Solar Planet Motion Trajectory Is A Square (Proves)

By Gerges Francis Twadrous

2nd course student – Physics Department - Physics & Math Faculty – Peoples' Friendship University – Moscow – Russia -2010-2013
TEL +201022532292 georgytawdrous@yandex.ru / mrwaheid@gmail.com

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Abstract

The Moon Orbit Uses Earth Circumference To Cover The Solar Planet Motion Real Trajectory (Which Is A Square) And To Show The Imaginary One (An Ellipse) i.e.
The Solar Planet Real Trajectory Is A Square But The Moon Orbit Uses Earth Circumference To Cover This Real Trajectory And Shows The Imaginary One Which Is The An Ellipse…

1- Introduction

We complete our discussion in the previous paper Solar Planet Motion Trajectory Is A Square And Not An Ellipse http://vixra.org/abs/1811.0135

This paper provides the proves for my claim …… which is….
the solar planet motion trajectory is a square but we see it as an ellipse because of the moon orbit geometrical structure effect (the moon here means Earth Moon)

This claim tells us that, the moon orbit is related to and effect on all planets motions trajectories, which means there's a relationship between the moon orbit and all solar planets motions…

To provide the proves we have 2 jobs to do

1st job to show how the moon orbit geometrical structure covers the planet motion real trajectory which is a square and replaces it with an imaginary one which an ellipse…
We need to analyze the moon orbit geometrical structure in full details to see the proves of this fact.

2nd job we need to review the theoretical concept behind this process…. Shortly why and by what power the moon covers the planet motion real trajectory with the imaginary one…

Let's start immediately in following…

2- Methodology

I have mentioned to the methodology in previous paper, where the research method is the same in all my papers..
I- Proves are Provided by The Moon orbit Geometrical Structure

3-The Relationship between Earth, Moon and Uranus
3-1 The Main Idea and Data
3-2 The Discussion

3-1 The Main Idea
Shortly the claim is … The Square We See As Ellipse

\[
\frac{\text{Square Circumference}}{\text{Circle Circumference}} = 1.272727
\]

So the rate 1.272727 we should find in the moon orbit geometrical structure
And that's true

\[
\frac{\text{Earth orbital distance}}{\text{Earth moon distance}} = \frac{\text{The Sun Diameter}}{\text{The Moon Diameter}} = 400
\]

That's why the previous rate = 400

\[
\frac{400}{\pi} = 127.272727
\]

The rate 127.272727 is the main factor for the moon orbit to do his task…. Shortly we should find this rate frequently in the moon orbit data (and also in solar planets data)
Let’s provides the data in following

I- Data:

Group 1 (rate 1.2727)

I-

\[
1.2727 = \frac{\text{Uranus Diameter}}{\text{Earth Circumference}} = \frac{\text{Mercury Circumference}}{\text{Venus Diameter}} = \frac{\text{Earth PLuto Distance}}{\text{Neptune Orbital Distance}}
\]

II-

\[
1.2727 = \frac{278.4 (\text{outer planets axail tilts total})}{354.36} = \frac{150}{118.3} = \frac{(2\pi)^2}{\pi^3}
\]

III- 127.272727 x 0.8 degrees (Uranus orbital inclination) = 25.2 x 4 = 101

IV- 687 days (Mars orbital period) = 1.2727 x (1800 seconds x 0.3 mkm/sec)

Group 2 (Earth Circumference)

1- (Earth Diameter/ Moon Demeter)^2 = (Earth orbital period / Moon orbital period)

2- Earth Moon Distance at Perigee point = 363000 km = Solar Outer Planets Diameters Total (error 1%)

3- Earth Moon Distance at Apogee point = 406000 km = Solar Planets Diameters Total

4- The Distance between Perigee and Apogee = 40000km = Inner Solar Planets Diameters Total = Earth Circumference.

5- Earth daily motion = The moon orbit circumference at apogee radius (r=406000 km)

6- Saturn Circumference = Earth Moon Distance at total solar eclipse radius (r=377000km)
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7- (Earth Diameter/ Moon Diameter) = (Sun Diameter/ Saturn Circumference)

8- Note Please/ Solar Planets Diameters Total= 2 Jupiter diameters + 1 Saturn diameter
(i.e. Jupiter diameter = 8 solar planets diameters total)

Group 2 summary

Table No. 1
"The Solar Planets Diameters Total Relationship With The Moon Orbit"

If Earth diameter = 12756 km, is considered to be = 1
i.e. The Earth Circumference which = 40080 km, will be just =Π

So The Following Is Correct  |  Error
---|---
Earth Circumference  =Π | -
Solar Inner Planets Diameters total  =Π | -
Moon motion free space (from perigee to apogee) (the free space without the moon diameter)  =Π 1.3%
Moon Perigee Orbit Radius  =9Π | -
Solar Outer Planets Diameters Total  =9Π | -
Moon Orbit Apogee Radius  =10Π 1.2
All Solar Planets Diameters Total  =10Π 1
2 Jupiter Diameters + Saturn Diameter  =10Π | -
Saturn Circumference = Moon Orbit Radius At Total Solar Eclipse  = 9.5Π | -
Jupiter Circumference  =11Π 1.9
The Sun diameter  =11 Π² 1.2

