EDITORIAL

Validation of the equivalence of information flow and energy

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ABSTRACT

In this article, the validation of the equivalence of information flow and energy is provided step by step. First, the validation of the equivalence of information flow and time is carried out and then the validation of equivalence of energy and time is carried out. the validation of the equivalence of information flow and energy then results automatically. in this way, the validation of information flow and time and the validation of energy and time are carried out at the same time.

Key words: *Information flow; Energy; Validation; Indirect confirmation; age of the universe; Dark energy*

INTRODUCTION

The equivalence of information flow and energy has been theoretically thought through, mathematically formulated and published. What is still missing is direct experimental verification, which has not yet been carried out. Therefore, in this article the verification of this equivalence will be carried out step by step and indirectly. In today's information age, the term „Information "has become more and more important [1-2]. We are living in a time of renewed paradigm shift, away from the traditional concepts of energy and matter to the prevailing concept of information in today's information age. Although the concepts of energy and matter are still present and important in our world, they are increasingly being replaced by the concept of information. This applies not only to biology with its deeper biochemistry and molecular biology but also to physics [3-5]. This is where the term information "plays an increasingly important role alongside energy and matter as the third fundamental quantity. The American physicist John Archibald Wheeler considers an information-theoretical reformulation of quantum theory, in general, to be promising. He once said: Tomorrow we will have learned how to understand all physics in the language of information and how to express it in this language. The experimental physicist Anton Zeilinger, Vienna, even equates information with reality. Even if reality is not a concept of physics and the concept of effect has no particularly descriptive meaning physics, one can understand physical
reality as a single effect or as the sum of all effects. The publication of the article Equivalence of Energy and Time is only a small step to the writing of the article Equivalence of Information Flow and Time.

Validation

The validation of the equivalence of energy and time results from the direct proportionality of energy and time. This can be seen from the proportional increase in dark energy with the age (time) of the universe. The higher energy consumption as time progresses is an example of this. This can be seen in the energy consumption bill. The same applies in the equivalence of information flow and time. The more time is available, the more information can be transmitted.

CONCLUSION

This provides the validation for the equivalence of information flow and energy. at the same time, the validity of the equivalence of energy and time and the validity of the equivalence of information flow and time are also proven.

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