Experiment supports STOE model and rejects the traditional model of a coulomb field

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Abstract

The Scalar Theory of Everything (STOE) model of the coulomb field is of vortices in the plenum. An experiment is proposed that forces a spark of electrons to flow outside the volume between a positive–negative electrode pair. This experimental observation rejects the traditional source–sink pair model of the coulomb field and does not reject the STOE model of the coulomb field and the mechanism of electric attraction and repulsion.

keywords: STOE, charge attraction, charge repulsion, magnetism, electromagnetic effests

1 INTRODUCTION

Because the speed of coulomb waves and electromagnetic signals differed, the Scalar Theory Of Everything (STOE) modeled the coulomb field as a property of the plenum and the EM signals as a property of the hods.

The traditional view of the coulomb field is that the straight streamlines of force emanate from an isolated point source (divergent) or sink (convergent). The potential along each streamline varies inversely with distance - the Newtonian spherical property. Figure 1 shows a diagram of the streamlines around a source–sink (positive charge–negative charge) pair. Such a situation is found in the north–south pair of magnetic poles as seen in Fig. 2.

A characteristic of the source–sink pair model is the curved streamlines of potential outside the area between the pair.

Hodge (2018) suggested the coulomb field was caused by vortices in the plenum. A positive charged particle such as a positron is a source of one type of vortices such as (smoke) rings. A negative charged particle such as an electron is a source of another type of vortices such as cone vortices. Similar types of vortices repel each other. Therefore, the equipotential surfaces become spherical at a distance from the isolated vortex generator (the charge). Thus, creating the spherical property and the measurable illusion of a point source.

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Figure 1: Diagram of the popular view of the coulomb field around positive and negative electrostatic charges.

Figure 2: Photo of iron fillings in a magnetic field.

Different type vortices combine to cancel each other's vortex structure and allow the plenum to dissipate to assume the static plenum ρ potential. Figure 3 and 4 are diagrams of the ρ between the charge pair. Because the ring and cone vortices cancel and the total ρ is the static ρ , the ρ between the pair becomes less than the average ρ_L . This "cancel region" (Fig. 3) (CR) is a plane midway between the pair and perpendicular to the pair's axis.

Assemblies of hods (bodies) are directed by $\nabla \rho$ (Hodge 2015).

This Paper examines electric sparks. The experiment observation and its interpretation are discussed in section 2. The Conclusion is in section 3.

2 The experiment

A Wimshurst machine (Eisco, cat. No. PH0848C) was used to generate sparks. The electrode spheres were approximately 2.1 cm apart. A glass windowpane approximately 0.2 mm think was used as an insulator between the electrode spheres. The glass pane was positioned such that the top edge was approximately 4.0 mm above the top of the spheres.

2.1 Observation

Several sparks were photographed, two examples are shown in Figs. 5 and 6. The sparks are over the glass pane and are piecewise linear.





Figure 3: Diagram of the STOE view of the coulomb field around a pair of positive and negative electrostatic charges.

Figure 4: Plot of the calculated ρ from a charge (Hodge 2018, Fig. 2).



Figure 5: Photo of an electrostatic spark over a glass pane.



Figure 6: Photo of an electrostatic spark over a glass pane.

2.2 Interpretation

The spark is electrons (bodies) flowing from one electrode to another. The flow is considered to be along a streamline of the coulomb field. The STOE considers this to be from the high ρ (static plus dynamic peak of similar vortices from other charges) to the lower ρ (static only) of the CR. The outward flow of similar vortices maintains the spherical property of the vortices density. The streamlines remain perpendicular to the spherical vortex density and become piecewise linear. The glass pane prevents the spark from traveling directly between the electrodes. Therefore, the electrons travel outside the volume directly between the electrons cause cones of plenum to be released. These travel at a speed much greater than light. Therefore, the cone vortices remove the dynamic portion of the plenum field ahead of the electron in a piecewise linear direction. This leaves the static portion of the ρ field to push the electron to the positive electrode.

The electrons movement is along streamlines and these streamlines are piecewise linear. That is, the streamlines of the coulomb field are not the curved lines of a traditional source–sink pair model.

3 Conclusion

This experimental observation rejects the source–sink pair model of the coulomb field and does not reject the STOE model of the coulomb field and the mechanism of electric attraction and repulsion.

References

- Hodge, J.C., 2015,Universe according totheSTOE. In-ISSN tellectualArchive, Vol.4, No. 6, P.61929-4700, , http://intellectualarchive.com/?link=item&id=1648 Toronto. 2015.https://www.academia.edu/19564786/
- Hodge, J.C., 2018, STOE electric charge http://intellectualarchive.com/?link=item&id=1917