# The Solar Eclipse Geometry Basics 

## Gerges Francis Twadrous

2nd course student - Physics Department - physics \& Math faculty peoples' friendship University - Moscow - Russia
gfrancis@yandex.ru / gergesfrancis@yandex.ru /+201022532292
Abstract
This paper proves The Following Hypothesis...

# The Solar Eclipse Geometry Basics are different Completely from the Current Physics Basics. i.e. 

## The Solar System Geometry Basics contradicts the Current Physics Basics, and violates The physics Concepts.

The Total Solar Eclipse event I use as proof for this claim.
Let's start
The Sun diameter $=400$ folds the moon diameter, but the Sun/ Earth distance $=400$ folds the Moon/ Earth distance, for that reason the people on the Earth see the sun size equals the moon size approximately, that enables the total solar eclipse to be occurred before our eyes!
Is it just "a pure coincidence"? or there's a physical reason causes the equity of The Sun \& Moon Angular Diameters to occur the solar eclipse.

If this is "a pure Coincidence" for just once, So No argument can be found here..

But The Solar System Geometry is filled by hundreds as such "pure Coincidences" and for that

We should discuss that deeply to see The Contradiction Roots between The Current Physics Concepts \& The Solar System Geometry..


# S. Virgin Mary Assumption into Heaven. <br> Written in Cairo - Egypt 

Planetary Fact Sheet - Metric (The used Data in this paper)

|  | $\frac{\text { MERC }}{\underline{\text { URY }}}$ | $\frac{\text { VEN }}{\underline{\text { US }}}$ | $\frac{\text { EAR }}{\underline{\text { TH }}}$ | $\frac{\underline{\mathrm{MO}}}{\underline{\mathrm{ON}}}$ | $\begin{aligned} & \underline{\mathrm{MA}} \\ & \underline{\mathrm{RS}} \end{aligned}$ | $\frac{\text { JUPIT }}{\text { ER }}$ | $\frac{\text { SATU }}{\text { RN }}$ | $\frac{\text { URAN }}{\text { US }}$ | $\frac{\text { NEPTU }}{\text { NE }}$ | $\underline{\text { PLU }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mass ( $\mathbf{1 0}^{24} \mathrm{~kg}$ ) | 0.330 | 4.87 | 5.97 | 0.073 | 0.642 | 1898 | 568 | 86.8 | 102 | 0.0131 |
| Diameter (km | 4879 | $\begin{gathered} 12,10 \\ 4 \end{gathered}$ | 12,756 | 3475 | 6792 | 142,984 | $\begin{gathered} 120,53 \\ 6 \end{gathered}$ | 51,118 | 49,528 | 2390 |
| Density ( $\mathbf{k g} / \mathrm{m}^{3}$ ) | 5427 | 5243 | 5514 | 3340 | 3933 | 1326 | 687 | 1271 | 1638 | 1830 |
| Gravity ( $\mathbf{m} / \mathbf{s}^{\mathbf{2}}$ ) | 3.7 | 8.9 | 9.8 | 1.6 | 3.7 | 23.1 | 9.0 | 8.7 | 11.0 | 0.6 |
| Escape <br> Velocity ( $\mathbf{k m} / \mathbf{s}$ ) | 4.3 | 10.4 | 11.2 | 2.4 | 5.0 | 59.5 | 35.5 | 21.3 | 23.5 | 1.1 |
| $\begin{aligned} & \frac{\text { Rotation }}{\text { Period (hours }} \\ & \hline \text { ) } \end{aligned}$ | 1407.6 | $\begin{gathered} 5832 . \\ 5 \end{gathered}$ | 23.9 | 655.7 | 24.6 | 9.9 | 10.7 | -17.2 | 16.1 | -153.3 |
| $\begin{aligned} & \frac{\text { Length of }}{\text { Day (hours) }} \end{aligned}$ | 4222.6 | $\begin{gathered} 2802 . \\ 0 \end{gathered}$ | 24.0 | 708.7 | 24.7 | 9.9 | 10.7 | 17.2 | 16.1 | 153.3 |
| $\begin{aligned} & \text { Distance from } \\ & \left.\underline{\text { Sun }\left(10^{6}\right.} \mathbf{~ k m}\right) \end{aligned}$ | 57.9 | 108.2 | 149.6 | $\begin{gathered} 0.384 \\ * \end{gathered}$ | 227.9 | 778.6 | 1433.5 | 2872.5 | 4495.1 | 5870.0 |
| $\frac{\text { Perihelion }}{\left.{ }^{6} \mathrm{~km}\right)}{ }^{10}$ | 46.0 | 107.5 | 147.1 | $\begin{gathered} 0.363 \\ * \end{gathered}$ | 206.6 | 740.5 | 1352.6 | 2741.3 | 4444.5 | 4435.0 |
| $\frac{\text { Aphelion }}{\mathbf{k m})}\left(10^{6}\right.$ | 69.8 | 108.9 | 152.1 | $0.406$ | 249.2 | 816.6 | 1514.5 | 3003.6 | 4545.7 | 7304.3 |
| $\begin{aligned} & \text { Orbital } \\ & \underline{\text { Period (days) }} \end{aligned}$ | 88.0 | 224.7 | 365.2 | 27.3 | 687.0 | 4331 | 10,747 | 30,589 | 59,800 | 90,588 |
| $\frac{\text { Orbital }}{\text { Velocity }}(\mathrm{km} / \mathrm{s}$ | 47.4 | 35.0 | 29.8 | 1.0 | 24.1 | 13.1 | 9.7 | 6.8 | 5.4 | 4.7 |
| Orbital <br> Inclination (d egrees) | 7.0 | 3.4 | 0.0 | 5.1 | 1.9 | 1.3 | 2.5 | 0.8 | 1.8 | 17.2 |
| $\frac{\text { Orbital }}{\text { Eccentricity }}$ | 0.205 | 0.007 | 0.017 | 0.055 | 0.094 | 0.049 | 0.057 | 0.046 | 0.011 | 0.244 |
| $\xrightarrow{\text { Axial }}$ (degrees | 0.01 | 177.4 | 23.4 | 6.7 | 25.2 | 3.1 | 26.7 | 97.8 | 28.3 | 122.5 |
| Mean <br> Temperature | 167 | 464 | 15 | -20 | -65 | -110 | -140 | -195 | -200 | -225 |
| Surface <br> Pressure (bars) | 0 | 92 | 1 | 0 | 0.01 | Unkno wn* | Unkno wn* | Unkno wn* | Unknow n* | 0 |
| $\begin{aligned} & \text { Number of } \\ & \hline \text { Moons } \end{aligned}$ | 0 | 0 | 1 | 0 | 2 | 67 | 62 | 27 | 14 | 5 |
| Ring System? | No | No | No | No | No | Yes | Yes | Yes | Yes | No |
| $\begin{aligned} & \text { Global } \\ & \begin{array}{l} \text { Magnetic } \\ \hline \text { Field? } \end{array} \\ & \hline \end{aligned}$ | Yes | No | Yes | No | No | Yes | Yes | Yes | Yes | Unkno wn |
|  |  |  |  |  |  |  |  |  |  |  |

Site / http://nssdc.gsfc.nasa.gov/planetary/factsheet/

Gerges Francis Tawadrous/
$2^{\text {nd }}$ Course student - physics Faculty - People's Friendship University - Moscow -Russia.. gfrancis@yandex.ru gergesfrancis@yandex.ru

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## Chapter 1

## The Moon Orbit Geometry

## I- Introduction

The contradiction between the solar system Geometry \& The modern physics concepts can't be covered more..
It's easy for any researcher to discover such contradictions in a long series of astronomical events \& Data, So, we have to face the fact..

## The Modern Physics Fails To Explain The Solar System Geometry

In this chapter I prove that:

## The Moon Orbit Geometry Basics Are Out Of The Current Physics Basics

## i.e.

The Moon Orbit Geometry Surpasses (And May Contradicts) With The Modern Physics Basics
let's present some of the historical astronomical questions which have no answers yet...

