

## ESSAY 53: Simple and Clear Refutations of Einstein's General Relativity.

These occur in three papers of a forthcoming special issue six of "Journal of Foundations of Physics and Chemistry". They are UFT 190, UFT 193 and above all UFT 194. By feedback we know that these have been studied intensely as soon as they appeared. They deal with the use of the infinitesimal line element method by Einstein and contemporaries. The line element method was used by Einstein in November 1915 to claim that he had described the precession of the perihelion of planets, namely Mercury. This claim was scathingly dismissed by Schwarzschild in December 1915. It is doubtful if more than a few people had the technique to understand what was going on, so Einstein's incorrect calculation survived, probably because of his prestige and because Schwarzschild sadly died in 1916. Precession of the perihelion is a mouthful of jargon that means that the elliptical orbit moves a little every year. This movement for the planet Mercury is very tiny, only about forty arc seconds every century. So it is a very bad piece of science to choose such a tiny phenomenon to test a completely new and revolutionary theory, especially as it is known that there are other contributions to the precession, and also that it can be described without using general relativity at all. Einstein was desperate for a positive result because he could think of no other way to test his theory. This makes me feel very uncomfortable, a feeling that nature is going to be forced to describe a theory. Karl Schwarzschild showed almost immediately that this attempt failed, and the theory should have been abandoned there and then.

Schwarzschild also made a suggestion to Einstein in that same scathing letter that is on the web, translated into English, for everyone to see using google. This was a suggestion for a metric that is Schwarzschild's solution to the Einstein field equation inferred in 1915 and published in 1916. Someone unknown to me later tried to change history by attributing another function to Schwarzschild, who was no longer around to argue back. It is a false function that fuels the dogmatic ego trip. It was never derived by Schwarzschild at all. The strange and damning thing is that Einstein kept silent about this fabrication. Einstein never published another paper on perihelion precession. This fabrication is known as "the Schwarzschild metric". In hundreds of supposedly respectable textbooks it is used to claim that general relativity produces a precessing ellipse.

It doesn't.

In UFT 190 I had the idea of comparing the result claimed to be due to Schwarzschild with the result derived simply by differentiating the analytical equation of a precessing ellipse. Only a simple minded chemist would think of such an obvious thing to do. The relevant function, called  $m$  for the sake of brevity, is nothing like the falsely attributed Schwarzschild function, and even worse, is nothing like the real Schwarzschild function either. All my hand calculations were checked as usual by co author Horst Eckardt, so they cannot be dismissed. Any school pupil can check them once the idea is known. The trick is in finding the idea that shatters general relativity and replaces it with a greatly improved theory, ECE theory. I have no interest in destroying anything. In UFT 190 other sequential errors and self inconsistencies quickly emerged, the proverbial pack of cards or dominoes, whichever game you like best. This made me sea sick with textbooks that I had been reading for a decade, and I get really sea sick from looking at a puddle. I am sensitive to hogwash that smells of brine. How can they be so wrong? The question echoes down the ages.

The usual claim made in a book such as "Classical Dynamics" by Marion and Thornton (which happens otherwise to be a good book) is that an effective potential can be derived from the false Schwarzschild metric and a well known classical lagrangian method used to give the orbit from the effective force law found from the effective potential. Being innocent and simple minded, but otherwise trained in mathematics, I reversed the procedure

in UFT 193, started with the orbit, the analytical function of a precessing ellipse, a simple function, and deduced the force law using precisely THE SAME lagrangian method as all the textbooks. The resulting force of attraction is the sum of two terms in the radial vector  $r$ , the distance between a planet and the sun. One term is inversely proportional to the square of  $r$ , the other term is inversely proportional to the CUBE of  $r$ . Only this sum gives a precessing ellipse, and no other of any kind whatsoever. The sum given by textbook general relativity is of an inverse square term and inverse FOURTH power term. This means to any chemist that all the physicists are wrong, nothing new in that. It also means the logical end of the Einstein general relativity. Finally Horst Eckardt evaluated by computer the true orbit given by the sum of inverse square and fourth power terms, and it is hideously complicated and so to any chemist, not a precessing ellipse at all. So there must have been fiddling and magic in high places.

As if this was not enough, the major catastrophe that has been coming for a century finally arrived in UFT 194, which was originally an attempt to find a line element general relativity that worked. I wrote down the basic definition of the constant total angular momentum for any function  $m$  of a spherical spacetime. This was expressed in terms of a well defined linear velocity  $v$  and constants. Then I used the basic definition of  $v$  to express it in terms of  $m$  again. This procedure gives two simultaneous equations with which to eliminate  $v$ . The result is that  $m$  is a CONSTANT, and never varies with  $r$  in any way at all. This is a direct and very simple refutation of Einstein general relativity of any kind in any spherical spacetime, because in that theory,  $m$  can never be a constant and always varies with  $r$ . So UFT 194 is my favourite refutation. It is the simplest of all, with absolutely clear results.

Only the metric due to the much maligned but brilliant scholar Stephen Crothers survived this blithering fiasco for physics. To a chemist this is always true about physics.