

## An Act that unifies fields

Good evening;

this law is simply the fourth form of the law that unifies the gravity and electromagnetism that I found, in fact for the first form of this law, the left-hand side of this equation is the ratio of the magnetic force to the electric force, it suffices that I divide the numerator as well as the denominator by a fictitious charge, say a Coulomb, for that the ratio of the electric field of force to the field of magnetic force is obtained, then as the right-hand side of this equation can be represented by the square root of the ratio of the gravitational force (for that between two masses identical) to Planck's gravitational force, it suffices that I divide this gravitational force and this Force of Planck by a fictitious mass, let us say by a kilogram, and the right-hand side of this equation thus becomes the square root of the ratio of the gravitational field to that of the Planck gravitational field, and then if we inverse (the numerator and the denominator) given;

$$C_{fe} / C_{fm} = (C^2) / (V^2)$$

$C_{fe} = C_e =$  electric force field

$C_{fm} = (V) (C_m) =$  field of magnetic force, then;

$$C_e / C_m = (C^2) / V$$

the equation of the electric field (in Newton by Coulomb) for a uniformly charged infinite rectilinear thread is given by one of my class books (suggested in one of my CEGEP courses on electromagnetism) I little expressed it like this;

$$C_e = (\text{load per unit length}) / [(2 \pi) (E_0) (\text{distance})]$$

then the equation of the magnetic field (in Tesla) is given also in this same book, I use the special case of Biot-Savart's law that I do not express much like this;

$$C_m = (U_0) (\text{current}) / [(2 \pi) (\text{distance})]$$

the current can be expressed as a load per unit length moving at a speed  $V$ ,

then, in order to have the expression of a field of magnetic force, it suffices to multiply the magnetic field  $C_m$  by the speed  $V$ , this is where this equation comes from.

I checked this equation with the experimental data of the lightning that I was able to find on the internet, this verification is very encouraging (has 30% close), I have remarked that if the velocity  $V$  of lightning or lightning tended towards the velocity of light  $C$ , the equation would give;

$$C_e / C_m = C$$

$$C_e = (C) (C_m)$$

This means that the velocity of an electromagnetic wave is equal to the ratio of its electric field to that of its magnetic field, also in an electromagnetic wave, its electric field of force is equal to its field of magnetic force.

All these details are given in my editions 3 and 4 of the following article;

<https://gnralsujet47.blogspot.com/2017/09/effet-relativiste-maximum-60-volts-par.html>