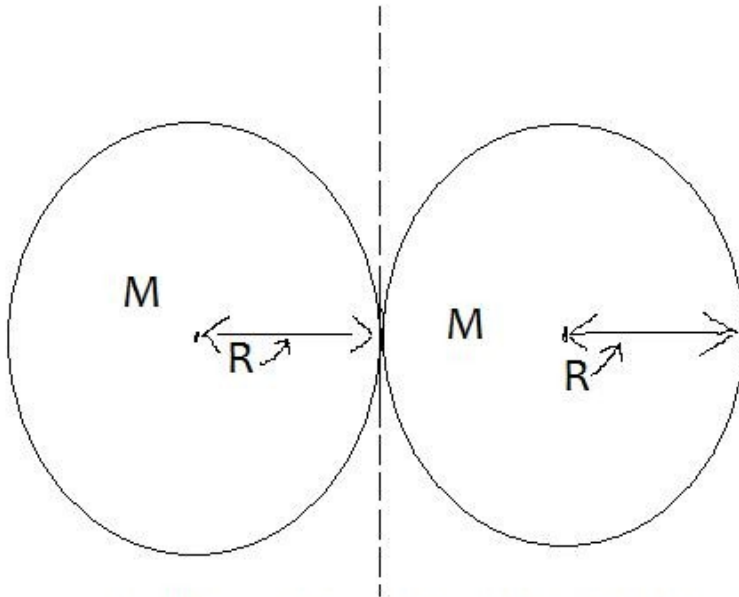


As I found a case that gravitational force depends only on the rate of release, with the exception of the gravitational constant, then as the speed of light (C) is universally recognized, it gave me the idea (after a discussion of the gravitational constant g) to provide a universal strength (N uni.), the universal gravitational constant (g uni.) would be $1 (C^4) / (N \text{ uni.})$.

Here is a drawing that is the basis of this proposal:



$$\text{Vitesse de libération} = [(gM)/(2R)]^{(1/2)} ,$$

$$M_1 = M_2 = M , \quad R_1 = R_2 = R ,$$

Les deux sphères ont le même volume et la même masse et leur densité sont uniforme et identique.

$$\text{Force gravitationnelle} = (1/g)(\text{vitesse de libération})^4$$

Pour démontrer ces deux équations, il suffit de considérer d'abord une vitesse de rotation circulaire pour nos deux sphères autour de l'axe en pointillé qui est sur le dessin ci-contre, la force gravitationnelle est égal a la force centrifuge en absolu tel que montrer par l'équation suivante:

$$MM / [4R^2] = (MV^2) / R,$$

vit V is the velocity of orbiting , isolate the speed V as follows:

$$GMM/4R^2 = M (V^2) / R,$$

$$(1/4) (GM / R) = V^2,$$

$$(1/2)[GM/R]^{(1/2)} = V ,$$

Since the kinetic energy release is two times greater than the kinetic energy of orbiting and speeds as in

the expressions for the kinetic energy is the square, then it is necessary that the release rate is greater than the speed of orbiting of a factor which equals $2^{(1/2)}$, namely:

$$[(V \text{ lib.}) / (V \text{ satellites.})] = 2^{(1/2)},$$

ici V libé. is velocity release and V satellite is the speed of orbiting,

multiplying by the square root of 2 Equation 1, we obtain for the speed of release:

$$V \text{ libé.} = V \text{ release} = [(GM) / (2R)]^{(1/2)}, \text{ equation 2,}$$

$$\text{gravitation strength} = G[(M)^2]/(4R) ,$$

raising to the power 4 equation 2, then multiplying by (1 / g), we obtain the gravitation strength:

$$\text{gravitation strength} = (1/g)(V \text{ libé.})^4 , \text{ Equation 3,}$$

note that the total energy release is ener. tot. release and is:

$$\text{ener. Tot. release} = (1/2)M(V \text{ libé.})^2 + (1/2)M(V \text{ libé.})^2 = MV^2 ,$$

$$\text{éner. Tot. release} = M(V \text{ libé.})^2 , \text{ équation 4 ,}$$

The total energy release is required to release the two spheres of gravity.

The kinetic energy of a sphere is to release half of the total energy release or half of total gravitational energy and has the value:

$$(1/2)M(V \text{ libé.})^2 = (1/2)GMM/2R , \text{ équation 5,}$$

the center-center distance of the two spheres is 2R, the total value of the gravitational energy is given by $G[(M^2)](2R)$ and as this value is for the

two speres, then divide the result by two coresponde that has the gravitational energy for a single sphere,

isolating V release in equation 5, we obtain again the velocity release and equation 2.

Note that the release rate is half the velocity release surface for a single sphere isolated.