1. What are the unified definitions of (the Matter -the Energy- the Time - the Space - the Charge - the Filed - The Light nature... etc)
2. What's The Earth- Moon Trajectory Explanation?
3. How Many Seconds are found In The Solar Day?
4. Why The Light velocity Is The Standard Velocity In The Universe? (this is the Einstein Basic hypothesis for the General Relativity where The GR depends only on an experimental result isn't supported by any theoretical explanation till NOW!)
5. What's the GRAVITY or How does the planet move?

The previous questions give us a shock...
The physics research during 110 years can't find an explanation for The Einstein Basic Hypothesis "The Light Velocity is standard in the Universe" where the Great General relativity theory till Now depends on an experimental result only!
$2^{\text {nd }}$ Course student - physics Faculty - People's Friendship University - Moscow -Russia..
gfrancis@yandex.ru gergesfrancis@yandex.ru +201022532292

## II-The Moon Orbit Relationships

## A- The Moon Orbit Relationships

Based on NASA Planetary datasheet (which is found in page No. 2 of this paper) the following relationships are discovered.

1st- The 5 Inner Planets Diameters Total (i.e. the diameters total of : Mercury- Venus - Earth - Moon - Mars) = Earth Circumference $=$ The Moon Motion Free Space (The free space for the moon motion From Perigee To Apogee).

## 2nd- The Moon Orbit Radius In Perigee Including The Moon Diameter = The Outer Planets Diameters Total= The Total Solar Eclipse Umbra Length.

## 3rd- The Solar System Planets Diameters Total = The Moon Orbit Radius (In Apogee)

These strange relationships I need to support clearly as possible So in next page I present the numbers calculations supporting these relationships.

## B- THE CALCULATIONS

## The First Relationship:

The 5 Inner Planets Diameters Total (i.e. The Diameters Total Of : Mercury- Venus - Earth - Moon - Mars) = Earth Circumference $=$ The Moon Motion Free Space (The free space for the moon motion From Perigee To Apogee). i.e.
a- The Diameters Total $=4879 \mathrm{~km}$ Mercury diameter + 12104 km Venus Diameter +12756 km Earth Diameter + 3475 km Moon diameter +6792 km Mars Diameter $=$ $=40006 \mathrm{~km}$
b- Earth Circumference $=\mathrm{R} * \Pi=12756 \mathrm{~km} * \Pi=40074 \mathrm{~km}(\mathbf{2})$

It's clear that

$$
1=2 \quad \text { (error } 0.1 \%)
$$

c- The Moon Orbit Radius in perigee $=363000 \mathrm{~km}$ and in apogee $=406000 \mathrm{~km} \ldots$ The difference between them $=$ 43000 km, this Value includes the moon himself So the space in the moon motion from perigee to apogee $=43000$ $-3475 \mathrm{~km}=39525 \mathrm{~km}$ and this number $=$ the Earth Circumference (error 1.2\%)

## $1=2=3$

## The First Relationship:

## The 5 Inner Planets Diameters Total = The Earth Circumference = = The Moon Motion Free Space.

## The Second Relationship:

## The Moon Orbit Radius In Perigee Including The Moon Diameter = The Outer Planets Diameters Total

 i.e.The Outer Planets Diameters Total $=142984 \mathrm{~km}$ Jupiter Diameter +120536 km Saturn Diameter +51118 km Uranus Diameter +49528 km Neptune Diameter +2390 km Pluto Diameter $=366556 \mathbf{k m}$

The Moon Orbit Radius in Perigee $=\mathbf{3 6 3 0 0 0} \mathbf{k m}$

$$
\begin{equation*}
1=2 \tag{2}
\end{equation*}
$$

(error 0.9\%)
And this $0.9 \%=$ the Moon diameter
i.e.

## The Moon Orbit Radius In Perigee Including The Moon Diameter = The Outer Planets Diameters Total

## Note :

The total solar eclipse is occurred only when the moon be in Perigee (the nearest point to the Earth) and in this Case the Solar Eclipse Umbra length reaches to the Earth which causes the total solar eclipse
And when the moon be far from the perigee the total eclipse doesn't occur but instead the Solar annular eclipse is occurred..
i.e.

The Total Solar Umbra Length = The Moon Orbit Radius In Perigee including the Moon Diameter.
i.e.

## The Second Relationship: <br> The Moon Orbit Radius In Perigee Including The Moon Diameter = The Outer Planets Diameters Total The Total Solar Umbra Length

## The Third Relationship:

It's easy Relationship because it's the addition of the previous 2 relationships
i.e.

The Third Relationship:

## The Solar Planets Diameters Total=

## $=$ The Moon Orbit Radius In Apogee

## (Apogee point is the most Far point from the Earth to which the moon can reach)

Additional Results:
$\Pi=($ Mercury Diameter + Venus Diameter + Moon Diameter+ Mars Diameter)/ (Earth Diameter)
$2 \Pi=($ Jupiter Diameter + Saturn Diameter + Uranus Diameter + Pluto Diameter )/ (Neptune Diameter)

## C- The Discussion

The Previous Relationships are clear \& trustee but have no explanations in our physics book!

The physicists will explain such Puzzled Relationships by one word only

## 'Pure Coincidences"

These relationships can't be "Pure Coincidences"

## Because they are "Accumulated Relationships"

Of course there's $\underline{\text { A Geometrical Reason for these Relationships but I }}$ need to add more strange relationships before to discuss their explanation

For that this discussion should be complete in the end of this Chapter after the studying of the solar eclipse \& the Metonic Cycle..

## III- The Solar Eclipse

I quote from "this paper abstract" the following sentence:
"The Sun diameter $=400$ folds the moon diameter, but the Sun/ Earth distance $=400$ folds the Moon/ Earth distance, for that reason the people on the Earth see the sun size equals the moon size approximately, that enables the total solar eclipse to be occurred before our eyes!
Is it just "a pure coincidence'? or there's a physical reason causes the equity of The Sun \& Moon Angular Diameters to occur the solar eclipse.

In following we discuss the eclipse process as well as to explain the Angular diameter meaning \& values.

Let's take a look deeply at the Solar Eclipse as following:


This Miracle needs some deep thinking, because this relationship is complex more than we consider
Let's look at it again..
The Sun diameter $=400$ folds the moon diameter, but the Sun/ Earth distance $=400$ folds the Moon/ Earth distance, based on that the total solar eclipse can be occurring.
The previous Equation has 2 sides

## The First Side

The Sun Diameter / The Moon Diameter $=400$
But
The Sun Diameter / The Earth Diameter $=$ 109 and
The Earth Diameter / The Moon Diameter =
But

## $3.66 * 109=400$

So 400 is the expressing Factor of the three diameters relationships! ( $2^{\text {nd }}$ Pure Coincidence)

## The Second Side

(The Sun - Earth distance $) /($ The Moon - Earth distance $)=400$
But
$($ Sun-Earth distance $) /($ Sun Diameter $)=$
Note: Sun Diameter = The Lunar umbra length! (also Pure Coincidence)
$($ The lunar umbra length $) /($ The total solar umbra length $)=3.66$
But

$$
3.66 * 109=400
$$

i.e.

400 is the Expressing factor of the three distances relationships..

# $1^{\text {st }}$ conclusion: <br> The Previous Relationship Is Accumulated Relationships Can't Be Found By "Pure Coincidences" Absolutely, <br> Of course There's A Geometrical Reason Causes These Relationships To be found enabling The Eclipse to occur. 

