

## The Moon Orbit Geometrical Structure By Gerges Francis Twadrous

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S. Virgin Mary Assumption into Heaven- Written in Cairo – Egypt -24<sup>th</sup> July 2018

### Abstract

This paper provides an explanation for The Earth Moon Puzzles

Let's remember them here again:

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. Saturn Circumference = Earth Moon Distance at total solar eclipse radius (377000 km)
5. Earth daily motion = The moon orbit circumference at apogee radius (406000 km)

### Why these relationships are found?

Because all these distances are originated from the same source, from which all solar planets diameters are created also

If all these elements (the diameters and distances) are created from the same source that will support the main concept of my research which is:

### "The Matter and Distance Are Created Together From the Same Energy

That means

The Matter is Energy ( $E=mc^2$ )

The distance is Energy (my hypothesis)

**That means the Matter and Energy are created from the same Energy which causes the solar group general harmony**

Please review the planet diameter and orbital distance relationship ( $d=r*109^2$ )

Mars Immigration Proves (Revised)

<http://vixra.org/abs/1807.0268>

## **Introduction**

The first question in this research was why we see the sun disc = the moon disc? i.e. why (the Sun diameter/ the moon diameter) = (earth orbital distance/ Earth Moon distance)?

The answer was **"That's only Pure Coincidence" (No.1)**

Then I found another question...

The Earth-Moon Orbit circumference at apogee radius (406000km) = 2.58 mkm = Earth daily motion... why?

**"That's also Pure Coincidence" (No.2)**

Then I found the moon orbit geometrical relationships which are:

6. Earth Moon Distance at Perigee point = 363000 km = Solar Outer Planets Diameters Total (error 1%)
7. Earth Moon Distance at Apogee point = 406000 km = Solar Planets Diameters Total
8. The Distance between Perigee and Apogee = 40000km = Inner Solar Planets Diameters Total = Earth Circumference.
9. Saturn Circumference = Earth Moon Distance at total solar eclipse radius (377000km)

Why the previous relationships are found?

**"Surely these are Pure Coincidence" (No.3)**

Let's then with more depth, the moon has to move daily a distance = Earth daily motion, otherwise they will be separated from each other.. that means the moon should move daily = 2.58 mkm, but we know that the moon orbit circumference at apogee radius (406000km) also 2.58mkm ..why?

**"We all know this is Pure Coincidence" (No.4)**

Then Metonic Cycle question is produced

Why the moon orbit regresses daily 19 degrees? Why the moon rotates Metonic Cycle which Earth doesn't? let's think with some deep vision

Metonic Cycle period = 6939.75 days

6939.75 days = 19 x 365.25 days (19 sidereal years)

= 235 x 29.53 days (Synodic Month)

= 20 x 346.6 days (nodal year)

The previous data tells us that, the Earth motion is in harmony with Moon and Moon orbit motions, that's why the three motions finish their cycles in the same time \

Why?

**"Just Pure Coincidence" (No.5)**

I found we need to find some logical and physical explanation behind all these data, I can't accept any of these as Pure coincidences...

### 3- The Moon orbit Geometrical Structure

#### I-Data

- 1- **2095 mkm (Jupiter Uranus Distance)** =  $(71)^2 \times 0.415$  mkm (Earth Moon distance at apogee radius) (error 2.3%)
- 2- **2095 mkm (Jupiter Uranus Distance)** =  $(7.1)^2 \times 41.4$  mkm (Venus Earth distance) (error less than 1%)
- 3- **2095 mkm (Jupiter Uranus Distance)** =  $(120536 \text{ km Saturn diameter})^2 / 7.1$   
(Error 1.4%)
- 4- **2095 mkm (Jupiter Uranus Distance)** =  $1/2$  Saturn circumference x Moon Circumference (error 1.2%)
- 5- **2095 mkm (Jupiter Uranus Distance)** = 6939.75 second x 0.3mkm/sec (light velocity) (error less than 1%)
- 6- **2095 mkm (Jupiter Uranus Distance)** = 71 mkm x 29.53 days (synodic month)
  - a. 71 mkm = 29.53 days (synodic month) x 2.41 mkm the Moon orbit at radius (384000km)
  - b. 71 mkm = 27.3 days (sidereal month) x 2.58 mkm the Moon orbit at apogee radius (406000km)
- 7- 2.58 mkm Earth daily motion =  $7.1 \times 0.363$ mkm (Earth Moon distance at perigee point)
- 8- 41.4 mkm (Venus Earth distance) =  $(71)^2 \times 2$  Earth diameter
- 9- 2 Saturn Circumference = 2 Jupiter Circumference – Jupiter diameter
- 10-  $(\text{Saturn diameter})^2 \times 7.1 = 103155 \text{ mkm}^2$  (The area of space between perigee and Apogee points in the moon orbit)
- 11-  $(\text{Earth diameter} / \text{moon diameter}) \times 71 = (2095 \times 2\pi / (7.1)^2)$

#### II- Discussion

Let's provide the general conclusion here and we'll discuss it deeply in following points  
"From the same distance **2095 mkm**, all the moon orbit radiuses (perigee, apogee and total solar eclipse) and the solar planets diameters are created, and also Metonic Cycle is created based on this same distance"

That means the source is the same for all these elements...