Group 3 Additional Data

a. The Moon Diameter x The Sun Diameter = Jupiter Orbital Circumference
b. The Moon Circumference x Jupiter Circumference = Jupiter Orbital Circumference
c. The Moon Circumference x Venus Circumference = Venus Earth Distance
d. The Moon Circumference x Mars Circumference = Mars Orbital Distance (2.2%)
e. The Moon Circumference x Neptune Diameter = 541 mkm = 1800 seconds x c
II- Discussion

Data Group 1

What we need to do in this group of data?
We need to analyze the data to see if the rate 127.2727 or 1.2727 is found deeply and widely in the moon orbital geometrical structure and in other planets data…
Why we do that?
Because the rate 127.2727 is the method by which the moon orbit covers the planet motion square trajectory with the ellipse… (as we have discussed in the main idea 3-1)
Let's start immediately …

Equation No. I

\[
1.2727 = \frac{\text{Uranus Diameter}}{\text{Earth Circumference}} = \frac{\text{Mercury Circumference}}{\text{Venus Diameter}} = \frac{\text{Earth PLuto Distance}}{\text{Neptune Orbital Distance}}
\]

Equation no. I tells us, the rate 1.272727 (= Square circumference /circle circumference) is used for many different planets…
The aforementioned planets are the main planets on which the moon motion depends…

Let's summarize the idea in following:

1- Earth and Venus are the moon parents
2- Uranus effects on the moon orbit vertically in his relationship with Mercury
3- Neptune is the planet reflects the energy toward the inner planets … shortly inner planets all energy is reflected from Neptune… that's why Neptune is found always…
4- The rate 1.2727 tells us that, the planets uses this rate as independent from the moon orbit rate 127.2727… that tells us the solar group general geometrical structure takes into consideration the interaction process between the square and circle circumferences which means that this process is found deeply inside the solar group supporting the moon orbit geometrical structure….

Equation No. II

\[
1.2727 = \frac{278.4 \text{(outer planets axial tilts total)}}{354.36 \text{lunar synodic year}} = \frac{150 \text{ mkm Earth orbital distance}}{118.3 \text{ degrees Neptune axial tilt vertically}} = \frac{(2\pi)^2}{\pi^3}
\]

Equation No. II supports clearly that the rate 1.272727 is found deeply in the solar group..
Firstly we need to remember the main rule
1 day = 1 degree = 1 million km (not always this rule is used sometime we have found that 1 million km = 1 second as with the distance 86400 millions km)
But any way this is the usual case
So the equation tells us the following:
- The outer planets axial tilts total is related to lunar synodic year with this rate 1.2727
- Earth orbital distance 150 mkm is related to Neptune axial tilt at vertically (28.3 degrees Neptune axial tilt +90 degrees)
Nothing can be stronger than the last part…
\((2\pi^2)/\pi^3 = (4/\pi) = 1.272727 \ldots \) why this rate is very specific? Because
- \(\pi^3\) = Uranus axial tilt 97.8 deg. / Jupiter axial tilt 1.3 deg.
- \((2\pi)^2\) is the main rate in the solar group which we need to discuss in this paper later
So the part \((2\pi^2)/\pi^3\) is a main factor in the solar group geometrical structure…
Equation No. III

\[ 127.272727 \times 0.8 \text{ degrees (Uranus orbital inclination)} = 25.2 \times 4 = 101 \]

Thus Equation tells us that, Mars axial tilt 25.2 degrees is defined by 3 factors which are:

A. The rate 127.2727 (=400/π)
B. Uranus Orbital Inclination 0.8 degrees
C. The Number 4

Why?! Let's discuss them regularly

A- The rate 127.2727 = (400/π) is used because
Mars is related and connected with the Moon strongly as much as the Earth herself…. the data can support that easily ….let's see that in following:
- 687 days (Mars orbital period ) =365.25 days (Earth orbital period) x 1.9 (Mars orbital inclination)
- 687 days (Mars orbital period)= 27.3 days (the moon orbital period) x 25.2 (Mars axial tilt=25.2)
- 25.2 Mars axial tilt = 1.9 Mars orbital inclination x 13.18 (Moon daily motion = 13.18 degrees)
- (Earth diameter / Mars diameter) = (Mars diameter/ Moon diameter) (Error 2%)

B- Uranus orbital inclination 0.8 degrees is used because
- Metonic Cycle is a cycle rotated by the moon by Uranus effect… in fact Metonic Cycle is a vertical motion the moon does by Uranus effect and help… so the moon vertical motion depends on Uranus only…(Metonic Cycle will be discussed in point No.4 of this paper)

C- The number 4
- Earth Cycle is 4 sidereal years = 1461 days…. What does that mean? That mean the value 101 is used as much as the value 25.2 degrees is used… both values are effective in the solar group geometry… that provides an explanation for the equation (5870 mkm "Pluto orbital distance" = 57.9 mkm "Mercury orbital distance" x101)
- The value 25.2 degrees Mars Axial tilt is so important values for all solar planets which supports the claim that the moon orbit effects on all solar planets motions trajectories and cover their real trajectories (the square) producing an imaginary one which is the ellipse…

We may remember the importance of Mars axial tilt from Kepler 3\textsuperscript{rd} law table
(Kepler 3rd Law)

\[ P^2 \times 25 = d^3 \]

- \( P \): The Planet orbital period
- \( d \): The Planet orbital distance
- \( 25.2 \): Mars Axial Tilt

