction when light gets in a denser environment. But it must not be considered that this anti-neutral field's speeding down because it generally doesn't interact with any matter cause of anti-matter borne and being wave which has the lowest energy. As to energy wavelet which is called photon of light can be speeding down with interacting as being absorbed by atoms of matter and being reflected according to it's transparency with partially losing energy. This anti-neutral field will lean more to zones where it can move easier at places where it meets with gravity as same as pushing something which is being pulled at the same way if it is considered as they both are acting same way. This tending movement simulates the bending space so well and it explains blue shift of light which is getting close to large masses. As it's seen in the figure 2a, length and speed are the same but way bent and the distance between photons got shorten relatively. Because of this reason, it will cause wavelength getting shorter with photons getting closer to each other relatively and blue shift with increasing frequency. Photon's increasing frequency with more vibrations at that area of space was depicted more exaggeratedly in figure 2b at right side just for imagining easier as though when two black holes bending space like doing pendulum movement.



Picture 2. Analysis of bending way which light follows at small scale

My thesis can explain the event horizon of black holes, too. The gravity neutral field in event horizon zone of singularity is so dense that the anti-neutral pushing field has no effect as if it's like an another dimension and it comprises of gravitational field completely, because of this anything even light can't escape. This anti-neuter main wave which creates spacetime must be considered as dominating space. For example walking anyone in crowd will move in compliance with crowd because of not having any area to run even he's the fastest athlete. This area whose borders is stated by Schwarzschild radius is separated off from the effects of spacetime. Much as it could be perceived as like this in ergosphere region, this influence must not be considered as in interference experiments which can create crest and trough points. This anti-neuter field which we call spacetime must be considered as being a form of wave which is expanding in 3 dimensions at the same time. Therefore this can be the main reason of

we have ability to move freely in 3 dimensions. Because if it was like gravity, we could have difficulty in like working to move, swim in a strong flow just heading to center so collapsing; besides the universe collapses too, it would give no chance to life with form we know. Additionally this thesis can also explain why we are in a situation of we can't go back to pass. Because it is not possible that we oppositely move this wave which is expanding to 3 dimensions, doesn't interact with almost anything, is unstoppable, as like gravity in the collapsing way like making space smaller. Furthermore it won't be correct if we think the neuter wave which we call gravitation can act in the way of moving the time reversibly, restoring to a previous state, to back of now. Because in our universe something which has happened or been lived can not be taken back, nothing can influence the before it's existence and if we want to reword, our universe doesn't contain paradox. It must be considered that in the area of named event horizon, coming into existence time remains constant, does not change because of there is no space which moves an expanding location to another location, a memory - a time to a next time and we think that region of space remains always constant at same diameter.

## **Result**

As a result, we find that the built-in dark energy which provides expansion with being effective on everywhere of space while everything is in connection with each other is actually space itself as we found out that the space and time are the same one. We can discover this effect approximately 400 years after Newton held off from publishing because of those day's conditions for not based universal gravitation law on any effect, pulling causelessly with an invisible influence and even so published with a great contribution for mankind. The answer of why not anti-gravity exists while gravity exists in nature is standing in front of us is being discovered with the most consistent form of being neutral and anti-neutral field. This discovery can also explain why anti-matter mass doesn't even the atoms of anti-matter don't exist even being in small amounts by anti-neutral pushing field making unstable, ripping apart itself while there are so many mass clumping together. Not just with mathematical methods, our observations and findings take us to result of, space is this anti-neuter anti-gravitation field. The space-time is this anti-neuter field with reasons which i explained above. This anti-neuter field matches up one to one with the structure of space-time.

## **References**

[1] OZAN VARLI, Misunderstanding description of the gravity, August 2017.