## Solar Planet Gravity Equation

By Gerges Francis Twadrous
$2^{\text {nd }}$ course student - Physics Department - Physics \& Math Faculty Peoples' Friendship University - Moscow - Russia -2010-2013 TEL +201022532292 georgytawdrous@yandex.ru / mrwaheid@ gmail.com S. Virgin Mary Assumption into Heaven- Written in Cairo - Egypt - ${ }^{\text {st }}$ August 2018

## Abstract

The Solar Planet gravity is defined by my following Equation:
The planet gravity $=\left(\frac{\text { Earth Diameter }}{\text { The Planet Diameter }}\right)^{2} \times\left(\frac{\text { The Planet Mass }}{\text { The Earth Mass }}\right) \times$ Earth gravity
(The Sun herself also follows this same equation)

## 3- Planet Gravity Equation

I- Data
The Equation: The Planet Gravity $=(\text { Earth Diameter / The Planet Diameter })^{\mathbf{2}} \mathbf{x}(($ The Planet Mass/ The Earth Mass) x Earth Gravity
Let's use this Equation in following

| Table No. 1 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Planet | Equation | Resulted | Registered | Error |
| The Sun gravity $=$ | (Earth Diameter / The Planet diameter) $^{2} \times(($ The Planet Mass/ The Earth Mass) x Earth Gravity $(12756 \mathrm{~km} / 1.392 \mathrm{mkm})^{2} \times(333000) \mathrm{x} 9.8=274$ $\mathrm{m} / \mathrm{s}^{2}$ | 274 m/s ${ }^{2}$ | 274 m/s ${ }^{2}$ | 0 |
| Moon <br> Gravity= | $(3.66){ }^{2} \times(0.073 / 5.97) \times 9.8=1.6 \mathrm{~m} / \mathrm{s}^{2}$ | $1.6 \mathrm{~m} / \mathrm{s}^{2}$ | $1.6 \mathrm{~m} / \mathrm{s}^{2}$ | 0 |
| Mercury Gravity= | $(2.614)^{2} \times(0.33 / 5.97) \times 9.8=3.7 \mathrm{~m} / \mathrm{s}^{2}$ | $3.7 \mathrm{~m} / \mathrm{s}^{2}$ | $3.7 \mathrm{~m} / \mathrm{s}^{2}$ | 0 |
| Venus <br> Gravity= | $(1.0538)^{2} \times(4.87 / 5.97) \times 9.8=8.9 \mathrm{~m} / \mathrm{s}^{2}$ | $8.9 \mathrm{~m} / \mathrm{s}^{2}$ | $8.9 \mathrm{~m} / \mathrm{s}^{2}$ | 0 |
| Earth <br> Gravity= | $9.8 \mathrm{~m} / \mathrm{s}^{2}$ |  | $9.8 \mathrm{~m} / \mathrm{s}^{2}$ |  |
| Mars <br> Gravity= | $(1.878)^{2} \times(0.642 / 5.97) \times 9.8=3.7 \mathrm{~m} / \mathrm{s}^{2}$ | $3.7 \mathrm{~m} / \mathrm{s}^{2}$ | $3.7 \mathrm{~m} / \mathrm{s}^{2}$ | 0 |
| Jupiter Gravity= | $(0.0892){ }^{2} \times(1898 / 5.97) \times 9.8=24.8 \mathrm{~m} / \mathrm{s}^{2}$ | 24.8 m/s ${ }^{2}$ | 23.1 m/s ${ }^{2}$ | 7.3\% |
| Saturn <br> Gravity= | $(0.10582)^{2} \times(568 / 5.97) \times 9.8$ | $\begin{aligned} & 10.44 \\ & \mathrm{~m} / \mathrm{s}^{2} \end{aligned}$ | $9 \mathrm{~m} / \mathrm{s}^{2}$ | 16\% |
| Uranus <br> Gravity= | $(0.25){ }^{2} \times(86.8 / 5.97) \times 9.8=8.89 \mathrm{~m} / \mathrm{s}^{2}$ | $8.89 \mathrm{~m} / \mathrm{s}^{2}$ | $8.7 \mathrm{~m} / \mathrm{s}^{2}$ | 2\% |
| Neptune Gravity= | $(0.2575)^{2} \times(102 / 5.97) \times 9.8=11 \mathrm{~m} / \mathrm{s}^{2}$ | $11.1 \mathrm{~m} / \mathrm{s}^{2}$ | $11 \mathrm{~m} / \mathrm{s}^{2}$ | 0.9\% |
| Pluto Gravity= | $(5.337)^{2}(0.0131 / 5.97) \times 9.8=0.612 \mathrm{~m} / \mathrm{s}^{2}$ | $\begin{aligned} & 0.612 \\ & \mathrm{~m} / \mathrm{s}^{2} \end{aligned}$ | $0.6 \mathrm{~m} / \mathrm{s}^{2}$ | 2\% |