The results are shown in the following table

<table>
<thead>
<tr>
<th>Table No.2</th>
<th>Planet</th>
<th>( P^2 )</th>
<th>( \times 25 )</th>
<th>( = d^3 )</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercury</td>
<td>(88)^2</td>
<td>*25</td>
<td>(57.9)^3</td>
<td>0.2%</td>
<td></td>
</tr>
<tr>
<td>Venus</td>
<td>(224.7)^2</td>
<td>*25</td>
<td>(108.2)^3</td>
<td>0.3%</td>
<td></td>
</tr>
<tr>
<td>Earth</td>
<td>(366)^2</td>
<td>*25</td>
<td>(149.6)^3</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Mars</td>
<td>(687)^2</td>
<td>*25</td>
<td>(227.9)^3</td>
<td>0.3%</td>
<td></td>
</tr>
<tr>
<td>Jupiter</td>
<td>(4331)^2</td>
<td>*25</td>
<td>(778.6)^3</td>
<td>1.4%</td>
<td></td>
</tr>
<tr>
<td>Saturn</td>
<td>(10474)^2</td>
<td>*25</td>
<td>(1433.5)^3</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Uranus</td>
<td>(30589)^2</td>
<td>*25</td>
<td>(2872.5)^3</td>
<td>1.3%</td>
<td></td>
</tr>
<tr>
<td>Neptune</td>
<td>(59800)^2</td>
<td>*25</td>
<td>(4495.1)^3</td>
<td>1.5%</td>
<td></td>
</tr>
<tr>
<td>Pluto</td>
<td>(90588)^2</td>
<td>*25</td>
<td>(5870)^3</td>
<td>1.4%</td>
<td></td>
</tr>
</tbody>
</table>

Comment

Some told me that I use specific units to reach to this results... I use million km for distance and 1 day for period why these are specific units?

The constant 25 is Mars axial tilt

That proves the moon orbit effect which we have discussed in Equation III can be reach to all solar planets through Mars axial tilt...

I wish the reader supports my point of view... of course I don't explain the geometrical mechanism by which the moon orbit effects on each planet motion trajectory (the square) to cover it and replace with an imaginary trajectory (the ellipse)

But the data shows clearly that the moon orbit effect can be transported from planet to another easily

In Fact the Earth Moon has many ways to effect on all solar planets...

By the way...

We have good chance here to prove that, the Earth Moon isn't similar to any other moon.. the mere observation here is insufficient to explain the situation... because the solar planets data analysis shows very specific features by which Earth Moon enjoy which no other moon can reach....

Again, I wish I could explain the crucial role of the solar planets data analysis.. where the mere observation is very weak method to discover the universe...
Equation IV

687 days (Mars orbital period) = 1.2727 x (1800 seconds x 0.3 mkm/sec)

How to understand this equation?

1800 seconds x c velocity = 540 mkm ..... light passed 540 mkm during 1800 seconds
we may remember the rule ....1 mkm = 1 degree = 1 day
So 540 mkm = 540 days or 687 days = 687 mkm
So the rate between these 2 values = 1.272727
Why this equation is important one?

3600 seconds x 1.16 mkm/sec = 2 x 2088 mkm (Jupiter Uranus distance)
(1.16 mkm/sec is high supposed velocity of light)
3600 seconds x 0.3 mkm/sec = 2 x 540 mkm ...So ... (687/540) = 1.272727
That tells 2 different velocities of light create these 2 different distances based on the same period 3600 seconds... that's why this distance 540 mkm is very important because it's created in parallel to Jupiter Uranus distance which is the metonic Cycle energy source.

The Conclusion

The Rate 1.2727 Is Found Deeply In The Solar Group Geometrical Structure And Be Taken Into Consideration By The Solar Planets Geometrical Structure Data.
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Data Group 2

Earth Circumference:
Table No. 1 tells us that, the Earth circumference is used as measurement for 2 jobs
- to measure the solar planets diameters
- to measure the distance between Earth and the moon

1st Relationship

(\text{Earth Diameter} / \text{Moon Diameter}) = 3.66

The solar group data is classified into 5 categories ....Which are

<table>
<thead>
<tr>
<th>Table No. 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. 1.9</td>
</tr>
<tr>
<td>II. ((1.9)^2 = 3.66) Rates</td>
</tr>
<tr>
<td>III. ((3.66)^2 = 13.4) Rates</td>
</tr>
<tr>
<td>IV. ((13.4)^2 = 175.9) Mercury Day (days)</td>
</tr>
<tr>
<td>V. ((175.9)^2 = 30589) Uranus orbital Period (days)</td>
</tr>
</tbody>
</table>

Please review / The Solar Group is One Machine (Proves) [http://vixra.org/abs/1808.0081](http://vixra.org/abs/1808.0081)

So the Earth /moon diameters rate is one of the 5 basic rate in the solar group and I can provide even 50 values in the solar group are rated together with this rate 3.66

For example
- (The Sun Diameter / Saturn Circumference) = 3.66
- (Jupiter Circumference / Saturn Diameter) = 3.66

2nd Relationship

(\text{Moon Circumference} = 27.3\% \text{ of Earth Circumference})

The rate 27.3\% is related closely to the moon because 27.3 days = the moon orbital period
What's the relationship between 27.3\% and the moon orbital period?

It's pure coincidences of numbers!!

By the way the lunar eclipse umbra length = the sun diameter …"pure coincidence"!!

