THE MYSTERY OF GRAVITY

Bertrand Wong
Eurotech, S'pore
Email: bwong8@singnet.com.sg

Abstract

Newton accidentally discovered gravity after observing an apple falling from a tree. What exactly is gravity? This article suggests a solution for the mystery of gravity. Any theory about gravity would have to be confirmed by physical experiments of course.

Einstein had suggested that gravity is the geodesic of an "imaginary rubber sheet" which occupies space in his paper on general relativity. By this suggestion he had transformed gravity, which is an abstract entity, into a geometric, more tangible entity that is linked to what he described as space-time. This had been evidently an attractive idea to his peers. How should this "rubber sheet" be visualised or interpreted? Is this "rubber sheet" really three-dimensional as has been illustrated by pictures in scientific tomes, or, is it of more dimensions, say having infinite dimensions?

The author would like to modify this "rubber sheet" idea of Einstein's. The suggestion here is to replace this "rubber sheet" with a layer (or layers) of fluid, which is possibly a combination or compound of air, liquid/vapours, gases, chemical elements, particles, etc., which has the quality of adhesiveness, i.e., it could adhere to matter or any object it comes into contact with (like water drenching all objects it comes into contact with), perhaps including light particles and quantum particles. This "sheet which replaces Einstein's geometric rubber sheet" is comparable to a "sea of water or parcel of air" in which matter occupies. The activity of any matter within this "sheet" could be compared to that of a submarine, fish or swimmer navigating in the sea of water or bird, airplane or glider navigating in the parcel of air. As is stated above, this "sheet" or layer could possibly adhere to all matters it comes into contact with, surrounding and enveloping (drenching) these matters. Since its shape would depend on the shapes of the objects (matters) it surrounds and envelops which could be all kinds of shapes the shape of this "sheet" or layer should be fluid, flexible and infinite in dimensions. Denser objects could congregate to the bottom of this "sheet' or layer while less dense objects could float nearer or at the top (like denser objects sinking to the sea-bottom while less dense objects float nearer or at the top of the ocean). All of these could be interpreted as "effects of gravity".

We now look at the case of outer space and other planets. Like Einstein's "geometric rubber sheet of space" this "sheet" or layer could stretch all the way from earth to outer space, surrounding and enveloping (drenching) the planets out there (like water twirling around in outer space and gushing all over the planets). The "sheet" or layer could be interpreted as denser in outer space allowing space travellers to float in it, which could all be interpreted as the "lesser effect of gravity".

The above is the germ of an idea about the real nature of gravity.

REFERENCES

[1] On The Electrodynamics Of Moving Bodies, Annalen der Physik, 17:891, Albert Einstein, June 30, 1905

[2] The Meaning Of Relativity, Princeton, Albert Einstein, 2005