## 2nd- The Earth / Moon Diameters Rate =3.66

The Earth/ Moon diameters rate 3.66 in very essential factor in the Solar system geometry! Let's see that as following

## 1- The Earth Orbital Cycle

The Earth Orbital Cycle 365.25days $=$ The Moon Orbital Cycle 27.3 days * ( $\mathbf{( 3 . 6 6 ) ^ { 2 }}$

## 2- The Moon Gravity = (Moon Mass/ Earth Mass) * (3.66) ${ }^{2 *}$ The Earth Gravity <br> $=(3.66)^{2} \times(0.073 / 5.97) \times 9.8=1.6 \mathrm{~m} / \mathrm{s}^{2}$

The problem here we have no explanation for such strange relationships And the physicists also have not

# But the question is "Why we don't search here to know the truth geometry of the Solar system?" 

Why the physicists do nothing but told us such Relationships are just 'Pure Coincidences" where all of us understand clearly there's a real reason behind?!

## 3rd- $\quad$ The Sun / Earth Diameters Rate $=109$

Also The Sun / Earth Diameter rate (109) is very essential in the solar system Geometry let's see that as following:

## Mercury Orbital Distance $=$ Mercury diameter * $\mathbf{1 0 9}^{2}$

## Earth Orbital Distance $=$ Earth diameter $* \mathbf{1 0 9}^{\mathbf{2}}$

* Saturn Orbital Distance $=$ Saturn diameter * 109²

The physicists tell us the previous Relationships are only 'Pure Coincidence" '! have no explanations!

But if you see the angular diameters of these planets you will find another surprise as following:

## The Planets Angular Diameters:

| - | Mercury | $\mathbf{0 . 0 0 5}$ degrees |
| :--- | :--- | :--- |
| - | Venus | 0.006 degrees |
| - | Earth | $\mathbf{0 . 0 0 5}$ degrees |
| - | Mars | 0.002 degrees |
| - | Jupiter | 0.011 degrees |
| - | Saturn | $\mathbf{0 . 0 0 5}$ degrees |
| - | Uranus | 0.001 degrees |
| - | Neptune | 0.001 degrees |
| - | Pluto | 0 degrees |

The same 3 planets (Mercury, Earth $\mathcal{\&}$
Saturn) who follow the Planet orbital
distance Equation, these same 3 planets
have The Same Angular Diameters!:

## Is this also "Pure Coincidence"!!

## 1- The Planet distance equation is "The Planet Orbital Distance $=$ The Planet Diameter ${ }^{*} \mathbf{1 0 9}^{\mathbf{2}}$ )

## 4th- The Angular Diameter Of The Planets

## The Angular Diameter is:

The measurement of the diameter of a distant object from the perspective of the angle resulting between the observer and the object's outer edges. Also known as the 'visual diameter.
http://rechneronline.de/sehwinkel/angular-diameter.php
(This site calculate the Planet angular diameter based on the equation $\alpha=2 * \arctan (g /(2 r)))$

After The Angular Diameter calculations, I found the following

- Moon Angular Diameter at orbit radius 374250.758=0.532 degrees Sun Angular Diameter at Orbit radius $149.6 \mathrm{mkm}=0.532$ degrees
- The Moon Angular Diameter at orbit radius $384400=0.518$ degrees
- The Moon Angular Diameter at orbit radius $363000=0.548$ degrees So, we can see that the total solar eclipse can be occurred at angle 0.532 degrees only,

For that the Earth, Sun, Moon Diameters \& orbital distances create together a harmony design guarantees that the degrees should be $\mathbf{0 . 5 3 2}$ for the Sun \& the Moon which enables the total solar eclipse..

This Data analysis leads us to the following conclusion

# $2^{\text {nd }}$ Conclusion <br> The Planet Diameter Is Related To The Planet Orbital Distance <br> i.e. <br> The Planet Mass is dependent on the Motion i.e. <br> The Rest Mass Concept Is Unreal 

## 5th- The Earth / Moon Relationship

The specific relationship between the Earth \& the Moon gives more puzzled data.. ad following:

## First:

## 149.6 millions $\mathbf{k m}$ (The Earth orbital distance) / 0.406 millions $\mathbf{~ k m}$ the Moon orbital distance (in apogee) $=366.5$ (error 0.5)

What does the relationship tell us?
Does this relationship tell us that, the 366.6 Earth rotations periods during the year are found based on the rate between the Earth orbital distance \& the Moon orbital distance?!

It's very new Geometry Concept, But Not clear yet before my eyes!
The Earth /Moon orbital distances rate causes the Earth Cycle period around the Sun!!
Of course it's just idea to explain the puzzled data

## Second

* The Moon diameter is $27.3 \%$ of the Earth Diameter, but the moon turns around his axis once in 27.3 days where the day is defined by the earth rotation around her axis! "Pure Coincidences in Numbers"
* The Earth speed ( $29.8 \mathrm{~km} / \mathrm{s}$ ) and the Moon speed is $1.0 \mathrm{~km} / \mathrm{s}$ (But The Earth turns around her Axis 30 times monthly and the moon turns 1 time monthly around his axis). "Pure Coincidences in Numbers"

If we return to the total solar eclipse, in which the total solar umbra length depends on the moon diameter but this umbra length $=$ the moon Orbit Radius when the Moon be in perigee..
That tells us the Earth has such Specific Moon Whose Circumference Caused An Umbra Length = The Moon Orbit Radius!!

And the Solar \& Lunar eclipse Cycle (Metonic) depends on the sidereal years 365.25 days ( 366.6 rotations periods),
Surely I have no explanation for this very complex "pure Coincidences" but I know there's a Geometrical Concept causes that which we don't know yet!! at the end of this chapter we should extend this discussion.

# 6th- The Moon Mass Distribution (another Pure Coincidence) 

The following text I quoted from the following book

## ECLIPSE

The celestial phenomenon that changed the course of history
DUNCAN STEEL
Foreword by Paul Davies
Page 385

The Text:
"We say that it is "tidally locked." Over the eons the lunar spin rate has been damped by Earth's gravity, because the Moon's mass distribution is not uniform. There is a greater density beneath the lunar nearside, displacing its center of mass away from its axis of symmetry, and the pull of the Earth keeps that greater mass directed towards us.

## It's another Pure Coincidence!!

Why the Moon Mass Distribution is not uniform? Is that repeated for any other planet?!

But who can object this interesting explanation which is based on another Pure Coincidence..

It's NOT True
Our physics book is insufficient and the physicists tell us mysteries \& imaginaries concepts about this universe!

## A comment

I have many \& many as such puzzled data, I'll write the complete idea in the general discussion of this chapter..

But I write this data here because I want to explain that,

## The Solar system geometry surpasses the current physics concepts

The problem here is difficult because
The current physics depends on the experimental data which creates an acceptable logic by all of us
But the solar system data doesn't follow this current physics..

## That tells us the experimental logic is imperfect!

This fighting between the experimental logic \& the solar system geometry is a fighting for the universe physics foundations.

But the physicists don't help here any way!
They are out of this fighting, insisting all these data are just "pure Coincidences" which makes the universe to depend on "The Pure Coincidences" and makes the physics book to be useless!!

It's not clear for me, why the physicists don't help!
Why No One interests for the truth?!
What's in their Mind to avoid this Data treasury of the solar system and consider all of the, as "Pure Coincidences" Not need for explanations.. ! There's something wrong here, in the books and may in the minds...

## VI- Metonic Cycle

Metonic Cycle is the Cycle of the Moon orbit regression which completes in 19 sidereal years $(19 * 365.25=6939.75$ days $)$

And this Cycle defines the Solar \& Lunar Eclipse events during this period.

This Cycle gives us also some very strange data, let's take a deep look.
The following figure shows some data about Metonic Cycle. ${ }^{2}$


Fig. 1.5. The plane of the lunar orbit is tilted by just over $5^{\circ}$ with respect to the ecliptic, i.e. the Earth's orbit around the Sun. In addition, the line of the nodes (the plane intersection points where eclipses occur as Earth, Moon and Sun are in line) regresses clockwise by $19^{\circ}$ per year. This regression gradually shifts the two windows per year when eclipses can occur, earlier, by about 19 days per year. As shown in the diagram, when the nodes are at right angles to the Sun-Earth line, the Moon's umbra will sail way above (or below) the Earth at New Moon.