Let's review some conclusions we have reached in my previous papers

- The matter is Energy (we know that \(E=mc^2\))
- The Distance is Energy (my hypothesis)
- The planet matter and orbital distance are created from the same energy which guarantees the general harmony of solar planets data (my suggestion)
- The planet motion needs energy and the planet has one source for energy from which he creates his matter, orbital distance and by the rest energy he moves… that's why the planet matter, orbital distance and motion are related to each other…
So, if the moon circumference = 27.3% of Earth circumference and the moon orbital period=
=27.3 days where the Earth rotation defines the Day meaning...so I may conclude that the
moon orbital period 27.3 days is related somehow to his diameter percentage 27.3% of
Earth diameter!

**Erath Circumference (More Discussion):**

<table>
<thead>
<tr>
<th>Table No. 1 (repeated)</th>
</tr>
</thead>
</table>

"The Solar Planets Diameters Total Relationship With The Moon Orbit"

| If Earth diameter = 12756 km, is considered to be = 1 |
| i.e. The Earth Circumference which = 40080 km, will be just =Π |

<table>
<thead>
<tr>
<th>So The Following Is Correct</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>❖ Earth Circumference</td>
<td>=Π</td>
</tr>
<tr>
<td>❖ Solar Inner Planets Diameters total</td>
<td>=Π</td>
</tr>
<tr>
<td>❖ Moon motion free space (from perigee to apogee) (the free space without the moon diameter)</td>
<td>=Π</td>
</tr>
<tr>
<td>❖ Moon Perigee Orbit Radius</td>
<td>=9Π</td>
</tr>
<tr>
<td>❖ Solar Outer Planets Diameters Total</td>
<td>=9Π</td>
</tr>
<tr>
<td>❖ Moon Orbit Apogee Radius</td>
<td>=10Π</td>
</tr>
<tr>
<td>❖ All Solar Planets Diameters Total</td>
<td>=10Π</td>
</tr>
<tr>
<td>❖ 2 Jupiter Diameters + Saturn Diameter</td>
<td>=10Π</td>
</tr>
<tr>
<td>Saturn Circumference = Moon Orbit Radius At Total Solar Eclipse</td>
<td>= 9.5Π</td>
</tr>
<tr>
<td>❖ Jupiter Circumference</td>
<td>=11Π</td>
</tr>
<tr>
<td>❖ The Sun diameter</td>
<td>=11Π²</td>
</tr>
</tbody>
</table>

**Table Discussion**

In this table …. Earth Circumference =Π
Why the previous table should be considered as pure coincidences?!
The relationships which are strong and clear tells us easily that
Earth Circumference is a factor effects on all solar planets data…
The idea is clear…
The moon orbit effects on the solar planets motions trajectories and cover the real one
(square) and show an imaginary one (an ellipse)
So he needs tools to effect on all solar planets
and here we can see that Earth Circumference is a great factor the moon orbit uses for this
process…
That's why Earth circumference is effective in both directions!
effective in Earth moon relationship and effective on all other solar planets…
I see the table is very strong proof for my claim….

**3rd Relationship**

(Light velocity / Earth velocity) = Earth orbital period x Moon orbital period =10⁴
(0.3 mkm per second /30 km/sec)= 10000 = 365.25 x 27.3
What does this equation tell us…?
Earth velocity depends on both orbital periods of Earth and Moon….
Moon Circumference 10921 km

- 10921 km moon circumference x 27.3 days = 300000 km
The previous Equation tells us that, if the moon rotates around his axis one time every day, he would move during his orbital period a distance = 300000 km = light motion for 1 second
- 10921 km moon circumference x 86400 seconds = 940 mkm (Earth orbital circumference)
The previous Equation tells us that, if the Earth revolves around the sun one complete revolution in one day (86400 seconds) so the moon circumference will be equal a motion of 1 second of her day…

The Conclusion
- Earth Circumference is a strong factor uses by the moon orbit to effect on the solar planets motions trajectory, which enable the moon orbit to cover the planet motion real trajectory which is (a square) and replace it with an imaginary one (an ellipse).
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4- Metonic Cycle
4-1 Metonic Cycle is produced by light motion from Jupiter to Uranus
4-2 Metonic Cycle is a vertical motion

4-1 Metonic Cycle is produced by light motion from Jupiter to Uranus

I- Data
Equation No.1
6939.75 seconds x c velocity = 2094 million km (Jupiter Uranus Distance)

Equation No.2
6939.75 = 97.8 x 71 = (71)^2 x 1.392

a- \((97.8)^2\) x c velocity = 2872.5 mkm
b- 97.8 second x 1.16 mkm/sec =113.45 mkm
c- 97.8 degrees = 122.5 degrees x 0.8 degrees

Equation No.3
86400 x 2 = 6939.75 x 25.2 (error 1%)

Equation No.4
86400 = 5040 x 17.14

Equation No.5
5041 = (71)^2

Equation No.6
- During Metonic Cycle Mercury moves a distance = Neptune orbital circumference
- During Metonic Cycle Earth moves a distance = Uranus orbital circumference
- During Metonic Cycle Saturn moves a distance = Mercury Pluto Distance
- During Metonic Cycle Pluto moves a distance = Mercury Uranus Distance

Equation No.7
(Mercury velocity/ Saturn Velocity) = (6939.75/1407.6)

II- The Discussion
Equation No.1
6939.75 seconds x c velocity = 2094 million km (Jupiter Uranus Distance)

