

# Review of: "Properties of elementary particles, dark matter, and dark energy"

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In this article, the author has provided a rich and detailed history of articles related to elementary particles, gravity, and cosmology, along with observational or theoretical documentation. This history also contains very useful tables. Also, in order to develop the view of elementary particles and its connection with gravity and cosmology, and to generalize the periodic table of elementary particles, he has used a new concept such as isomers and presented a new modeling "SUPP" in comparison with the well-known model "POST". I must admit that the author has put a lot of effort into preparing this article. Theoretically, phenomenology is a very remarkable and valuable work, although there are mutual scientists who are interested in the unknown views of dark energy and dark matter, alternative theories to Einstein's theory of general relativity to treat the problems that current models have in describing the microscopic world and its relationship with the cosmic macroscopic world is presented. But both the alternative gravity theories and the modeling of the current article, the only way to save them is to test them and obtain experimental confirmations. As the author himself has mentioned, it was after the presentation of Mendeleev's table for the first time that the next elements were discovered and the empty spaces of the table were filled. Another clear example is the theory of super-gravity and super-symmetry, which is based on the theory of groups, which was first discovered and introduced to the world by Galva. Perhaps he himself did not know that in the not too distant future his theory will become a powerful mathematical tool in understanding the nature of the world of micro-physics and even macro-physics.

Sincerely