

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

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This article is a fresh wind in particle physics, based on the existence of concealed photons and the existence of hypothetical sparks as the fundamental elements that are the building blocks of subatomic particles.

I think one step more is needed here: where are concealed photons and sparks? Universal space here plays an important role; it is a fundamental arena where subatomic particles exist. A model was developed where concealed photons are situated in universal space itself: <https://ujp.bitp.kiev.ua/index.php/ujp/article/view/2019393>

When space is given energy, virtual photons become visible. Photons from heated iron are not coming from iron; they come from superfluid space. Photons are an excitation of space. It might be that the proposed sparks are also a manifestation of superfluid space. Einstein's idea that universal space is empty and deprived of physical properties has given too much attention to particles and no attention to the space where these particles exist. We are back to the old model of the ether, where photons and sparks are excitations of the ether (quantum vacuum, superfluid space...we use different names). I think that the particle physics future is in reconnecting particles with space; particles are energy forms of space:

"What we observe as material bodies and forces are nothing but shapes and variations in the structure of space." - Erwin Schrödinger

"Particle" means "part of something more complex." For example, a proton is a complex system that is stable, and an open question is whether a stable system can be composed of unstable constitutive elements (particles). Quarks are highly unstable, and how they build protons is a question that needs a clear answer. In principle, only stable subatomic particles could build more complex particles:

<https://rajpub.com/index.php/jap/article/view/8668>

The top quark has 171.2 GeV/c², a proton has 938 MeV/c², and where the top quark should be situated remains an open question. In a proton, it would be difficult as the top quark has a much bigger energy. The incapacity to integrate the top quark into the proton is a weakness of the Standard Model. What is the point of discovering a new particle when you do not know where the particle is situated?

Sbitnev's idea that elementary particles are vortexes of superfluid space could be of use:

<https://arxiv.org/pdf/1603.03069.pdf> In this perspective, 6 fundamental sparks are 6 different basic vortexes of superfluid

space that is the non-created primordial energy of the universe.

I would encourage authors to develop their model to the extent where also the fundamental arena, the superfluid space, is involved. Subatomic particles have an attribute of energy and can exist only in a medium that has an attribute of energy. I believe that proceeding in this direction will give excellent results.