- The Equation tells us that, light needs 6939.75 seconds to pass the distance between Jupiter and Uranus
- We know the Moon rotates Metonic Cycle for 19 years = 6939.75 days
- We may conclude that Metonic Cycle is found because of the light motion from Jupiter to Uranus
- 1 second of light motion from Jupiter to Uranus become 1 day in the moon motion in Metonic Cycle \(\text{(That Means The Moon follows The Light Motion But With A Different Rate Of Time)}\)
- The previous description is just supposition, let's try to know if it's real in following

Equation No.2
6939.75 = 97.8 x 71 = (71)^2 x 1.392 (error 1.1%)

- This equation tells us that the period 6939.75 suffers from single Lorentz contraction to produce the value 97.8 seconds... Lorentz contraction rate 71 is found by a motion with velocity = 0.9999c which we have discussed in details in previous paper

Gorges Francis Tawadrous/
2nd Course student – physics Faculty – People's Friendship University – Moscow –Russia..
mrwaheid1@yahoo.com mrwaheid@gmail.com +201022532292
The Sun Data shows Relativistic Effects (revised)
http://vixra.org/abs/1806.0209

- The value 97.8 seconds is very important, let's see its importance through the sub-equations a, b & c

a- \((97.8)^2 \times \text{c velocity} = 2872.5 \text{ mkm}\)
Equation (a) tells us that Uranus Orbital distance depends basically on this value 97.8 seconds which is produced by Lorentz contraction from light motion period from Jupiter to Uranus (6939.75 seconds)

b- 97.8 second x 1.16 mkm/sec =113.45 mkm
Earth Axial Tilt = 23.45 degrees, but one vertical = 23.45 +90= 113.45 degrees. From Mercury orbital circumference we know that 1 degree can be = 1 million km… That means the value 113.45 mkm is Earth Axial Tilt on vertical axis and that proves the relationship between Earth Axial Tilt and Uranus Axial Tilt.

c- 97.8 degrees = 122.5 degrees x 0.8 degrees
97.8 degrees is Uranus Axial Tilt
122.5 degrees is Pluto Axial Tilt
0.8 degree is Uranus Orbital inclination
The equation tells us that Pluto axial is found completely depends on Uranus Data

For more explanation please review

The Moon Orbit Geometrical Structure (revised)
http://vixra.org/abs/1807.0449
4-2 Metonic Cycle is A Vertical Motion
4-2-1 Saros Cycle
4-2-2 The Moon orbital vertical axis

3-3-2-1 Saros Cycle
In Saros Cycle we find very specific information
Let's remember Saros Cycle in following:
Saros Cycle (54 sidereal years & 34 days) causes the solar umbra shadow to wipe the same
longitude on Earth surface but the new place may change with 1000 km to north of south
from the original one.
We interest basically for Saros Cycle which causes the solar umbra shadow to wipe the
same specific place, and this Cycle needs (from 360 to 410 sidereal years)
This Cycle depends basically on the Earth diameter, and if the Earth diameter changes this
cycle will never be seen.
Let's discuss 2 equation here:

I - The solar umbra shadow covers a distance on Earth surface=304 km, this distance is
shifted 115 degrees with each Saros cycle (6585.3211 days)

\[ \text{II- } 6585.3211 = 115 \times \frac{180}{\pi} \]

How can we understand the previous equations..? \((\frac{180}{\pi} = 2 \times \text{Neptune axial tilt})\)

The factor \((\frac{180}{\pi})\) I consider as a geometrical constant… i.e.

Saros Cycle period 6585.32 days is defined based on the shift angle 115 degrees. and the
shift angle 115 degrees. is defined because of Saros Period 6585.32 days

But why the shift angle = 115 degrees?
115 degrees = 90 degrees + 25.2 degrees (Mars axial tilt) \(\text{(Equation No. 5-1)}\)

We know Mars axial tilt 25.2 is equivalent to Earth axial tilt 23.4 but the difference in
values is found by the relativistic effects...
The previous equation (5-1) tells us that, the solar eclipse umbra shadow needs 90 degrees
to reach to the Earth...
The shadow came to Earth based on Earth axial tilt 23.4 but needs 90 degrees to reach to
Earth surface....
The value 90 tells that there's a perpendicular position the umbra needs to overcome to
reach to the Earth surface..
I wish I explained the idea clearly as possible, how can I prove there's some planet
perpendicular on another planet....? I analyze their data and the value 90 degrees tell me
there's some perpendicular point here..... we can discuss that in more depth in following
point
But here I need to refer to some data which may support my claim
4-2-2 The Moon Orbital Vertical Axis

I- Data
1- The Lunar distance from Perigee to apogee = 43200 km
2- Earth Moon Distance at total solar eclipse = 377000 km = Saturn Circumference
3- Jupiter Circumference = 449378.2
   (449378.2 – 406000 apogee point) = 43200 km
4- the Moon orbital diameter = 1 million km horizontally and vertically (supposition)

II-Discussion

- The distance from perigee to apogee = 43200 km
- If we add 43200 km after apogee point
- The distance from perigee with the additional distance = 86400 km

- The moon orbital vertical diameter = 1 million km
So

- The Area = 86400 km x 1 million km = 86400 million km
   (the Energy sent from Neptune toward the inner planets = 86400 mkm)

Please review
Solar Group Geometrical Structure
http://vixra.org/abs/1805.0081

That tells us the energy 86400 mkm is accumulated in the distance 86400 km which starts from perigee point to apogee point and add an equal distance on the same level and trajectory…
The moon orbital vertical diameter causes the previous distance 86400 km to be 86400 mkm
which provides total energy sent from Neptune….

