

Electric charge , magnetic charge , plank 's constant and the Rydberg constant

from: Tobias Richter

Introduction:

The value of a physical quantity is represented as the product of a number and a unit .

In general, we write any size G

$G = \{G\} * [G]$ where

G is the physical dimension

{ G } the numerical value of the physical quantity

[G] the unity of the physical quantity.

assumptions:

1. It is assumed that the premise of the so-called long shot symmetry .

This means any physical size in electromagnetism is at least 2 times before .

Each electrical size can be "translated " into a magnetic size.

2. Because of the long shots symmetry it follows that the amp is not a base unit in the normal sense .

[I] = A (amperage); [Q] = As = C (charge in ampere- second, or coulomb) ;

[Φ] = Vs = Wb (volt second or Weber)

For energy applies:

$$[E] = Nm = \frac{kgm^2}{s^2} = J (Joule)$$

For performance (both General , and electrical) applies:

$$[P] = \frac{J}{s} = \frac{Nm}{s} = \frac{kgm^2}{s^3} = VA = W (Watt)$$

Für Spannung gilt: V (Volt)

$$[U] = \frac{J}{C} = \frac{Ws}{As} = \frac{W}{A} = V = \frac{kg*m^2}{As^3}$$

Für Stromstärke gilt:

$$[I] = \frac{J}{Wb} = \frac{Ws}{Vs} = \frac{W}{V} = \frac{kgm^2}{Vs^3} = A (Ampere)$$

One consequence of the total symmetry is that there must be a magnetic charge !. The magnetic charge is the magnetic flux , which in turn means that a synonym for the term electrical charge is electrical flux .

After following you can see a table where you can illustrate the total symmetry beautiful.

electrical phenomenon	magnetic phenomenon
1a) $I = \frac{-N * e}{(\Delta * t)}$	1b) $U = \frac{-N * \Phi}{(\Delta * t)}$
2a) $E = v * B$ $E = \frac{U}{d}$ $E = \frac{F_{el}}{Q}$	2b) $H = v * D$ $H = \frac{N * I}{l}$ $H = \frac{F_{mag}}{\Phi}$
3a) $D = \epsilon * E$ $D = \frac{Q}{A}$	3b) $B = \mu_0 * H$ $B = \frac{\Phi}{A}$
4a) $C = \frac{\epsilon * A}{d}$ $C = \frac{Q}{U}$	4b) $L = \frac{\mu_0 * N^2 * A}{l}$ $L = \frac{\Phi}{I}$
5a) $E_{el} = \frac{1}{2} C * U^2$	5b) $E_{mag} = \frac{1}{2} L * I^2$
...	...

FYI it is said that the distance s, the distance d and the length l are each measured in meters and seen here as various physical quantities are the

Example to illustrate: From the total symmetry follows that all magnetic phenomena have a twin electric and vice versa. Thus, for example from the box 2a 2b follows.

The electric field is equal to the velocity times the magnetic flux density. If you now know that the counterpart of the electric field, the magnetic field strength is dependent the magnetic flux density, the electric flux density (Electric displacement) is can these formulas translate literally into each other.

This has consequences:

1. The magnetic charge is not discovered and measured similarly as the electric charge.
2. The Planck's quantum of action is equal magnetic charge times electric charge.
 $h = \Phi * e$
3. The Maxwell formulas are probably totally symmetrical.
4. There may exist a "second" Electromagnetic wave. ($H = v * D$)
5. The magnetic charge has the value $4.13 * 10^{-15}$ eVs or Vs where Vs = Wb.
6. There are still several problems to be dismantling it with this idea.

to 2.)

$$6,626 * 10^{-34} = 4,13 * 10^{-15} \text{ Wb} * 1,602 * 10^{-19} \text{ C}$$

$$= 4,13 * 10^{-15} (e) \text{ Vs} * 1,602 * 10^{-19} \text{ As}$$

and

$$V = \frac{\text{kg} * \text{m}^2}{\text{As}^3}$$

$$4,13 * 10^{-15} * 1,602 * 10^{-19} \frac{\text{kg} * \text{m}^2}{\text{As}^3} * \text{A} * \text{s}^2$$

$$4,13 * 10^{-15} * 1,602 * 10^{-19} \frac{\text{kg} * \text{m}^2}{\text{As}^3} * \text{A} * \text{s}^2$$

end result

$$6,626 * 10^{-34} \frac{\text{kg} * \text{m}^2}{\text{s}}$$

This idea can dissolve several problems:

1. magnetic charge times Rydberg = voltage
and
magnetic charge times Rydberg = voltage * 1 * = Coulomb energy

$$4,13 * 10^{-15} \text{ Vs} * 3,2 * 10^{15} \frac{1}{\text{s}} = 13,54 (e) \text{ V}$$

2. magnetic flux quantum = $\frac{1}{2}$ magnetic charge

3. neutrons are electrically neutral. But can a magnetic (positive or negative)
Have charge .

4. A constant less. The Planck's quantum of action was explained by the
interaction between the magnetic charge and eletrischer charge .