Quantum particle physics and the skirting of unresolved conundrums

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The study of quantum particle physics has been going on for a relatively long time. While not discounting in any way the work previously accomplished on the subject, particle physics appears to have come solidly into its own with the invention of the cyclotron by Ernest O. Lawrence around 1930. The cyclotron has since evolved into larger much more powerful particle accelerators culminating with the LHC (Large Hadron Collider). The purpose of the LHC is to drive high-energy streams of specific micro particles into each other in an attempt to fracture the particles into constituent components. (The cyclotron does not accelerate opposing streams of particles but accelerates only a single stream of micro particles. The accelerated particles are then deflected into or otherwise impact a fixed target.) The chase was and is on to reduce the innate particles, which make up all things considered matter, to their most fundamental forms. The question is have we gotten ahead of ourselves?

There are many named particles that include true particles, hypothetical particles, quasi particles and virtual particles. These particles are assigned to groups that are within what is called the standard model of particle physics. The standard model of particle physics is at the heart of quantum particle physics while covered under the umbrella of quantum mechanics. The hunt goes on for yet more particles to be named and assigned to some group. Some so-called particles appear unproven in that they were cultivated only to solve some conundrum or to confirm a particular mathematical hypothesis. A potential part of the alleged problem involving the appropriateness of what is being done is the forced interpretation of what is being observed experimentally.

Are some of the products of the various colliders' not true new particle but the result of less than head-on collisions? Are grazing hits or contaminated particle streams falsely producing what appear to be new particles? How many particles are misidentified noise from some source such as an electronic or electro-mechanical device that causes unrecognized interference with the various detecting apparatus? It is suggested that potential sources of interference, even though they are being looked for and considered, cannot be fully accounted for or eliminated.

The use of "free parameters" (arbitrary parameters) is also challenging. A number of free parameters are used in the current standard model in order to make it work. As the number of free parameters increases, serious questions develop about subject validity.

Instead of continuing to seek new quantum particles of potentially questionable lineage, perhaps those investigators in the world of physics should back up and work on previously but debatably solved issues. Issues such as those that contain questions about the use of force carrier particles to ostensibly solve certain problems involved in defining the forces holding atomic structures together. The contentions outlined herein only but reinforce suggestions made by others in that there is work to be done on refining the current standard model or that the model needs to be replaced by a new paradigm. (Replacing the standard model with one of the string theory variants or a string theory collective currently appears unlikely.)