Let's remember the solar group main equation
90000 = 86400 + 3600
Where Metonic Cycle depends on 3600 value
Now the value 86400 mkm is found in the solar group geometrical structure and concentrated on the moon orbit as the aforementioned explanation
But to complete the value 90000 mkm it's necessary to provide the rest value 3600
That tells us the story
A rate 96% of the required energy is found in the solar group geometrical structure
And Metonic cycle provides only 4% of the total energy
But the energy is a quantum and can't work with less value
That's why just by add Metonic Cycle energy the required quantum energy is completed and the sun rays can be produced…
II- The Moon Orbit Description (The Theoretical Concept)

The Sumary
- The solar planet motions trajectory is a pyramid … we can call it "The Pyramid of Energy"
- This Energy is sent to the moon orbit…
- In fact this energy is reflected to the moon orbit and for that the Pyramid is reversed in the moon orbit.
- As we know the moon perigee point at distance 363000 km but the moon apogee point at distance 406000 km .. we can see the pyramid is reversed where the pyramid base is found at apogee point (406000 km)…
- For the moon pyramid the Earth is found on Pyramid Apex…
- The Moon pyramid is also Pyramid of energy and shows every motions are found in the solar group because this pyramid is a mirror for the original one
- That tells us why the moon trajectory is so difficult to define…. That because the moon trajectory expresses all solar planets motions in the solar group but in small distances and actions as the mirror reflects the pictures…!
- So the moon indeed accumulate the solar planets energies in his orbit but this accumulation is done by the reflection process… where each planet motion energy is reflected inside the moon orbit and because each planet motion is in harmony with other planets in the solar group, the reflected energy also will be in harmony with other reflected energies inside the moon orbit
- The moon here is just indicator and by his motion he refers to and shows the different actions which are done in the solar group… that's why the moon orbit is the great Map for the solar group…
- The previous description provides a clear answer for the hard question….. let's remember it here…

Why the next relationships are found?
1- Earth Moon Distance at Perigee point =363000 km = Solar Outer Planets Diameters Total (error 1%)
2- Earth Moon Distance at Apogee point =406000 km = Solar Planets Diameters Total
3- - The Distance between Perigee and Apogee = 40000km = Inner Solar Planets Diameters Total = Earth Circumference.
4- Earth daily motion = The moon orbit circumference at apogee radius (r=406000 km)
5- Saturn Circumference = Earth Moon Distance at total solar eclipse radius (r=377000km)
6- Note Please/ Solar Planets Diameters Total= 2 Jupiter diameters + 1 Saturn diameter (i.e. Jupiter diameter = 8 solar planets diameters total)
Appendix No. 1

Solar Group Geometrical Structure Features (Alternative Description)

In this point I discuss why the Solar Group Current Description is insufficient! and provide my alternative one
Let's perform this task in next 2 points.

1st / Why The Current Description is Insufficient?
2nd / The Alternative Description

1st / Why The Current Description is Insufficient?
The current theories tell us that, the solar planet moves by gravity forces between his and the sun masses, where the planet defines his orbital distance according to this gravity forces… So the solar group current description shows the solar planets as separated points meet each other only through the sun.
Also the main effective relationship is the sun-planet relationship where the planet-planet relationship is very weak because of the sun massive Mass..
The solar planets, according to the current description, are created from a star was following the sun, later exploded and from his material the solar planets are created by gravity (means the solar planets matters are created by random and there is no any relationship between the planets diameters)

The Current Description Problems

1- No one knows How the matter is created? the star story gives us nothing about the matter, simply we don't know how the matter is created? or why the mass produces the gravity?
2- The gravity which is the main force in this description still puzzle till now! No one knows the gravity mechanism or if it needs time to work!
3- The main problem in this description is the Planet Data Inconsistency, where the description tells us that Mercury Orbital Distance =57.9 mkm because of the gravity between his and the sun masses. But the description tells us no explanation why Mercury Diameter = 4879 km or why his orbital inclination = 7 degrees…we can see easily that the description uses some of the planet data and ignores simply the other data and by such way the solar planet data become inconsistent…
4- This problem produces worse result. Where there's no explanation for the planet ignored data, each relationship is found with this data will be just pure coincidence!

The main question still needs answer… How the matter is created?
Again let's provide our old puzzle one more time here …

Why we see the sun disc = the moon disc? Because (the Sun diameter /the moon diameter) = (Earth Orbital Distance/ Earth Moon Distance)? Why The Diameters Rate =The Distances Rate? no answer for this question because no one knows How the matter is created?

The matter creation was and will be our main difficulty to see the truth. The matter is the player in every point around us, she does the motion and tells us there's a physical law behind.. the Matter is The Knowledge Messenger…
2nd / The Alternative Description

My suggested Description provides the answer for the main question "How the Matter is created …let's write that at immediately here…

What's the Matter (Mass)?  The Mass is an Energy  \( E=mc^2 \)
What's the distance?  The Distance is an Energy (hypothesis)

i.e.

From The Same Energy The Matters (Masses) And Distances Are Created

The Description Summary

One unified Energy is transported from one point to another point through the solar group, this same energy creates the planets matters (masses) and causes the motion transportation from planet to another through the group. In this transportation of Energy the relativistic effects are found because the energy has different velocities in her motions through the group. Based on these relativistic effects, different rates of times are created and based on these different rates of time the solar group can accumulate the energy in different points to create a huge energy from the low one.

