Extra Space-Time Dimensions and Toward a Gravitational Theory of Multiverses and No Dark Energy.

Dr George Christos 12 April 2018

In a previous note we suggested that we may be just a bubble within a bigger universe, with lots of other bubbles/universes.

Let our universe have the space time coordinates (x,y,x,t), and let other universes have the space time coordinates (x',y',z',t'), (x",y",z",t"), etc..

Suppose all universes exist in another bigger universe with space time coordinates (X,Y,Z,T).

If all of these universes then have these coordinates in common as well, then our space-time coordinates are really (x,y.z.t,X,Y,Z,T), and that of another universe (x',y',z',t',X,Y,Z,T), etc..

Einstein's equations in the (X,Y,Z,T) coordinates would determine how the different universes interact with each other.

This could lead to an external force pulling inside our own universe, from the outside, which is making it expand faster than was expected and then there would be no need for some 75% dark energy which is supposedly pushing our universe apart from within. The 'dark energy' is nothing more than the old “ether” and needs to be replaced with a theory.

Why can we not see these other extra dimensions? The reason is that we are located within a tiny fragment in the (X,Y,Z,T) space-time, like almost like at a point, that we cannot even begin to see these extra dimensions until we get out to much larger distances and times. We are almost frozen in these extra dimensions as are the other universes, yet it enables the unverses to have an effect on each other.

The level of “dark energy” required within our universe may give us an indication of how extended and dynamic we are in the super (X,Y.Z,T) space-time.

Such a theory would have consequences other than the possible explanation of the supposed effects of dark energy, that should be measurable, and so is a testable theory.

I'm just putting this idea out there for the experts in general relativity to consider.
So imagine a giant universe in which lots of new universes are starting up from a singularity (big bang). They are all expanding at the speed of light so it is difficult to observe the bigger picture from within each universe.

The issue of a big bang starting from a quantum fluctuation bothers me, so elsewhere I have suggested an alternative where a the big bang results from an exploding black hole, which is also a singularity in general relativity.

Also, interestingly, string theories have 26 dimensions, 22 of which are rolled up into tiny balls less than Plank's length, so we cannot see them, and they are what makes up the particles we see that make up matter, like protons, quarks, electrons, muons, pions, etc. So what if we are a rolled up dimension (or dimensions) inside another bigger world, a particle inside another world, which can interact with other particles (universes like ours), and of course, ad infinitum.