If we replace the velocity V libe. by the speed of light C in Equation 3, is the formula of the gravitational force expressed by a velocity release, it is not sufficient, so as to express the velocity release by the speed of light C, which we give the universal force,

then to have a universal speed of light, I propose a universal length divided by a universal time, I suggest to use it for a density which corresponds to the density of matter which seems to me more conductive power, it 's is the density of gold is 19500 kg / (cubic meter)

our universal length (R uni.) is obtained by the following equation:

$$GMM / (4R) = (1/2) MC^2$$

$$gM / (2R) = C^2,$$

$$D M = (4/3) (\pi) R^3,$$

d is the density of gold worth 19500 kg / (cubic meter), with these values our equation becomes:

$$g (2/3) (\pi) R^2 = C^2 ,$$

$$R = \text{universal length} = R_{\text{uni.}} = C = \{3 / [(2\pi) g]\}^{(1/2)} = \text{equation 6} ,$$

universal time is simply the time it takes light to travel the length universal

$R_{\text{uni.}}$, this universal time is:

$$\text{universal time} = (R_{\text{uni.}}) / C, \text{ equation 7,}$$

I get the following values for stars that have the density of gold:

$$R_{\text{uni.}} = \text{universal length} = (1.81738)(10)^{11} \text{ mètres} ,$$

$$\text{universal length} = (1.81738) (10)^{11} \text{ meters}$$

$$\text{universal length} = (1.2148435) \text{ astronomical unit,}$$

The universal force is:

$$\text{universal force} = (1/g)C^4 = (1.21103)(10)^{44} \text{ N} ,$$

the speed of the universal light is:

$$C_{\text{uni.}} = (R_{\text{uni.}}) / (\text{Time together.})$$

$$\text{force uni.} = [1 / (g_{\text{uni.}})](C_{\text{uni.}})^4 ,$$

$$\text{force uni.} = 1 \text{ N uni.} ,$$

$$g_{\text{uni.}} = [(C_{\text{uni.}})^4] / (1 \text{ N uni.}) ,$$

$$\text{universal constant } g \text{ is } 1 \text{ with the units } \{[(R_{\text{uni.}})^4] / [(\text{universal time})^4] / (1 \text{ N uni.}), \text{ or simply } [(C_{\text{uni.}})^4] / (1 \text{ N uni.})$$

or $[(C^4) / (\text{N uni.})]$ because the speed of light (C) the system recognizes and International which is about $3 (10)^8 \text{ m / s}$ is the same as the

the universal light ($C_{\text{uni.}}$), the most important is to recognize universal force because it is the condition for the equality of the three forces

(Électrique, magnetic, gravitational) as we will see later (because V must equal C).

During a discussion I learned that universal strength that I propose is the same as the strength of Planck, However, the radius of Planck's gravitational force is half the Schwarzschild radius, whereas the radius of the two spheres identical

to give an example here is the double of the Schwarzschild radius, then the release rate of these two spheres that touch is the speed of light,

It is significant to note that this system expresses a gravitational strength that is comparable to that given in the example given in the text that follows,

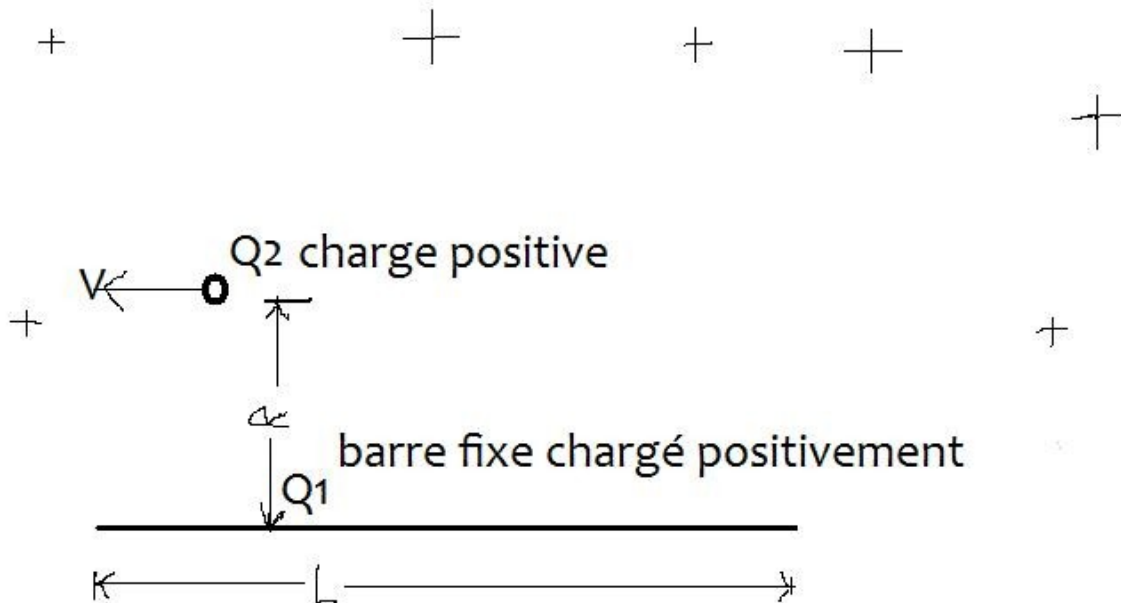
if the length L of the bar is 8R (according to the Figure containing the bar), R is the distance from the center of the bar to the center of the mass m_2 (or charge Q_2),

in my drawings can not consider the Planck radius, but the radius that I am suggesting here is twice the radius of

Schwarzschild, however the mass m_2 is located at the same location (by comparison) as Q_2 , must be elongated (or more dense raise both my spheres touching).