Let's summarize the description main points in following:

1- General Description
2- Main Relationship
3- Motion Transportation
4- Relativistic And Non-Relativistic motions
5- Distance And Time Values Equivalence
6- How the Distance And Time Values can be equivalent?
7- Energy Accumulation Concept (Why time and distance values are equivalent)

Let's provide a brief statement about each point in following:

1- General Description
- One Unified Energy travels from one point to another point through the solar group, in her travel this unified Energy creates the planet matter and the distance from planet to another planet.
- for Example, the Energy comes from the sun toward Mercury, so she builds firstly Mercury orbital distance and then will build Mercury Planet Mass. Then this same Energy will move toward Venus to build the distance between Mercury and Venus and then will build Venus Planet Mass….etc (Note/ this example is for explanation only, because the Energy real trajectory is more complex)
- This description makes the planet-planet relationship is strong as much as the sun-planet relationship.
- Let's summarize the idea in a sentence "One Unified Energy builds the Distance and Mass of all solar planets"
- This description makes the solar group similar to one line of Energy (a necklace)
- Also this description makes the solar group similar to a great river has many canals, each canal creates a soil on her banks. The river water here is similar to the Energy, she creates everything and have different forms, so the canals and their soils are
created from the river water … that's the same description the matter and distance are created from the same energy even if the matter is not similar to the distance but both of them are created from the same source…

2- Main Relationship
  - The problem becomes clear now, because the Energy is transported in different forms as mass, distance or time values.. how can we see the main geometrical pillars of the solar group where there thousands of relationships are found? What relationship is the main one?
  - The main relationship is the relationship which connects many planets. For Example Mars Axial Tilt 25.2 degrees works as the constant in Kepler 3rd law (table No.1 is found at End of this introduction).. from this table we see that the constant 25 = Mars Axial Tilt, this tells us that, this Value 25 effects on all solar planets.. even if we don't know why or how but this value (25.2 Mars Axial Tilt) is one of the main solar geometrical structure Values.
  - The Description Main advantage is the integration and cooperation between the solar planets… which makes the solar group as one machine, that means the value 25.2 will be Mars axial tilt in any place we find it. In more clear The sun Diameter = Venus Diameter x 115.2 (this value 115.2 is Mars Axial Tilt uses its vertical value i.e. 115.2 = 25.2 +90) …means the sun diameter is defined based on Venus diameter with help from Mars Axial tilt.

3- Motion Transportation
  - Similar to the transported motion from one gear to another, the motion is transported from one planet to another and through the motion transportation the energy is transported also from point to another through the solar group…
  - We should pay attention to the motion transportation sequence ….. Because it's not necessary to transport the motion by the current solar planets sequence …. There are 2 reasons for that
  - 1st Reason – The planets positions from the sun may change through the history – as I suggested before that Mars immigrated from his original point at 84 mkm to the sun to dwell in his new point in 227.9 mkm to the sun…. this change of Mars orbital distance– if real- causes a disturbance for Motion transportation sequence… the Sun Please review: Data shows Relativistic Effects (revised) http://vixra.org/abs/1806.0209
  - 2nd - Reason – the planets positions relative to each other… where I claimed that some planets suffer from Relativistic effects but other don't… that may cause more disturbance for the motion transportation sequence….
  - Can we discover the motion transportation real sequence? Yes … because the Energy is transported from point to another through the solar group and we can follow this Energy trajectory to see clearly the motion transportation sequence.
4- Relativistic and Non-Relativistic Motions

The Description Main Hypothesis
- "There's a physical point in the solar group moves with light velocity relative to another physical point in the solar group"
- This high velocity motion causes relativistic effects on the planets orbital distances and periods
- Because the solar group is one machine or one integrated system, these relativistic effects can be observed in different points in the solar group…
- We can't observe this high velocity motion but we can observe and record the relativistic effects
- So my work is to rewrite the solar planets data in a form shows the relativistic effects, where the planets data consistency will be a crucial proof for my claim.
- If we can perform this task and prove that there are relativistic effects in the solar group, that will make the solar group another source to study the Special Theory of relativity by which we can test and develop the theory basics and concepts.
- The proves and discussion of this claim are written in Point No.5 of this Paper

5- Distance And Time Values Equivalence
The Special Theory of Relativity tells us that
If a particle (energy) moves with c velocity the following relativistic effects may be observed:
1st- Time Dilation
2nd- Length Contraction
3rd- Mass Increasing
4th- **Time And Distance Values become equivalent**…

Point No. 4th is my conclusion I got by the solar planets data analysis, and this is my suggested contribution in the Special Theory of Relativity
Let's Provide an example to explain how I reach to this conclusion…
- 25920 years is the Cycle of Precession.
But
- Light moves during the solar day 86400 seconds a distance = 25920 million km
Also
- Solar Planets velocities total 17.6 mkm/ daily x 1461 days (Earth 4-years Cycle_ = 25920 mkm
As we see in the previous relationships… the value 25920 are seen 2 times one in time units and the other in distance units…. The same value are seen in different units…
Because this situation is repeated hundreds of times I found it's necessary to find a logical explanation for that..
So I suggested that, the Distance and Time Values become equivalent with high velocity as relativistic effect … I concluded that basically because not all distance and time values can be equivalent but only a great part of them which can't be pure coincidences … so I searched for specific reason behind and suggested this one..
- Let's see another example for more explanation
  - Jupiter Orbital Period 4331 days = Mars Orbital Period 687 days x2\(\pi\) … this equation tells us that these orbital periods are energy transported from one point to another, as the motion transportation from one gear to another…. The time values here are equivalent to distance values, (as the factor 2\(\pi\) tells us) but these values become time values because of the relativistic effects in the solar group….now we can see that, this equation has a physical reason behind and not pure coincidence…

