# **EXPERIMENT XT b**

#### INTRODUCTION

Experiment XT b which will be elaborated below is based on the EXACT SAME REASONING and on the SAME RATIONALE as Experiment XT (*See* <u>www.tsolkas.gr</u>).

Experiment XT b is in essence a variation of Experiment XT. Yet, both experiments, i.e. Experiment XT and Experiment XT b, are equally simple to carry out and have the following advantages:

a) The results obtained from their conduct are of major scientific importance and

b) Their performance has a low cost.

#### THE EXPERIMENT

Experiment XT b (fig. 1) is described below:



In Experiment XT (*See* <u>www.tsolkas.gr</u>), we have the moving automobile S' which runs linearly and at a steady velocity u relative to the surface of the earth. Contrarily in experiment XT b, fig.1 the electrically charged sphere  $S_2$ , which is found inside automobile S' is removed.

In other words, during the conduct of Experiment XT b, there is no electrically charged sphere  $S_2$  inside the moving automobile S', bearing an electrical charge +Q.

Automobile S (in experiment XT), which is steadily immobile relative to the surface of the earth is then replaced by a series of posts, fig.1.

These posts are vertical, solidly fixed in the ground, have a height h (e.g. h = 1m) and are placed equidistantly from each other (equidistance d, e.g. d = 0.5 m).

Each of the above posts bears at its top an electrically charged metallic sphere carrying an electrical charge +Q.

All spheres atop each post carry the same electrical charge +Q.

Moreover, all these posts are arranged along a straight line of a length L (e.g. L = 50 m), at –for example– the edge of a linear road where the experiment will be conducted. This is in general terms the experimental

basis needed for the performance of Experiment XT b.

## THE PERFORMANCE OF THE EXPERIMENT

Let us see what happens during the conduct of Experiment XT b.

According to the Theory of Relativity, during the performance of the experiment, observer  $\Pi'$  who sits inside automobile S' moving linearly at a steady velocity u (e.g. u = 160 km/h) relative to the surface of the earth shall see the posts move towards him linearly at a steady velocity u, i.e. at a velocity u = 160 km/h, as referred to above.

However, what does this signify for observer  $\Pi'$  who sits inside the moving automobile *S*'?

Simply that observer  $\Pi$  shall observe a linear, steady and continuous flow of electrical charges +Q (that is, the electrical charges of the spheres found at the top of each post) passing by his automobile S' at a steady velocity u, i.e. at a velocity u = 160 km/h.

Seeing the above-mentioned linear, steady and continuous flow of electrical charges, Observer  $\Pi'$  will follow the line of reasoning and reach the conclusions analyzed below:

Given that next to automobile S' there is a linear, steady and continuous flow of electrical charges +Q moving towards automobile S' at a steady velocity u (i.e. at a velocity u = 160 km/h), then (according to what is already known) next to automobile S' there must also exist a linear, continuous electrical current of stable intensity *i*.

Moreover (always following Observer's  $\Pi$  line of reasoning):

Since next to automobile S' there is a linear, continuous electrical current of stable intensity *i*, then according to Ampere's law there must also exist a steady magnetic field around this linear, continuous electrical current.

Consequently, (as observer  $\Pi'$  maintains), since there is a steady magnetic field (this very magnetic field), it can be detected with the use of a magnetic needle found inside automobile S.

**REMARK:** a) Certainly, observer  $\Pi'$  will notice inside his automobile the presence of an electrical field (i.e. the electrical field generated by the electrically charged spheres of the posts).

However, we are NOT THE LEAST interested in this electrical field. We are EXCLUSIVELY interested in the MAGNETIC FIELD and in whether the latter will be noticed or not inside the moving automobile S'. This is the problem that needs to be solved and for this reason Experiment XT b is carried out.

b) Furthermore, because the electrical charges of the spheres found atop the posts are steady (they do not change with time) and because these spheres do not accelerate, decelerate or oscillate (either in a harmonic or disharmonic way) relative to  $\Pi'$  (nor relative to an immobile observer  $\Pi$ standing on the ground), this signifies that there is absence of electromagnetic field (either a steady or changing one) both for the moving observer  $\Pi'$  and for the immobile observer  $\Pi$  who stands on the ground.

Following all the above, the question that is being raised is the following: During the conduct of the experiment, will observer  $\Pi'$  who is in the moving automobile S' notice the presence of this magnetic field as analyzed above?

The answer to this question (from the author's point of view) is the following:

If Experiment XT b is conducted, then UNDER NO CIRCUMSTANCES whatsoever will observer  $\Pi$  notice inside his automobile S the presence of a magnetic field (either a steady or changing one), and certainly he will not notice the presence of any electromagnetic field (steady or changing one).

What doe this mean however?

It means that if something similar occurs (that is, absence of magnetic field inside automobile S), this finding alone signifies DIRECTLY that the Theory of Relativity (Special and General) is unquestionably ERRONEOUS.

## **IMPORTANT REMARK**

As the reader can easily perceive, the most "sensitive" and "critical" part of Experiment XT b (as well as of Experiment XT) is "whether the magnetic field will be produced inside the moving automobile S' or not". This is the critical question.

For, in the event that Experiment XT b is carried out and the moving observer  $\Pi'$  does not notice inside his automobile S' a magnetic field, the consequences that will arise in this case are of major scientific importance as regards both the Theory of Relativity and Classical Physics.

Following everything discussed above, the following fundamental conclusion is drawn:

## CONCLUSION

During the conduct of Experiment XT b (or Experiment XT), if the phenomenon occurs (i.e absence of a MAGNETIC FIELD inside the moving automobile *S*), then this phenomenon cannot be explained neither by the THEORY OF RELATIVITY NOR THROUGH THE PRISM OF CLASSICAL PHYSICS!!!

Consequently, if this phenomenon occurs, it will entail MAJOR CONSEQUENCES ON PHYSICS WHICH WILL HAVE TO UNDERGO RADICAL CHANGE.

The latter is self-evident and perceived by "all of us".

Thus, what can be done in such a case and how will the above phenomenon be interpreted?

The answer to this question is very simple:

This phenomenon, (that is, the non-presence of a magnetic field inside the moving automobile S), is easily explained only if the following are accepted:

a) SPACE and TIME are absolute, and

b) Ether exists in nature and is described according to the New Etheric

Model and on the basis of the "New Ether Theory", such as the latter are elaborated on <u>www.tsolkas.gr</u>, as well as in the pertinent literature (studies elaborated by the author himself) which is cited at the end of the above website.

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Christos A. Tsolkas December 21, 2005