[Conditions pour l'égalité entre les forces électrique et magnétique et gravitationnelle](#) [Conditions for equality between the electric and magnetic forces and gravitational](#)

champ magnétique positif



$$\text{force élec.} = (Q_1 Q_2) / [e_0 (2\pi) (RL)]$$

$$\text{force magné.} = [\mu_0 (Q_2 Q_1) / (2\pi) RL] (V^2)$$

force électrique comparé a la force magnétique

I'll demonstrate that for the electric force is equal to the magnetic force absolute must the following condition:

$$V^2 = 1 / (e_0 \mu_0) = C^2,$$

V is the speed of an electric charge Q in the direction as shown in the figure below cons,

e_0 is the permittivity constant of the vacuum and is $(8.85) (10)^{-12} \text{ F / M}$,

μ_0 is constant and magnetic permeability of vacuum is $(1.26) (10)^{-6} \text{ H / M}$,

C is the speed of light and is about $3 (10)^8 \text{ m / s}$,

to demonstrate, as was shown in figure against a force of repulsion which is equivalent to the electrical charge repulsion between Q_2 and a bar loaded fixed electric charge Q_1 of length L a distance distanced R of charge Q_2 and then comparing a magnetic force of attraction which is between a charge Q_2 has a speed V from a parallel fixed bar of length L , distanced by a distance

R, this bar having a current positive in the same direction as the velocity V of the charge Q2 which provides a positive magnetic field B fixed.

The electric force (force elec.) Is the electric field E multiplied by the electric charge Q2 or EQ2,

$$E = (1/\epsilon_0) [Q1 / (\text{surface})] = (1/\epsilon_0) \{Q1 / [2 (\pi) RL]\}$$

$$(\text{Force elec.}) = (1/\epsilon_0) \{q_1 q_2 / [2 (\pi) RL]\} = EQ2, \text{ Equation 1,}$$

The magnetic force (magnetic strength.) Is multiplied by the charge Q2 multiplying the speed V by the magnetic field B fixed positive or:

(Magnetic strength.) = -Q2VB by convention the minus sign (-) is because the magnetic force is attractive

$$B = [\mu_0 (i)] / [2 (\pi) R]$$

i is the current equivalent to a bar of length L having a charge density of Q1 / L and with a speed equal to V L / s, where s is the time to travel a distance L, the current i is equal:

$$i = Q1 / S = (Q1 / L) (L / S) = (Q1 / L) V,$$

$$i = (Q1 / L) V,$$

B is therefore:

$$B = \mu_0 [(Q1 / L) V] / [2 (\pi) R]$$

The magnetic force-Q2VB is therefore:

$$, (\text{Magnetic strength.}) = -Q2V\mu_0 [(Q1 / L) V] / [2 (\pi) R]$$

$$(\text{Magnetic strength.}) = -Q2Q1\mu_0 \{1 / [2 (\pi) RL]\} V^2, \text{ equation 2,}$$

divide equation 2 by equation 1 gives:

$$(\text{Magnetic strength.}) / (\text{Electrical power.}) = - (\mu_0 \epsilon_0) V^2, \text{ Equation 3,}$$

so that the magnetic force is equal in absolute has the electric force, it must be provided

$$V^2 = 1 / (\mu_0 \epsilon_0) = C^2,$$

which completes the proof here.

So that the electric force and the magnetic force is equal to the absolute gravity must in addition to the condition:

$$V^2 = 1 / (\mu_0 \epsilon_0) = C^2 ,$$

the following special conditions:

$$Q1 = \{[4 (\pi) G\epsilon_0]^{(1/2)} m1 ,$$

m1 is the mass of the bar having a length L,

This particular condition is due to the fact that:

$(\text{Force climbed.}) / (\text{Electrical power.}) = [4 (\pi) G e_0] [(m_1 m_2) / (q_1 q_2)]$, equation 4,

must $m_1 = m_2$, $Q_1 = Q_2$,

then by the force of gravity is evaluated according to the following formula:

gravitation force = (gravi. force) = (gravitationnelle acceleration) m_2 = (gravi. acce.) m_2 ,

(gravi. acce) = $4(\pi)G[(m_1)/(\text{surface})] = 4(\pi)G[m_1/[2(\pi)RL]$,

(gravi. force) = $4(\pi)G[(m_1 m_2)/[2(\pi)RL]$, équation 5,

Equation 1 gives the electric force, and dividing Equation 5 by Equation 1, we obtain the equation 4,

which completes the other demonstration.

Reference:

pour le rayon de Panck: to the radius of Panck:

http://fr.wikipedia.org/wiki/Force_de_Planck http://fr.wikipedia.org/wiki/Force_de_Planck

pour le rayon de Schwarzschild: for the Schwarzschild radius:

http://fr.wikipedia.org/wiki/Rayon_de_Schwarzschild

http://fr.wikipedia.org/wiki/Rayon_de_Schwarzschild