

Theory of Field-Matter Unification on Basis of Field Contraction

Umasankar Dolai

*Assistant Teacher,
Garhbeta South C.L.R.C., Satbankura-721253,
Dist.-Paschim Medinipur, West Bengal, India*

ABSTRACT

Matter is form of field. This concept was philosophically created after discovery of general relativity. But it can not be proved or explained till now. Actually the mathematical approach of field equation is too much complex to solve. So it is a big limitation to achieve any success from mathematical consultation. Here logic is only the way to solve this problem. Logically it be expressed that matter is nothing but a special situation of field. In this paper, field is considered as flexible existence; which is contracted. Matter is the result of this field contraction.

Key words: Relativity, Logic, Unified Field Theory

I. INTRODUCTION

It is already known that energy is the quality of field and mass is the quality of matter. According to relativistic view-point, the difference in between energy and mass is not qualitative; rather it is quantitative. Because mass is condensed form of energy. So logically it will be assumed that matter is specific state of field. Here it is noted that although the difference between energy and mass is in quantity; but the difference between field and matter is in state. This statement is true in reality; because same existence (energy) exists in different forms (energy and mass) to show different qualities (rarefied and condensed behavior) and to express different states (light and dense forms) in nature only by different quantities (low and heavy) in amount inside different carriers (field and matter). Moreover it is also considered that if the carriers are same in quality; then they must be different in state only. Thus the difference in between field and matter is only in their state.

Now how would be possible to express matter as form of field? Any mathematical solution is not available in our mind till now; but a logical opinion is in

our hands to overcome this problem. To solve this task, it is not sufficient by saying that matter is that where field is strong and other side it is quite weak. Here another question is arise. Why that type of situation would be found? That means what is the actual reason behind the strong and weakness of field (field strength)? Actually the existence of unique form of field and matter is concealed into the answer of the above question. Before entering the pathway of solution of our problem, the nature of field must be known. The nature of field means its characteristic by which its existence is existed. Whether it is flat or bent in state. However the uniformity of field and matter can depend on the change of above characteristic of field as well as the description of field also depends on it.

II. FIELD AND MATTER

Sometime logic plays a vital role than mathematical explanation to express a subject or to solve a problem; whatever the subject or the problem is in science or not. In many cases, the mathematical problem of an object is too complex in nature to draw any solution. Moreover the complexity is so hard to solve; because its hardness influences on the system of solving procedure to develop limitations in determination. Then logical view-point is only the way to explain the subject in place of mathematical explanation. To determine characteristics of field, we feel and face such problematic limitations.

Now what will be the logical approach for description of field to consider itself as matter? The answer of this question may be given by assuming field as an existence which can be bent or contracted. This contraction is the main reason for distribution of field energy; some where it is more or some where it is less in quantity. That type of energy distribution expresses the characteristic nature of field; which is strong or weak. In a word, this is the actual reason of field strength. It should be remembered that this energy distribution should depend on the limit of field contraction. The place where the field is contracted; there the density of energy is more. In that place, field is very strong. The energy is condensed there and it expresses itself as mass. Now this contracted field may be considered as matter. This is the place, where field intensity is maximum with respect to the limit of field contraction in that place. Moreover that maximum field intensity can move with the velocity of matter; which is nothing but the idea of construction of physics only by concept of field theory in relativity.

Matter is nothing but contracted field.

The above opinion can build the far reaching conception of field in our mind; where matter is form of specific condition of field in state. Actually field is not a rigid existence; rather it is flexible. Field should be contracted in different limits for this natural characteristic. However field contraction is a natural fact. It is a philosophical view-point proposed by logic. Why does field be contracted? The determination of answer of this question is very tough. Beside it, here the question is meaningless with respect to our explanation or logical approach. The mode of the above question belongs to different way. However in this respect to understand the conception of

field contraction, generally it be stated that field contraction in different places of field is roughly as like compression of gas layers in different parts of the gas.

III. SUMMARY

Field and matter are really unique existence; which is proved by logic. Actually matter is a special situation of field in its state. More clearly, matter is contracted field. In matter, energy could be condensed by this field contraction. As a result, density of field energy is very high in matter with respect to density of field energy in field. So field is very strong in that place, where matter is located. However the condensed energy expresses itself as mass with its several characteristic.

It is a true fact in nature that field can be perceived in existence of matter; which is very complex in nature under mathematical induction. So it is difficult to prove that matter is nothing but contacted field by mathematical solution. For this reason, it may be stated that matter can not be determined easily as field by a specific independent indicator of mathematical explanation. Here logic is only the way to prove matter as form of field. In fact, field and matter may be the existences which exist simultaneously in nature. The uncertainly in determination of field-matter separation is an important philosophical view-point in science.

Reference:

1. Albert Einstein, *ideas and opinions*, Based on MEIN WELTBILD, edited by Carl Seeling, and other Sources, New translations and revisions by Sonja Bargmann, First in Rupa Paperback 1979, Twenty-second Impression 2006.

