

# NEWTON'S LAW of UNIVERSAL ATTRACTION EXAMINED

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Here are my findings and bases for examining Newton's Universal Attraction Law.

- 1) Sun's attraction on the planets is the cause for their helical orbital motion. By correlating orbital velocities and distances I derived a **relation of constancy**  $V_n = K / \sqrt{Rn}$ . This relation is valid for any parent body satellite system. Every system has its own discrete constant value. It is equal to the product of the orbital velocity to the square root of the distance  $V_n \sqrt{Rn} = K$ . The challenge to the inverse square law increases in quadratic measure with distance. For the values of systems constants see

[http://www.mayanmajix.com/Nakovs\\_Law\\_Part\\_1.pdf](http://www.mayanmajix.com/Nakovs_Law_Part_1.pdf)

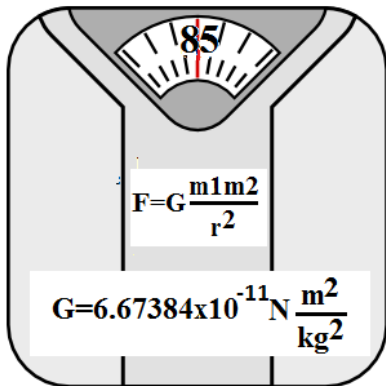
**A satellite's orbital velocity is directly proportional to systems' constant and inversely to the distance's square root to the parent body.  $V_n = K / \sqrt{Rn}$**

- 2) With the awareness of the above facts, I noticed that Pluto's orbital velocity, at a distance 104 times greater than Mercury, is only 10 times smaller than Mercury's. Has this being noticed and questioned before with the Newton' inverse square Law? Let's apply the **constancy relation** to the closest planet Mercury and the furthest Pluto.

Mercury's velocity times the square root of the distance  $47.89 \times \sqrt{.379} = 29.48$  (K)

Pluto, the same as above,  $4.74 \times \sqrt{39.44} = 29.76$ , K being Sun's constant when the distance is in AU (Astronomical Units).

- 3) And here is an application of Newton's Law in calculating Earth's attraction on one's body. For this you need a scale and Newton's formula. An 85 kg associate of mine did



the calculations and unintentionally revealed the transparency of the Law. He inserted his 85kg **weight** in the formula and came with an 85kg **attraction**. If after all the calculations the answer came to the inserted value of  $m_2$  then the value of the rest must be equal to the value of one (1). Why then one would need to include the  $m_2$  in the calculations at all? This simplifies the examination matters. We are left with the part of the equation  $F = G \frac{m_1}{r^2}$  will need to equal one (1). Then  $\frac{m_1}{r^2}$  will need to be equal to the reciprocal of Newton's G.

$1/G = .149838773$ . For an Earth  $r = 6.327 \times 10^{12}$  meters and a Earth mass  $m_1$  of  $6 \times 10^{24}$  kg,

we get  $F = 6.67384 \times 10^{-11} \frac{6 \times 10^{24} \text{ kg}}{40.04 \times 10^{12} \text{ m}^2} \times 85 \text{ kg}$ , and  $= 6.67384 \times 0.14985 = 1.000 \times 85 \text{ k}$

All Newton needed is a value of "G", his corner stone, as to eliminate the  $m_1 / r^2$  value.

You witnessed back engineering Newton's Universal Attraction/Gravitation Law.

Send your comment to [miencanto@hotmail.com](mailto:miencanto@hotmail.com), subject Newton Examined, thank you..