Electric Charge (non)-Conservation

by

Ken Shoulders © 2006

An EVO structure, whether in the white or black state, provides an easily measured and unambiguous testimony to the fact that electric charge is not conserved under the conditions of space modification provided by the EVO. Many papers by the author, available for download from: <u>http://www.svn.net/krscfs/</u>, show the means for making these measurements while the EVO state is in control of electron containment. The subject of charge conservation is an old one where many views have been used for its theoretical analysis, but for the sake of brevity, only one recent reference will be cited here. This reference and abstract is:

PHYSICAL REVIEW D 71, 025007 (2005)

Lorentz invariance violation and charge (non) conservation: A general theoretical frame for extensions of the Maxwell equations

Claus La mmerzahl* ZARM, University of Bremen, Am Fallturm, 28359 Bremen, Germany Alfredo Mac•´ast Universidad Autonoma Metropolitana Iztapalapa, Mexico Holger Mu"llert Physics Department, Stanford University, Stanford, California 94305-4060, USA (Received 8 July 2004; published 19 January 2005)

All quantum gravity approaches lead to small modifications in the standard laws of physics, which in most cases lead to violations of Lorentz invariance. One particular example is the extended standard model (SME). Here, a general phenomenological approach for extensions of the Maxwell equations is presented which turns out to be more general than the SME and which covers charge nonconservation (CNC), too. The new Lorentz invariance violating terms cannot be probed by optical experiments but need, instead, the exploration of the electromagnetic field created by a point charge or a magnetic dipole. Some scalar tensor theories and higher dimensional brane theories predict CNC in four dimensions and some models violating special relativity have been shown to be connected with CNC. Its relation to the Einstein Equivalence Principle has been discussed. Because of this upcoming interest, the experimental status of electric charge conservation is reviewed. Up to now there seem to exist no unique tests of charge conservation. CNC is related to the precession of polarization, to a modification of the 1=r-Coulomb potential, and to a time dependence of the fine structure constant. This gives the opportunity to describe a dedicated search for CNC.

DOI: 10.1103/PhysRevD.71.025007 PACS numbers: 03.50.De, 03.30.+p, 04.80.-y, 41.20.-q

The authors in this reference suggest a dedicated search for charge non-conservation be initiated whereas the present author suggests one has already been found that completely resolves the issue experimentally without the usual decades of time required to thresh out the answer collegially.

Using EVO methods, charge can be transported across great distances and through numerous barriers without either having to account for a return current loop or unwanted charging of the source. The transported charge is found only on the object the very penetrating black EVO is awakened within by becoming adequately excited during transit. If the black EVO is not excited adequately, there are indications that the charge it was composed of disappears from our cognizance, if not completely.