2- Quoted from "Total Solar Eclipses and How to Observe Them ....Martin Mobberley' P. 11

## Metonic Cycle Strange Data

1st- The moon motion during Metonic cycle $=\mathbf{6 1 4 . 2}$ millions $\mathbf{k m}=$ the distance from the moon To Jupiter.

## The Calculations as following:

a- The Moon orbit Circumference $=\Pi * 2 \mathrm{R}=\Pi^{*} 2 * 384400 \mathrm{~km}$ (the Moon orbital distance) $=2416228.5$ millions km
b- The Moon complete his orbit once each 27.3 days
c- So, The total distance during Metonic Cycle (6939.75 days) $=$ 2416228.5 * $254.2=\mathbf{6 1 4 . 2 1}$ millions $\mathbf{~ k m}$
d- Jupiter orbital distance 778.6 m km - Earth orbital distance $149.6 \mathbf{m k m}=629 \mathbf{~ m ~ k m}$

$$
1=2_{(\text {error } 2.3 \%)}
$$

## 2nd- $\quad$ The moon motion during Metonic cycle $=614.2$ millions $\mathrm{km}=4 *$ the Earth Orbital distance (149.6)

1- The Metonic distance $614.2 \mathrm{~m} \mathrm{~km}=\underline{4}$ * $153.2 \mathrm{~m} \mathrm{~km}(153.2 \mathrm{mkm}=$ The Earth orbital distance 149.6 m km with error $2.8 \%$ )

2- The Earth has a cycle of 4 years ( 365.25 days $\underline{4}=1461$ days)

## 3rd- More Metonic Cycle Relationships

a- The Metonic Cycle depends on the sidereal year (365.25 days) although Metonic Cycle is the moon orbit Cycle, there's no explanation why the moon orbit cycle depends on the Sidereal cycle (365.25 days)
b- The Sun circles The Earth during 365.25 days $=$ the Earth Orbital Period! Which's "another Pure Coincidence" ...by the way there's no any two planets in the solar group have the same Cycle period, So why the Sun has the same cycle Period as the Earth?! And On which the Metonic Cycle depends?!
c- Also as we know the Metonic Cycle (which is The moon Cycle) depends on the solar Cycle (19 sidereal years)!. And because Metonic Cycle ends on the last day of the 19 Sidereal years (first condition) and because the difference between the Lunar year 354.3 days and the sidereal year 365.25 days is 11 days (the second condition) for that the people were enabling to create the solar lunar calendar! (another Pure Coincidence)!

## V- The Bode Law

The Titius-Bode law (sometimes termed just Bode's law) is a hypothesis that the bodies in some orbital systems, including the Sun's, orbit at semimajor axes in a function of planetary sequence The formula suggests that, extending outward, each planet would be approximately twice as far from the Sun as the one before. The hypothesis correctly anticipated the orbits of Ceres (in the asteroid belt) and Uranus, but failed as a predictor of Neptune's orbit and has since been discredited further.

| https://en.wikipedia.org/wiki/Titius\%E2\%80\%93Bode_law |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Planet | $\mathbf{k}$ | T-B rule distance <br> (AU) | Real distance <br> (AU) | \% error (using real distance as the <br> accepted value) |
| Mercury | 0 | 0.4 | 0.39 | $2.56 \%$ |
| Venus | 1 | 0.7 | 0.72 | $2.78 \%$ |
| Earth | 2 | 1.0 | 1.00 | $0.00 \%$ |
| Mars | 4 | 1.6 | 1.52 | $5.26 \%$ |
| Ceres $^{1}$ | 8 | 2.8 | 2.77 | $1.08 \%$ |
| Jupiter | 16 | 5.2 | 5.20 | $0.00 \%$ (ciation needeal |
| Saturn | 32 | 10.0 | 9.54 | $4.82 \%$ |
| Uranus | 64 | 19.6 | 19.2 | $2.08 \%$ |
| Neptune | 128 | 38.8 | 30.06 | $29.08 \%$ |
| Pluto ${ }^{1}$ | 256 | $77.2^{2}$ | 39.44 | $95.75 \%$ |

${ }^{1}$ Ceres was considered a small planet from 1801 until the 1860s. Pluto was considered a planet from 1930 to 2006. Both are now classified

## The Comment

The Bode Law predicts 8 Planets orbital distances with error less than 5\% And fails to predicts the rest 2 planets!

Why The physics has no explanation for this Bode Law?
Why the rest 2 planets are out of the Bode law?
Why the 8 planets are followed the Bode law?

The Physicists found 2 planets out the Bode Law and then attacked him by every method to prove that, the Bode law is incorrect.. but No explanation why some planets followed the rule \& some Not

Their explanation is just "Bode Law is a Pure Coincidence"!!

## Chapter 1 General Discussion

I can summarize the general conclusions of as following:

The Planet Diameter is depended on the Planet Orbital Distance i.e.

The Planets are dependent on each other in their origins \& motions i.e.

# The Planet Mass is found based on the Motion 

 i.e.The Rest Mass Concept is Unreal And That's A Critical Proof Against The GR Theory

Note 1: This Conclusion We'll need In The Last Chapter Of This Paper

## Note 2:

In this paper I wrote very short report about my claim, but very wide discussions about every point you can find in my previous papers, where I fight in this place from around 3 years, my papers are following:
The Solar System Geometry (Part I)
http://vixra.org/abs/1509.0126
The Time And Distance Definitions In The Solar System
http://vixra.org/abs/1509.0241
The 2737 Egyptian Phenomenon \& Its identical distance 2737 millions km
http://vixra.org/abs/1509.0242
The Mars Data Analysis Proves the Rest Mass Concept is Unreal http://vixra.org/abs/1509.0244

The Solar Eclipse "The Gravitation Theory Puzzle"
http://vixra.org/abs/1509.0264
$2^{\text {nd }}$ Course student - physics Faculty - People's Friendship University - Moscow -Russia..
gfrancis@ yandex.ru gergesfrancis@yandex.ru +201022532292

In the Previous Chapter, I tried to show that, the word "Pure Coincidences" which describes the different Solar System Geometry Data, is a strong proof for the physics failure to understand the solar system Geometry.

The common mind can't accept such lies.. and the physicists told us that based on their authorities and NOT based on any knowledge because they know nothing.

And because there's many changes occur for The Earth (specially the Earth Climate changes), in addition to the unexplained astronomical phenomena, we have to take a deep look at the method by which the physicists create our Physics Concepts to see from where the contradictions are started.

The Nest Chapter will discuss the Experiment Scientific Rationality.

## Chapter 2

## The Experiment Scientific Rationality

## 1- Introduction

The Experiment as a method to discover the universe was an important question for very long time, and researched by hedge numbers of the researchers
Even this subject itself belongs to the philosophy more than to the physics
Any way I want to deal this subject from a different point of View
I don't interest for the theoretical basics of the Experiment using in the physics labs,

But I want to discuss The Result Of The Experiment Using along more than 800 years..

So this chapter will interest to discuss The following three questions:

- Why our physics Concepts can't explain the solar system geometry?
- How to evaluate the current physics science?
- How is useful the machine as the basic result of the Modern physics?


## IST OUESTION: Why our physics Concepts can't explain the solar system geometry?

The Experiment using as a tool to study physics started from around 800 years with the calling of Roger Bacon (1214-1292) to consider the Experiment as the physics research tool.

With The experiment, the Physics Science nature changed \& produced the huge number of inventions \& machines which form the modern daily live

Shortly, The Experiment is the modern civilization method

## I- The Experiment Scientific Rationality

The Scientific Rationality definition:
There's a hypothesis on which the theory is built and proved by the Experimental tests \& based on this theory we can deduce more conclusions which can be proved later by more experiments.

This is the Scientific Rationality of The Experiment which is used from 800 years.

And through this process the physics produced her Science body
Actually the Experiment is a strong method for search providing a real proof for the theories through a logical thinking method..