(Review Table No.2 for equivalent time and distance values at end of this introduction)

I want to explain that, the time and distance values equivalence is one of the main pillars in the solar system geometrical structure, so this isn't limited case in the solar group rather an extending case …

- Let's see one more example for more explanation

\[2 \times 86400 \text{ mkm} = 60 \times 2872.5 \text{ mkm} \text{ (Uranus Orbital Distance)}\]

The previous Equation has very specific importance in the solar group

Let's remember its components

- **The value 2 \times 86400 \text{ mkm}** is the solar group main energy, this value we have discussed in details with Jupiter Energy in my previous paper "Solar Group Geometrical Structure" [http://vixra.org/abs/1805.0081](http://vixra.org/abs/1805.0081)

- **2872.5 mkm Uranus orbital Distance** is very important distance in the solar group because Uranus is the main player in the sun creation process, we have discussed that before in "The Time definition" [http://vixra.org/abs/1805.0523](http://vixra.org/abs/1805.0523)

- **The value 60**: is a famous rate in the solar group, and it's found basically because 1 hour = 60 minutes and 1 minute = 60 seconds…. Means this rate is found between the distances because these same distances are worked as units of time in different cases that's why this rate 60 is required….(please review Table No.3 in End of this introduction for a complete list for the rate 60)

6- **How the Distance And Time Values can be equivalent?**
The Distance And Time Values are equivalent! What does that mean? What distance is equivalent to what time?

I'll write here the general conclusion of this argument but the discussion and arguments are found in Point No.6 of this paper

**The General Conclusion**

- The solar system uses a unified distance, say 1 million km, for different times rates!

i.e.

- There's a cycle in which 1 \text{ mkm} = 1 \text{ second}
- There's another cycle in which 1 \text{ mkm} = 1 \text{ minute}
- There's another cycle in which 1 \text{ mkm} = 1 \text{ hour}
- There's another cycle in which 1 \text{ mkm} = 1 \text{ day}
- There's another cycle in which 1 \text{ mkm} = 1 \text{ week}
- There's another cycle in which 1 \text{ mkm} = 1 \text{ month}
- There's another cycle in which 1 \text{ mkm} = 1 \text{ year}
- There's another cycle in which 1 \text{ mkm} = 1 \text{ Earth Cycle (1461 days)}
- That means the same distance works for many Cycle periods… why?
The solar group geometry uses the unified distances to create different rates of time

What does that mean?
The distance also has different rates! Yes the time has day, minute and seconds...etc
But the distance has km and thousand km and million km and .....etc
So, how to understand this conclusion?

Yes the distance has different rates but no cycle makes this rate to be known

The time different rates have cycles in the solar group to make these rates are shown

That's why the humanity knew all time rates.... year, month, week, day, minute, seconds
These values are standard for the universe regardless the people knowledge
But for distance, people uses km, miles, cubes ....etc

Solar Group Geometrical Design

The previous conclusion is interesting, the time periods are clear for people but distances aren't that because the universe geometry explains the time different values and rates..

Interesting idea....
But what's the useful result form it?
Why the time different rates and values are seen but the distances aren't?
Because the distances are unified but the time values are specific and shown by cycles
So, the 1 million km which we used in previous data is the same
But with different rates of time..!
Now let's ask
why the solar geometry does that?! Because

The Energy accumulation process depends on different rates of time

7- Energy Accumulation Concept (Why time and distance values are equivalent)
By the different rates of time Earth motion can produce the Sun Energy  i.e.

What the Earth moved along complete year, the sun can uses for one day only
so we can see how the energy is accumulated
let's summarize all that in clear idea

-The main Idea Summary
  - Based on the solar group relativistic motions, time values can be seen as distances values
  - The solar geometry uses unified distances to create different values of time, which are seen by different cycles
  - The time different values depend on each other to create different rates of time
  - By this different rates of time the Energy can be accumulated to produce huge energy from average one.
  - Based on this description, the solar planets motions produce the sun light beams
This claim proves and discussion will be in point No.7 of this paper
Please See also
Solar Group Geometrical Structure
http://vixra.org/abs/1805.0081
Author other papers
Solar Planet Motion Trajectory Is A Square And Not An Ellipse
http://vixra.org/abs/1811.0135

Solar Planets Motions Trajectory is A Pyramid or A Cone? (Part II)
http://vixra.org/abs/1811.0096

Solar Planets Motions Trajectory is a Pyramid (Part i)
http://vixra.org/abs/1811.0076

The Solar Group Geometrical Structure is A Pyramid (Revised)
http://vixra.org/abs/1811.0060

Earth Axial Tilt
http://vixra.org/abs/1811.0013

Kepler 3rd Law Explanation (Part No.2) (To Support my Claim Against Nobel Prize Board Decision in Physics 2018)
http://vixra.org/abs/1810.0485

The Observer Effect On The Observation Results (Space = Energy=mc2)
http://vixra.org/abs/1810.0343

Definition of Space (Revised)
http://vixra.org/abs/1810.0307

Does The Moon move by Gravity?
http://vixra.org/abs/1810.0089

Kepler 3rd Law Explanation (a Claim Against Nobel Prize Board Decision in Physics 2018
http://vixra.org/abs/1810.0053

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