## II- The Discussion

Table No. 1 shows that:
1- With Jupiter and Saturn only the equation produces very high errors!
2- The Equation is consistent with all other solar planets and the sun herself follows it
Why there are high error with Jupiter and Saturn only?!

## First Jupiter and Saturn high errors

1- Jupiter error 7.3 ... I wish we remember Lorentz contraction rate 1.0725 which we have discussed deeply in Solar Group Geometrical Structure http://vixra.org/abs/1805.0081

2- For Saturn, if Saturn diameter is increased with $7.25 \%$ (to be 129500 km ) his equation will not have any error... !
What does that mean?

3- The high error in Jupiter and Saturn are produced basically because Lorentz contraction rate 1.0725 with means change is value with $7.25 \%$, this rate we have discussed in details in many papers...
So the conclusion will be
a. The Equation is correct and consistent with all solar planets
b. The high errors with Jupiter and Saturn are found because of the relativistic effects..
The Time definition
http://vixra.org/abs/1805.0523

## Second

The Sun herself follows this same equation without any error, that supports the main claim in my research that the solar group is one machine controls by the same rules and laws.
Which supports also the basic hypothesis, that:
The matter and distance are created by the same Energy which grantees the solar group general harmony...

## Third

The Planet Gravity Equation tells us that, The Planet gravity doesn't depend only on the planet mass, but depend also on the planet diameter and Earth gravity
That means the planet gravity is a real geometrical feature, but the gravity doesn't depend on the mass because all planet geometrical features depended on each other, which means there's no any geometrical feature is independent from the other, that's told clearly by the gravity Equation
Please review the solar group geometrical structure in
The Moon Orbit Geometrical Structure (revised)
http://vixra.org/abs/1807.0449
$2^{\text {nd }}$ Course student - physics Faculty - People's Friendship University - Moscow -Russia..
mrwaheid1@yahoo.com mrwaheid@gmail.com +201022532292

Contacts : Gerges Francis Tawdrous
TEL +201022532292
E-mail georgytawdrous@yandex.ru
Linkedln https://eg.linkedin.com/in/gerges-francis-86a351a1
Facebook https://www.facebook.com/gergis.tawadrous
Academia https://rudn.academia.edu/GergesTawadrous

The Moon Orbit Geometrical Structure (revised)
http://vixra.org/abs/1807.0449
84 Minutes Are Required for Mercury Day
http://vixra.org/abs/1807.0412
Pluto was "The Mercury Moon"
http://vixra.org/abs/1807.0331
Saturn Data Proves Mars Immigration
http://vixra.org/abs/1807.0301
Mars Immigration Proves (Revised)
http://vixra.org/abs/1807.0268

## Solar Planet Motion

http://vixra.org/abs/1807.0220
Solar Planet Diameter Creation Rule
https://www.academia.edu/37012262/Solar_Planet_Diameter_Creation_Rule or
https://www.slideshare.net/Gergesfrancis/solar-planet-diameter-creation-rule?qid=758bbef2-9a42-4c24-bb83-
$75 \mathrm{a} 6 \mathrm{c} 7097 \mathrm{fdf} \& \mathrm{v}=\& \mathrm{~b}=\&$ from_search=1

Uranus Position In The Sky
http://vixra.org/abs/1806.0212
The Sun Data shows Relativistic Effects (revised)
http://vixra.org/abs/1806.0209
Earth Motion Produces the Moon Orbit
http://vixra.org/abs/1806.0137