Although the previous report about the Experiment Scientific Rationality, we find that the Experiment is a weak method to discover the universe and even disguises us

The Solar system analysis gives us many puzzled data can't be understood based on the current experimental physic science which tells us that the solar system geometry logic is beyond the experimental logic

We need to look deeply here..

The solar system is the another wing for the same bird,

So, The physics concept is based on the Experimental result at one side \& The Theoretical Geometry (i.e. The solar system geometry data) at the other Side

For that, The Theoretical Geometry (The Solar System Geometry Data) isn't a confirmation for the experimental results

But
The Theoretical Geometry (The Solar System Geometry Data) is another Source of The Physics \& Geometry Basics Which Can't Be Proved By The Experiment.

My claim is as following:

> The Physicists Used The Experimental Data Only And Ignored The Astronomical Data In Their Creation For The Physics Science Theories

> And that caused the contradiction between the physics concepts \& the solar system geometry basics.

2nd OUESTION: How do evaluate the current physics science?

1- The Basics of Newton Mechanics are destroyed by the Relativity theory which faces many serious attacks now specially after the discovery of the Neutrino 'faster than light'..
a. The news "Neutrino 'faster than light' you can find in any news paper as (http://www.bbc.com/news/science-environment17560379)

2- The process of Rebuilding The Physics Book is a continuous process, which means
a. The Physics Basics \& Concepts become incorrect after some time
b. The physicists create new Physics Basics \& Concepts which live for short period and become incorrect as the previous
c. This process is repeated always along 800 yearsand NOTHING Now is correct in the physics book has age more than 100 years!
d. This is NOT natural case because The Universe Is Stable \& The Nature Laws Are The Same From Ancient Times!

3- It's Noteworthy That The Physicists Didn't Try To Change The Experiment "As Method To Research \& Discover The Physics Science" During 800 Years Although The Physics Science Structure Is Destroyed Many Times During This Period!!

4- The physics scientist become very Rich \& Famous because of the industry...!

5-I Claim The Physicists Used The Physics Science As A Legal Cover For The Industry, Protecting The Industry,
Regardless The Truth of The Physics Science,
And They Teach Us The Lies To Protect \& Support The Industry, And For That Reason

## The Physicists Ignored Intentionally The Solar System Data

And Fought The Astronomers To Prevent Them To Create Any Theory Started From The Solar System Geometry

And Made The Experimental Data The Only Source For The Physics Science Because The Experiment Creates The Machines…

## It's A Conspiracy…

## I Claim For The United Nations Investigation

## rd OUESTION: How is useful the machine as the basic result of the Modern physics?

## 1st- The Machine Production Process Result

Every one knows how the machine is useful for us, in this report I refer to just the negative effects only, which I summarize as the following:

A- The Earth Climate Change negatively

## B- The Earth Air \& Water Pollutions

These Results make the Physicists Situation is more difficult because the machine is the only result for the physics searching process for 800 years..

## 2nd- The Machine Cycle

We need to take a deep look at the machine
Let's discuss the problem of the cars pollutions which is discussed now everywhere because of The Volkswagen scandal http://www.bbc.com/news/business-34324772

## A- what's The Main Problem?

Every one knows that, the electricity can be produced by the rivers water (without pollutions) and the car which move by electricity is invented already and we can now make a replacement for the whole industry to prevent the polluted gases! So what's the problem?

The problem is who will pay the replacement process? We should think very deeply in each word...
The replacement for the Whole Cars Production Industry means The replacement of millions of factories..
The money which need to be paid NO ANY GOVERNMENT CAN PAY!
So, we have 2 options, to choose from them:

1. To still with the old production methods causing the people death by the pollution (at least because of the high temperature where 2015 is the most heat year in the human history as the reports told us) or
2. The cars producers should get bankruptcy..

## B- The Social General Error

There's another question related to the previous problem...
If (Controversy) the cars producers accept this idea to replace their factories...
What we should do with the old car in the street?

The people who bought Millions Of The Cars, and they have the Cars now, how we order them to destroy their cars because their cars cause the pollutions..

By the way, the Physicists invented this car and there was no restrictions for their work, and no one told them that the Car destroys the Planet!

There's something wrong here!
The rich man choose the machine features and order the physicist to create such machine without any Restrictions or Procedures ..

Even the great scientists can produce the nuclear bomb easily..
And the only judge for the physicist is his Conscience...

It's a joke...
Great.

# Why <br> The <br> United Nations didn't create Restrictions for the invention process to protect the Planet?!! 

## C- The World War

The last question in the same subject as the following

## Is The Car industry is exceptional?

The fact as the following
After the $1^{\text {st }}$ world war the industry started to rebuild the destroyed countries by the wars and established new factories...
So the industry sold the products to the world population...
This process continue for some time (from 40-70 years), then the world gets "The General Demand Saturation" which means the biggest percentage of the Earth population already bought the industry products such as The apartments, Cars, Trains, Ships...etc these Products which need very long time to be replaced...

So the production rate decreases resulting to the decreasing of the Purchase power..
And after some time the world economy transfer into the services economy in place of the production economy..

Then the Depression is occurring and continuous as what happen in the Great Depression 1929-1939

## Why The Depression Is Occurring?

Because the factory can't produce in full power because the people already have the product

## How to deal with the Depression?

The only Solution is the world war,
If the world war doesn't occur the whole industry of the Earth will get Bankruptcy..

The World War is a part of the Earth Economic Cycle which depends on the Machines.

> The industry needs to create a world war each defined period to destroy the Sold Products to be enable to produce new products as well as to replace the industry process, SO
> The Industry Creates The Current World War.
> This claim needs an investigation by the United nations

Chapter 3
The Physics Question

## The Earth Great Earthquake

Before December 2012 there were many claims that in December 2012 the Earth will face the greatest Earthquake in human history. The claims of the greatest Earthquake are found in many sites as the following
http://en.wikipedia.org/wiki/2012_phenomenon

## http://www.timeanddate.com/calendar/maya-world-end.html

Here I don't evaluate this information if it's correct or incorrect
I only use our conclusion in chapter one to see How the vision will change with this new concept.

The chapter one conclusion is as the following:

## The Planet Diameter Is Depended On The Planet Orbital Distance

 i.e.
## The Planets Are Dependent On Each Other In Their Origins \& Motions

i.e.

The Planet Mass Is Found Based On The Motion
i.e.

## The Rest Mass Concept is Unreal And That's A Critical Proof Against The Gr Theory

## The Earthquake date was mistaken! Why?

The earthquake shouldn't hit the earth in December 2012, that was mistaken date! And why?

Because we know now that the Earth Matter (Mass) is portable

## by the Earth Motion

And because the Earth Matter (Mass) depends on the Earth Motion, the Earth Mass should be effected by the Earth motion Cycle..

So the Motion Cycle $(365 .+365+365+366=1461$ days $)$ isn't just motion Cycle but also the Earth Matter (Mass) is influenced by this Cycle..

That means the greatest earthquake - if truth- can't reach to the Earth Matter in December 2012

But should wait after one complete Cycle (1461days)

## So The Correct Date should be after December 2016

As the sun rays sent to the Earth needs 500 seconds to reach to the Earth That's the same case the Earthquake strong force should reach to the Earth Matter (Mass) after one complete Cycle (1461 days)

## The Conclusion

## The Earth Greatest earthquake -if Truth- will

 hit the Earth Mass after December 2016..
## Appendix No. 1

## The Egyptian Astronomic Phenomenon 2737

## 1- INTRODUCTION

On $3^{\text {rd }}$ December 2012 aligned 3 planets (Mercury, Venus and Saturn) on the three Great Pyramids heads in Egypt, the Phenomenon repeated just once each 2737 years.
I called this phenomenon

## 'The 2737 Egyptian Astronomic Phenomenon'



In this paper I present the proof that the 2737 Egyptian Phenomenon Cycle depends on the Moon Metonic Cycle! And then in the $3{ }^{\text {rd }}$ Chapter I'll discuss how the three planets (Mercury, Venus and Saturn) depend on the Earth- moon orbit in their motions!
In this introduction I'll refer just to some interests we got by the 2737 Egyptian phenomenon.

