Research Paper

Physics



An Approach to Understand the Physics of Conversions

* Debasis Roy

* Kanthadhar Chunaripara, P.o. Ichapur Nawabganj, Dt. 24 Pgs. (N), West Bengal – 743 144, India.

ABSTRACT

Physical conversions form a very important core of Physics and find usage in Applied Physics. Reality behind such conversions is not only of general interest, but it may also suitably enlighten some inequations of nature. An operator – based approach is made in this regard in this paper.

Keywords: Conversion, State, Operator.

1. INTRODUCTION:

Physics considers the study of matter, motion of matter in multi – dimensional space, energy and force. It is the general study of nature, with the aim to understand the behavior of nature. E. Rutherford described Physics as the only real science. Study of Physics is very important in the sense that advancements in such study and its applications resulted in progress of humanity as a whole.

Principles of reality are considered in Metaphysics. Metaphysics investigates into the basic nature of being. Relation between things is studied in Metaphysics, along with realizing objective hood and so on, so as to understand the nature.

The empirical activity of conversions, i.e. mass – energy (and vice versa), change of state of matter and transformation of energy is considered herein on the basis of the foregoing streams of thought.

This paper is in addition to my earlier paper published in PARIPEX – IJR (February, 2013) in Physics : An Approach To Understand The Physics Of Consciousness.

2. DISCUSSION:

Conversions, i.e. mass – energy (and vice versa), change of state of matter and transformation of energy, take place in multi - dimensional space. In Mathematics, a multi – dimensional space is a topological space. Here, a multi – dimensional manifold is a space which is locally like multi – dimensional Euclidean space. However, its global structure may not

be Euclidean. In Physics, dimension corresponds to constituent structure of space. Abstract space is not considered in this paper.

Let us make an attempt to discuss about an operator of Physics. Here, it is a function which acts on the multi – dimensional space of physical states. Its application on a state produces another state and generally some information is obtained on the relevant Physics.

Indirect experience is the source of Indian philosophical thoughts. It is considered as the basis of Indian philosophical streams. Again, higher knowledge is meant in Indian philosophy for realization and attaining the imperishable truth. [A]

Let us come for the truth from our thirst for knowledge. From Indian philosophical angle, proper form resides behind appearance.

3. CONCLUSION:

On the basis of foregoing discussion, a comprehensive view of the nature of conversions, i.e. mass — energy (and vice versa), change of state of matter and transformation of energy, is formulated as follows: that, such conversions result out of the action of physical operator on multi — dimensional space of physical states (mass / energy / state of matter / form of energy) under certain physical conditions. This approach may enlighten the inequations of energy and mass density in the universe at roots.

REFERENCES