Review of: "Annihilation-free chemical theory of subatomic particles"

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Potential competing interests: No potential competing interests to declare.

The suggestion that the real things are neither the relations nor the fields, but the 'ancient' particles still sounds revolutionary. Evolution comes through mutation, and most are lethal, but few ones may contribute to advance. The problem with new ideas is that it takes time until all consequences are tested, and the authors admit it.

I would like to ask the authors for adding some comments on the following 5 points:

1) If the ontic beables are neither the standard fields nor the elementary particles of the standard model, but sub-particles r,g,b±1⁄6, then the ***scattering processes*** should show ***some signature*** of that substructure. If no one has ever seen something in this direction: is that a clear refutation of the present model?

2) Could the authors say a bit more about ***the a and b parameters***. - If there is an electromagnetic field in a cavity, then the stationary state has a distribution of ***photon numbers***. - A hydrogen-like atom (e.g. take one with an Oganesson nucleus) with one negative electronic charge has a mixture of one electron and then ***some electron-positron pairs***; this vacuum polarization around a high positive coulomb charge is quite appreciable and adds significantly to the observed energies. The lepton field around the Og nucleus represents one electron with some no-negligible amount of e+-e- admixture. How is that represented in the equations for the Ξ matrices ?

3) The so-called particles are quantized wave-field-packages. They have extensions in space- time and the conjugated momentum-energy space. What are ***the sizes of the hidden photons***?

4) How are the interactions described. Should the interaction within the hydrogen atom and the anti-hydrogen be different in the new model? Why then have no differences been observed in the low-energy regime of ordinary optical spectroscopy for ***hydrogen and anti-hydrogen***? In the low-energy field the parity-violation by the weak interactions has been observed in the optical spectra of some diatomic molecules.

5) The spark model may be a simple approximation to picture and rationalize the conservation laws and symmetries of high-energy physics. Do the sparks live in ordinary space-time, or? What is the ***law for the*** causal development of the ***states of the sparks***?