## Some interests we got by 2737 Egyptian phenomenon:

* First we know that the Pyramids builders recognized the different astronomic cycles, and especially 2737 phenomenon, for that they built just 3 pyramids at its parallel line.
* Second, we know that the Pyramids builders knew the relative distances between the planets and built the pyramids at their rates!
* Third where the 2737 phenomenon repeated on $3^{\text {rd }}$ December 2012 for the third time, so the Number 8211 years is important number for human life or at least for the pyramids age.
* Fourth, I may claim that the Pyramids builders built the three Pyramids specifically for the 2737 Egyptian phenomenon.
* Note: The Great Pyramid Height is 5776 Egyptian inches = the distance between the Sun \& Pluto (each inch $=1$ million kilometer)


## $1^{\text {ST }}$ SECTION

## Why the Lunar year doesn't correspond with the sidereal year at any cycle? ${ }^{3}$

We know that the moon turns with the Earth around the sun, so why the lunar year which equals 354.36 days (lunar Synodic period 29.53 days x 12 months) doesn't correspond to the Sidereal year that equals 365.25 days at any cycle?
We see the 32 Sidereal year a cycle $\quad=11688$ days
But the Lunar year cycle $=33$ years - 5.81 days $=11693.88-5.8=11688$
And why there's this addition 5.81 days to prevent both periods to meet each other

We know that the plane of lunar orbit regresses 19 degrees each year that causes the eclipse to come early 19 days each year ${ }^{4}$
So that said the movement of 19 degrees causes change for 19 days
And now we see the lunar year come early 5.81 days, and the lunar plane has inclination to ecliptic equal approximately 5.14 degrees...
Can I suppose that this difference between Sidereal Cycle 11688 days and Lunar Cycle 11693.88 days which equals 5.8 days caused by the lunar plane inclination 5.14 degrees (later we will discuss How?) When we divided this inclination value 5.14 degrees (or the period 5.8 days) at 360 we find that,
The Lunar orbital inclination causes the lunar Synodic day to come early approximately 21 minutes daily..
That lead to the following results

- The correct Synodic month is 29.515
- The correct Synodic year is 354.1818 days And by such way

The lunar cycle which contain 33 Synodic year $=11687.999$ days
The Sidereal Cycles which contain 32 sidereal year $=11688$ days
Where both come to end in the same day
And So the cycle of 32 sidereal years equals 33 modified Lunar Synodic years (modified lunar year $=354.1818$ days) perfectly
${ }^{3}$ - the day defines here approximately 86164 seconds where the sidereal year is 365.25 days.
${ }^{4}$ - Total Solar Eclipses and how to Observe them- Martin Mobberley- page. 11

## The Basic Lunar Year 360 Days

## Now I modified the lunar year already from 354.36 to be $\mathbf{3 5 4 . 1 8 1 8}$ days

But there's another year related to the moon,
In this year we should added the modified year 354.1818 to the difference of days caused by the lunar orbital inclination which was 5.8 days approximately
So $5.8+354.1818=360$ days approximately
That's the ancient biblical year And I'll call it

## The Basic Lunar Year

Now we have three types of years

- The Basic Lunar Year =360 days
- The modified lunar Synodic year =354.1818 days
- The Sidereal year
$=365.25$ days
And we'll see how the Metonic Cycle effect on each of them


## $3^{\text {RD }}$ SECTION

## The 2737 Egyptian Astronomic Phenomenon depends on Metonic Cycle

The Metonic Cycle defines as a moon Cycle continues for 19 Sidereal Orbit year which equals 6939.75 days, and Metonic Cycle made because the Lunar orbit plane regresses yearly 19 degrees that causes the eclipses to come early 19 days yearly.

The Following Table shows How The Metonic Cycle Effect On The
Different Years

| Metonic Cycle Number | Sidereal years No. (365.25 days) | Number of modified Lunar year (equals 354.1818 days) |  | The Basic lunar Year Numbers (360 days) <br> For each Metonic Cycle |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Lunar years in each Metonic cycle | The Lunar years (354.1818days) Numbers For each Metonic Cycle |  |
| M. Cycle 1 | 19 S. Year | 19 | 19 Lunar Y. + 210.295 days | $\begin{aligned} & 19 \text { BLY (Basic Lunar Year) + } \\ & 99.75 \mathrm{~d} \text { (days) } \end{aligned}$ |
| M. Cycle 2 | 38 S. Y | 20 | 38 L. Y. $+420.59 \mathrm{~d}=$ <br> 39 L. Y + 66.408 d | 38 BLY+ 199.5 d |
| M. Cycle 3 | $57 \mathrm{~S} . \mathrm{Y}$ | 19 | 58 L. Y + 276.703 d | $57 \mathrm{BLY}+299.25 \mathrm{~d}$ |
| M. Cycle 4 | 76 S. Y | 20 | 77 L. Y +486.998 d = <br> 78 L. Y + 132.8162 d | $\begin{aligned} & 76 \text { BLY }+399 \mathrm{~d}= \\ & 77 \text { BLY }+39 \text { days } \end{aligned}$ |
| M. Cycle 5 | 95 S. Y | 19 | 97 L. Y + 343.111d | 96 BLY+138.75d |
| M. Cycle 6 | 114 S. Y | 20 | $\begin{aligned} & 116 \text { L.Y +553.406d = } \\ & 117 \text { L. Y + } 199.224 \mathrm{~d} \end{aligned}$ | 115 BLY+ 238.5 d |
| M. Cycle 7 | 133 S. Y | 20 | $\begin{aligned} & 136 \text { L. Y +409.519d= } \\ & \mathbf{1 3 7} \text { L. } \mathbf{Y}+\mathbf{5 5 . 3 3 7 4 d} \end{aligned}$ | 134BLY+338.25d |
| M. Cycle 8 | 152 S. Y | 19 | 156 L. Y +265.6324d | 153 BLY+438d= 154 BLY+78days |
| M. Cycle 9 | 171 S. Y | 20 | $\begin{aligned} & 175 \mathrm{~L} . \mathrm{Y}+475.9274 \mathrm{~d}= \\ & 176 \mathrm{~L} . \mathrm{Y}+121.745 \mathrm{~d} \end{aligned}$ | 173 BLY+ 17.75d |
| M. Cycle 10 | 190 S. Y | 19 | 195 L. Y+332.0406d | $192 \mathrm{BLY}+277.5 \mathrm{~d}$ |
| M. Cycle 11 | 209 S. Y | 20 | $\begin{aligned} & \text { 214L.Y +542.3356d= } \\ & 215 \mathrm{~L} . \mathrm{Y}+188.1538 \mathrm{~d} \end{aligned}$ | $\begin{aligned} & \text { 211 BLY+ } 37.25 \mathrm{~d}=212 \mathrm{BLY}+ \\ & 17.25 \mathrm{~d} \end{aligned}$ |
| M. Cycle 12 | 228 S. Y | 20 | $\begin{aligned} & 234 \text { L. Y +398.4488d= } \\ & 235 \text { L. Y +44.267d } \end{aligned}$ | 231 BLY+117d |
| M. Cycle 13 | 247 S. Y | 19 | 254 L. Y +254.652d | 250BLY+216.75d |
| M. Cycle 14 | 266 S. Y | 20 | $\begin{aligned} & 273 \text { L. Y +464.857d= } \\ & 274 \text { L. Y + 110.675d } \end{aligned}$ | 269 BLY+216.5d |
| M. Cycle 15 | 285 S. Y | 19 | 293 L. Y +320.9702d | $\begin{array}{lcc} \hline 288 \quad \text { BLY+416.25d }= & 289 \\ \text { BLY }+56.25 \mathrm{~d} & \\ \hline \end{array}$ |
| M. Cycle 16 | 304 S. Y | 20 | $\begin{aligned} & \text { 321L.Y +531.2653d= } \\ & 313 \mathrm{~L} . \mathrm{Y}+17.0834 \mathrm{~d} \end{aligned}$ | 308 BLY+156d |
| M. Cycle 17 | 323 S. Y | 20 | $\begin{aligned} & 332 \text { L. Y + 387.378d= } \\ & 333 \text { L. Y + 33.1966d } \end{aligned}$ | 327 BLY+255.75d |
| M. Cycle 18 | 342 S. Y | 19 | 352L.Y+243.4916d | 346 BLY+ 355.5d |
| M. Cycle 19 | 361 S. Y | 20 | $\begin{aligned} & \text { 371L.Y +453.7866d= } \\ & 372 \text { L. Y + } 99.60486 \mathrm{~d} \end{aligned}$ | $\begin{aligned} & 365 \text { BLY+455.25d= } \\ & 366 \text { BLY+ } 95.25 \mathrm{~d} \\ & \hline \end{aligned}$ |
| M. Cycle 20 | 380 S. Y | 19 | 391 L. Y + 309.8992d | 385 BLY+195d |
| M. Cycle 21 | 399 S. Y | 20 | $\begin{aligned} & 410 \mathrm{~L} . \mathrm{Y}+520.1948 \mathrm{~d}= \\ & 411 \mathrm{~L} . \mathrm{Y}+166.013 \mathrm{~d} \end{aligned}$ | 404 BLY+294.75 d |
| M. Cycle 22 | 418 S. Y | 20 | $\begin{aligned} & 430 \text { L. Y + 376.308d } \\ & \text { 431 L. Y + 22.12626d } \end{aligned}$ | $\begin{aligned} & 423 \text { BLY+394.5d= } \\ & 424 \text { BLY+ } 34.25 \mathrm{~d} \end{aligned}$ |
| M. Cycle 23 | 437 S. Y | 19 | 450 L. Y + 232.4212d | 443 BLY+ 134.25d |
| M. Cycle 24 | 456 S. Y | 20 | 469 L. Y +442.7162d= | 462 BLY+ 234d |

