

Essay 28 : THE DEEP FLAWS IN STANDARD PHYSICS

The standard physics of the twentieth century is based on quicksand. Only last week it was announced that a completely new particle physics theory is needed following the discovery of an anomalous peak at Fermilab. In the same week it was announced that the search for dark matter had produced another negative result. The search for gravitational radiation has failed. Optimists think that it is possible to go beyond the standard model, but increasingly, scientists when out of the public eye are beginning to wonder whether all those wasted billions could not have been used for something sensible such as searching for energy from spacetime and developing counter gravitational devices. The era of the ego trip in physics is drawing to a close, there have been too many failures.

The weakness of the old physics is by now all too evident. It is monstrously complicated, and hidden within the cloak of public propaganda are adjustable parameters and unobservables, things that can be adjusted empirically to fit the data, and things that cannot be tested experimentally. The old physics is kept going by accountants, who no longer measure quantities in nature, but measure the amount which is going to be demanded next year from the taxpayer. In response to the worldwide acclaim for ECE theory, governments have responded by cutting CERN's budget by almost three hundred million euros, bringing its activities to a halt for at least a year. That is a good start, but billions are still wasted every year. At present one major laboratory, Fermilab, has announced the need for a completely new particle theory, while another, CERN, has suspended activity for a year. Ludicrously, CERN announces at the same time that the Higgs particle will be discovered by 2011. It is already 2011. CERN has been announcing the advent of the god particle for fifty years. This is beginning to sound very much like a sermon. Can this be science, the objective study of nature?

It has been accepted internationally for eight years that ECE is the type of radically new physics needed. This claim can be made on the basis of very detailed feedback activity, monitored daily for seven of those years. The 178 source papers of ECE theory are read all the time, and a new journal has been started based on ECE type theory. Again that is a good start. The old standard model can be summarized by the search for a unified field theory. By international acceptance, ECE has achieved this aim using the philosophy of relativity, by using a rigorously correct and well known geometry and by using the minimum of hypotheses. To any geometer the structure of ECE is simple, its geometry well known. It is the use of that geometry that counts.

In stark contrast the old standard model stands against the horizon like a gaunt ruin. It is made up of sectors, or in simpler language it is made up of what are thought at present to be the four fundamental force fields of nature: gravitation, electromagnetism, weak and strong nuclear. These are unified easily and self consistently by ECE using geometry, each force field is a variation on a theme of general relativity. The standard model of gravitation has been refuted comprehensively in the past few years because of the fact that it uses only one out of the two fundamental properties of geometry, curvature. In order for geometry to be self consistent, torsion must be considered as well as curvature, and torsion cannot be neglected. This neglect of torsion means that all the claims based on the Einstein field equation are incorrect geometrically. It is no longer possible for the standard model to use the stop gap measure of dark matter, because it has just been found that it does not exist. Using simple arguments, the basics of particle theory have been refuted in UFT 158 ff., and with them the basics of the de Broglie Einstein theory. In simple words this refutation means that relativity and quantum mechanics seem to be precise when considered as separate subjects, but this is a mirage, when one tries to put them together as in the de Broglie Einstein

equations, the result is complete nonsense. A derivative theory of ECE theory, called R theory, has been devised as a first attempt to put right this disaster for the old physics. Again, there is great interest in R theory.

The electromagnetic sector of standard physics is in tatters because of its adherence to century old dogma, notably the massless photon. This idea leads to the use of a $U(1)$ sector symmetry and gauge theory. In UFT 131 ff this gauge theory has been comprehensively refuted using the antisymmetry laws of ECE theory. Earlier it had been refuted by the inference of the $B(3)$ field based on the inverse Faraday effect. The standard model still struggles to patch together a unified field theory based on a mixture of general and special relativity, and based on a hopelessly complicated plethora of ideas which can never be tested, the many unobservable dimensions of string theory being a well known example out of many. Meanwhile, ECE theory has unified physics with no problem at all. In so doing it has refuted the Copenhagen interpretation of quantum mechanics, and has unified quantum mechanics and general relativity straightforwardly. It is unscientific, and very foolish, to try to ignore such advances while continuing to apply for major funding for erroneous mathematics. Very few now feel confident enough in their own work to ignore the advances being made by ECE theory. It is not possible to go Abeyond the standard model@, by which is meant minor adjustments while still asking for a lot of money. What is needed is a radically new theory such as ECE, and a radical reform of the way in which physics fits into society, a much tougher assessment by government of its fifty year old pronouncements and failures.