ESSAY 70 : A Simple And Powerful New Cosmology

The Einsteinian general relativity (EGR) is an idea that cosmology may be developed with particular spacetime geometries represented by the infinitesimal line element or metric. It is now widely accepted to be riddled completely with errors and misconceptions. Its most glaring error is that a large chunk of geometry is missing completely. This is known as torsion. Another glaring error is that it is based on a metric that produces unphysical singularities and which is wrongly attributed to Schwarzschild. This metric produces such erroneous ideas as big bang and black holes. Fred Hoyle dismissed big bang as preposterous in 1950, and in 1994 wrote that none of the predictions of big bang had been fulfilled. This length of time illustrates the terribly stagnation of standard cosmology, which Hoyle described as an area of few ideas. Now it is known that big bang has been refuted experimentally. Penrose for example has abandoned it for an even more obscure claim. Only winners of prizes adhere to it.

We now know with definitive clarity that these few ideas are incorrect.

So in order to make progress I decided to abandon EGR some years ago and to try to develop the simplest cosmology compatible with the experimental data. This is an illustration of what is known in philosophy as Ockham's Razor, the simplest possible theory must be used. The other principle used in my approach is that a theory must be tested against ALL the experimental data available. This is a principle that Einstein was fond of quoting. If one piece of data refutes a theory, other pieces of data cannot keep it going, it must be abandoned. In about 1960 it was discovered that EGR fails completely to describe the orbits of stars in galaxies. It is now known very clearly that it fails in the solar system. There is a great deal of material on explaining why, all of which is studied intensely worldwide.

My first efforts towards a new cosmology were based on the Minkowski metric of special relativity constrained by an observable orbit. In UFT232 and UFT233 this idea was simplified to its essence by use of the Minkowski metric alone. It turns out that any orbit can be described and classified by the ratio of the relativistic linear momentum p to the relativistic angular momentum L. Any orbit observed experimentally can be explained with the Minkowski metric alone. Light bending, time delay and the Thomas precession can also be described by a Minkowski metric. The latter produces a non zero torsion and curvature because it can be factorized in terms of phase dependent tetrads. Therefore it produces ECE type field equations with a finite connection. As usual the field equations are based on the standard Cartan identity that relates torsion and curvature.

It is very important to understand that the new cosmology can classify any orbit, from the solar system to galaxies. EGR fails totally to describe galaxies. This fact was discovered about five years after Einstein had died. The fact that EGR fails was covered up in dark matter, a ton of anthracite and Einstein would have ridiculed that out of hand.. The EGR equation of motion is a nonlinear second order differential equation that is claimed to produce a precessing ellipse, but as shown in UFT232 and UFT233, its solution in general contains unphysical singularities that do not exist in nature. Even worse for EGR is that terms added at random to the EGR equation of motion all give the same erroneous result, the illusion of a precessing ellipse in a limit of vanishing precession. So the entire theory is easily reduced to nonsense. The true precessing ellipse is a conical section with the angle theta of the plane polar coordinate system multiplied by a precession factor x. In the solar system x - 1 is of the order of a few arc seconds per century, or about a millionth of a radian. The solar system is an appallingly bad place in which to test a theory. In addition the experimental methods used to test EGR have been heavily criticised, and experimental deviations from EGR are being found all the time, even inside the solar system. The equation of the true precessing ellipse is a well behaved function that contains no singularities. It is a simpler equation than EGR and

is preferred by Ockham's Razor. The new cosmology does not make the errors that lead to big bang or black holes. The first concept is well refuted experimentally. Those that refuse to accept this are not scientists. Black hole theory has been rejected since the thirties. It was first proposed by Chandrasekhar using special relativity, not general relativity, and was immediately rejected by Eddington, Landau and Einstein. It is now known that the entire theoretical structure of EGR is incorrect, and this fact has been accepted for some years by the great majority of scientists. This is shown with objectivity by feedback data. Those that deny this are not scientists, or not even sensible.