Gerges Francis Tawadrous/ 38
$2^{\text {nd }}$ Course student - physics Faculty - People's Friendship University - Moscow -Russia..
gfrancis@ yandex.ru gergesfrancis@yandex.ru +201022532292

IN THE ALMIGHTY GOD NAME
Through the Mother of God mediation
I do this research

|  |  |  | 470 L. Y + 88.5344d |  |
| :---: | :---: | :---: | :---: | :---: |
| M. Cycle 25 | 475 S. Y | 19 | 489 L. Y +298.829d | 481 BLY+ 333.75d |
| M. Cycle 26 | 494 S. | 20 | $\begin{aligned} & 508 \text { L. Y + } 509.1244 \mathrm{~d}= \\ & 509 \mathrm{~L} . \mathrm{Y}+154.9426 \mathrm{~d} \end{aligned}$ | $\begin{aligned} & 500 \text { BLY+433.5d= } \\ & 501 \text { BLY+ } 73.5 \mathrm{~d} \end{aligned}$ |
| M. Cycle 27 | 513 S. Y | 20 | $\begin{aligned} & 528 \text { L. Y + } 365.2376 \mathrm{~d}= \\ & \mathbf{5 2 9} \text { L. Y +11.0558d } \end{aligned}$ | 520 BLY+173.25d |
| M. Cycle 28 | 532 S. Y | 19 | 548 L. Y +221.3508d | 539 BLY+273d |
| M. Cycle 29 | 551 S. Y | 20 | $\begin{aligned} & 567 \mathrm{~L} . \mathrm{Y}+431.6458 \mathrm{~d}= \\ & 568 \mathrm{~L} . \mathrm{Y}+77.464 \mathrm{~d} \end{aligned}$ | $\begin{aligned} & 558 \text { BLY+ } 372.75 \mathrm{~d}= \\ & 559 \mathrm{BLY}+12.5 \mathrm{~d} \end{aligned}$ |
| M. Cycle 30 | 570 S. Y | 19 | $587 \mathrm{~L} . \mathrm{Y}+287.759 \mathrm{~d}$ | 578 BLY+112.5d |
| M. Cycle 31 | 589 S. Y | 20 | $\begin{aligned} & 606 \mathrm{~L} . \mathrm{Y}+498.054 \mathrm{~d}= \\ & 607 \mathrm{~L} . \mathrm{Y}+143.8722 \mathrm{~d} \end{aligned}$ | 597 BLY+ 212.25 d |
| M. Cycle 32 | 608 S. Y | 20 | $\begin{aligned} & 626 \mathrm{~L} . \mathrm{Y}+354.1872=627 \mathrm{~L} . \\ & \mathrm{Y} \end{aligned}$ | 616 BLY+ 312d |
| M. Cycle 33 | 627 S. Y | 19 | 646 L. Y + 210.295 | 635 BLY+ 441.75 d $=$ <br> $636 \mathrm{BLY}+51.75 \mathrm{~d}$   $\quad \$$ |
| M. Cycle 34 | 646 S. Y | 20 | $\begin{aligned} & 665 \mathrm{~L} . \mathrm{Y}+420.5754 \mathrm{~d}= \\ & 666 \mathrm{~L} . \mathrm{Y}+\mathbf{6 6 . 3 9 3 6 d} \end{aligned}$ | 655 BLY+151.5d |
| M. Cycle 35 | 665 S. Y | 19 | 685 L. Y + 276.6886 d | 674 BLY+ 251.25 d |
| M. Cycle 36 | 684 S. Y | 20 | $\begin{aligned} & 704 \text { L. Y +486.9836d= } \\ & 705 \mathrm{~L} . \mathrm{Y}++132.801 \mathrm{~d} \end{aligned}$ | 693 BLY+ 351 d |
| M. Cycle 37 | 703 S. Y | 19 | 724 L. Y + 343.096d | 712 BLY+ 450.75 d <br> $=713 \mathrm{BLY}+90.75 \mathrm{~d}$   |
| M. Cycle 38 | 722 S. Y | 20 | $\begin{aligned} & 743 \mathrm{~L} . \mathrm{Y}+553.391 \mathrm{~d}= \\ & 744 \mathrm{~L} . \mathrm{Y}+199.2092 \mathrm{~d} \end{aligned}$ | 732 BLY+190.5d |
| M. Cycle 39 | 741 S. Y | 20 | $\begin{aligned} & 763 \text { L. Y +409.5042d= } \\ & 764 \text { L. Y + 55.3224d } \end{aligned}$ | 751BLY+289.5d |
| M. Cycle 40 | 760 S. Y | 19 | 783 L.Y + 265.6174d= | $\begin{aligned} & \text { 770BLY+389d= } \\ & 771 \text { BLY +29 days } \end{aligned}$ |

Gerges Francis Tawadrous/
$2^{\text {nd }}$ Course student - physics Faculty - People's Friendship University - Moscow -Russia..
gfrancis@yandex.ru gergesfrancis@yandex.ru

## The Previous Table Study classified into 2 parts

## First Part : The study of the column of the modified lunar year (which equals $354.1818 d a y s$ )

1- Each 32 Metonic Cycles the last day of modified lunar year (equals 354.1818 days) corresponds with the last day of Metonic cycle which is the Sidereal Year last day where the lunar modified years equal 627 lunar years that equals 608 sidereal years perfectly.
2- The difference days between the Modified lunar year with the Metonic Cycle moves in Cycle and decreases as following (66.4-55.33- 44.26-33.19-22.126-11.0558-0.00 days) at 98 years interval ( 98 modified Lunar years - which equals 354.1818 days)
3- The modified Lunar years number for each Metonic Cycle shown in the table, and I found the following Modified Lunar Year order "19-20-19-20-19-20" repeats once with each Cycle consist of 627 modified Lunar year
a. That means with the last day of the Metonic Cycle No. 32 which equals 608 Sidereal Years but equals 627 Modified lunar year. after this Cycle ends, and starts the new one the modified lunar year order 19-20-19-20-19-20 will repeat once again as a mark for the new Cycle starting (this order in table marks by Gray color)
b. We can call the Metonic Cycle no. 32 a Cycle for the modified Lunar year with the Metonic Cycle (this Cycle in Table remarked by Yellow)

## Second Part: The Study Of The column of the Basic Lunar Year ( equals $=\mathbf{3 6 0}$ Days)

1- We see in the table the day common fractions spread through the cycles but these fractions unify to be one day each $4^{\text {th }}$ Metonic Cycle which equals 76 Sidereal years (that similar to the Sidereal Year, 3 years equals 365 days and the $4^{\text {th }}$ year is 366 days).....
2- but after $4^{\text {th }}$ Metonic Cycle the last day of Basic Lunar year (which equals 360 days) doesn't correspond the last day of the Metonic Cycle because there are 39 days addition to the Basic Lunar years (means 76 Sidereal years $=77$ Basic Lunar Years +39 days). And
with the following cycles this number increases regularly by addition 39 days each 76 Sidereal years. (so after more 76 years we finds at the $8^{\text {th }}$ Metonic Cycle 154 Basic Lunar Year +78 days.... And that continues)

3- But at Metonic Cycle No. $40^{\text {th }}$ which equals 760 Sidereal Years we find this number equals 771 Basic Lunar years +29 days, and that means the rest days decreased from 39 days to be 29 days during period (760 Sidereal Years -76 Sidereal years $=684$ years) and this is the difference between the Metonic Cycle No. 4 and Metonic Cycle No. 40...and all that says... EACH 684 SIDEREAL YEARS, THE REST DAYS DECREASE 10 DAYS

4- Now we know that 39 days prevented the basic lunar year to end in the same day with the $4^{\text {th }}$ Metonic Cycle, and we know this period 39 days decreases by 10 days each 684 sidereal years, and that means we need four Cycles which will decrease the 39 days to be ( -1 day) which is the most near to the metonic Cycle.
5- Now we need 4 Cycles of the period 684 years where These 4 Cycles Equals 2736 Sidereal Years
6- And based on that the 2736 Phenomenon was a Metonic Cycle and this period was needed to Correspond the Basic Lunar year with the last day of Metonic Cycle (the Basic Lunar Year equals 360 days - the bible year which no one considers in modern life)
7- Now we saw 39 days which found in Metonic Cycle No. 4, have decreased as (10/10/10/9) at interval 684 Sidereal years for each 10 days, by that we found the 2737 Egyptian phenomenon for which we researched,
8- But still there are two questions, first about the number because we got the Cycle of 2736 Sidereal Years and not 2737 Sidereal Years, and the second question about the last day we need because 39 equals (10/10/10/9) and the decreasing EACH 684 years equals 10 days and that means the last cycle will have -1 day

We still have 2 question to answer respectively

## The First Question

says we got relation to the Cycle 2736 Sidereal years and not to 2737 Sidereal years phenomenon? And how 2736 Cycle related to 2737 Cycle?

## the answer

As we know Metonic Cycle is 6939.75days
We know Saros Cycle is 6585.35 days
And the difference between both is 354.2 days
Which equals a modified lunar year approximately..
While Metonic Cycle connected to Saros Cycle completely because the Metonic Cycle is The lunar Orbit Cycle and Saroc Cycle is The Eclipse Cycles that made by the Moon itself.. all that say to us, there's great connection between both Cycles..
Because there's a complete year difference between them (regardless the explanation of How that occur!)
And we see this Cycle 2736 Sidereal years needs a complete sidereal year to be our phenomenon $2737 \ldots$
So Both connected with Great Relation
While the first one depends on the Metonic Cycle that means the second also does.

## The Second question about the minus day

39 days we found and the decreasing is 10 days each 684 Sidereal years means after 4 Cycles ( 2736 Sidereal years) the number 39 will decrease to be -1 day.. means the Metonic Cycle will finish after the last Basic lunar year day with one complete day..
So each 2736 Sidereal years we have -1 day
So this Cycle will continues to be 10 (-10) days and to consume in one Cycle 3736 Sideral Years
Where 27360 Sidereal years $=1440$ Metonic Cycles (which we may call astronomy full day where the solar day equals 1440 Minutes).

## A comment on <br> The Egyptian Astronomic Phenomenon 2737

I'm very surprised that there's no any study dealt "the 2737 Egyptian astronomic phenomenon"!
I see that not logical because the phenomenon tells us there were other people understood perfectly the universe astronomy and they gave us a great gift by building the great three pyramids as a references to such phenomenon, so why the modern astronomy doesn't try to compare our knowledge with theirs through encourage the studies and reports about this 2737 Egyptian astronomic phenomenon.. actually it's illogical to neglect such very great gift we didn't work for, but even got it without any payments or efforts, and its data are available to us to compare our knowledge with ancient knowledge and correct ourselves if it's necessary!!

## Author Other Studies

## The Solar System Geometry (Part I)

http://vixra.org/abs/1509.0126

## The Time And Distance Definitions In The Solar System

http://vixra.org/abs/1509.0241
The 2737 Egyptian Phenomenon \& Its identical distance 2737
millions km
http://vixra.org/abs/1509.0242
The Mars Data Analysis Proves the Rest Mass Concept is Unreal http://vixra.org/abs/1509.0244

The Solar Eclipse "The Gravitation Theory Puzzle"
http://vixra.org/abs/1509.0264

## Author Curriculum Vitae

## GERGES FRANCIS TAWDROUS

| Contacts |  |
| :---: | :---: |
| EDUCATION | Moscow - Peoples Friendship University Of Russia - Since 2010 Till 2012 - Faculty Of Science (Physics And Mathematics) - Physics Department. |

- A Training Course Russian language - Nizhniy Novgorod - Russia - during 2007-2008 .
- Goethe Institute In Cairo During 2001-2006
- Bachelor degree of commerce Ain shams university - Cairo 2000
- Additional studies of philosophy \& theology

| LANGUAGES | - Mother tongue is Arabic language <br> - English language <br> - Russian language <br> - German language |
| :---: | :---: |
| Work | Translation, proofreading, and editing. |
| Computer Skills | work with MS Office (Word, Excel, Power Point, etc.), Adobe Acrobat (full), WinZip, WinRar, etc. |
| $\begin{aligned} & \text { PERSONAL } \\ & \text { DATA } \end{aligned}$ | - Date of Birth : 09/10/1974 - Cairo. <br> - Martial status : Single <br> - Nationality : Egyptian <br> - Religion : Christian |

```
1 'st Equation
Gerges Equations
    The Planets Gravity=
= (Earth Diameter/ Planet Diameter)}\mp@subsup{}{}{2*}\mathrm{ (Planet Mass / Earth
Mass)* Earth Gravity
```


## $2^{\text {nd }}$ Equation

The Planet orbital Period= The Previous Planet period * his orbital inclination (or Axial tilt)

## $3^{\text {rd }}$ Equation

## The Planet Mass=

$=0.073 * 10^{24} \mathrm{~kg}$ (moon Mass)* 224.7 (Venus orbital period) ${ }^{\star} \mathbf{F}(x)$
(where $F(x)$ is a function in the required Planet/moon diameters rate with orbital inclination \& Axial Tilt of The required Planet,

## Venus \& Moon)

## $4^{\text {th }}$ Equation

## THE PLANET ORBIT AL DISTANCE =

$=($ Plant Diameter /Earth Diameter)* Earth Orbital Distance 1AU
> * The Orbital Inclination of the Previous Planet.

## $5^{\text {th }}$ Equation

$$
\text { Planet Orbital inclination }=13.18{ }^{*}(\mathbf{F}(\mathrm{x}))
$$

## Where:

$$
\begin{aligned}
& \text { 13.18: The Moon Motion degrees daily }=(360 / 27.3 \text { days }) \\
& F(x) \text { Is } A \text { Function Of The Planet \& Moon OI \& } A X
\end{aligned}
$$

IN THE ALMIGHTY GOD NAME
Through the Mother of God mediation I do this research