So no Pure coincidences are found here.. everything is built on geometrical rules.. as we'll discuss in this paper

### 3-1 The Main Idea

- I claim Earth has a hidden velocity =  $0.99c$  ( $c$  is light velocity), we can't see this high velocity of Earth but we can see its relativistic effects such as Lorentz contraction effect which will effect with a rate = 7.1
- I claim also, this velocity  $0.99c$  is changed later because of the relativistic interactions, so this velocity  $0.99c$  becomes  $0.9999c$  which will practice also a Lorentz contraction effect with a rate 71
- Also I noticed that, the Lorentz contraction effect can be single effect or double effect, means the rates can be 7.1 or 71 and can be also  $(7.1)^2$  or  $(71)^2$
- I claim that, the matter and distance are created together from the same energy. We can use Young Experiment (double slit experiment) to understand that... in Young Experiment, the light coherence produced bright fringes and dark fringes, I claim that we see the bright fringes as matters but the dark fringes we see as distances... \

Please review

Solar Group Geometrical Structure

<http://vixra.org/abs/1805.0081>

- That means the distances are in fact light beams and we may see them as distances, and they may be effected with Lorentz contraction effect

i.e.

- The distances and planets diameters can be effected by Lorentz contraction effect
- Lorentz contraction rates are different ( $7.1$ ,  $7.1^2$ ,  $71$ ,  $71^2$ ) in addition to one more rate 1.0725 which we discussed before in my previous paper

The Time definition

<http://vixra.org/abs/1805.0523>

### 3-2 The Discussion

#### Equation No.1

$$2095 \text{ mkm (Jupiter Uranus distance)} = (71)^2 \times (0.415 \text{ mkm}) \quad (\text{error } 2.3\%)$$

(0.415 mkm Earth Moon distance at apogee point)

Equation No. 1 tells us that the distance between Earth and the Moon at apogee point is a contracted distance from (Jupiter – Uranus Distance 2095mkm) with a rate  $(71)^2$

So the Moon orbit radius at apogee 406000km depends on the distance 2095mkm

**(Result No.1)**

#### Equation No.2

$$2095 \text{ mkm (Jupiter Uranus distance)} = (7.1)^2 \times 41.4 \text{ mkm (Venus Earth distance)}$$

Equation No. 2 tells us that the distance 41.4 mkm (Venus Earth distance) is created as a contracted distance from 2095 mkm by a rate  $(7.1)^2$

i.e.

Venus- Earth Distance is produced by contraction effect on the same distance 2095

i.e.

Venus- Earth Distance depends also on the Same Distance 2095 mkm

### **Equation No.7**

2.58 mkm Earth daily motion =  $7.1 \times 0.363$ mkm (Earth Moon distance at perigee point)

We have studied this Equation before,

- Earth Moon distance at perigee point = 363000 km is created as contracted distance from Earth daily motion 2.58 mkm
  
- Please remember that Venus Earth distance (Earth Position in the Solar group) depends on the distance 2095 mkm... that means **Earth Daily Velocity** depends on this same distance 2095 mkm

### **The conclusion**

- **Earth Moon distance at perigee point (363000km) depends on this same distance 2095 mkm (Jupiter Uranus distance)**

**(Result No.2)**

### **Equation No. 3**

2095 mkm(Jupiter Uranus distance) =  $(\text{Saturn diameter } 120536\text{km})^2 / 7.1$  (error 1.4%)

Equation No.3 tells us that, the distance 2095 mkm depends on Saturn diameter value i.e.

This same distance 2095 mkm (Jupiter – Uranus distance) is a contracted distance with rate 7.1 depends on Saturn diameter squared!

But Saturn diameter squared is an area! How the distance depends on it?

Imagine the distance 2095 mkm a distance and its breadth = 1 mkm, it will be an area =  $2095 \text{ mkm}^2$

That means

Saturn diameter and this distance 2095mkm are depended on each other

Means

Saturn diameter also depends on this same distance

Pleaser remember

Saturn Circumference = the distance between Earth and Moon at total solar eclipse radius

i.e. The Earth moon distance at total solar eclipse depends on Saturn diameter

i.e.

The Earth moon distance at total solar eclipse depends also on the distance 2095 mkm

**(Result No.3)**

### **Equation No. 10**

$(\text{Saturn diameter})^2 \times 7.1 = 103155 \text{ mkm}^2$  (The area of space between perigee and Apogee points in the moon orbit)

**Equation No. 10** tells us Saturn diameter squared also depends on another distance (area)

### **The Final Conclusions**

- 1- The distances are created depend on each other as contracted distances from each other, that supports my description (which tells us that the solar group is created from one energy transports from point to another point through the solar group)
- 2- The Distance is Energy, and that means the space is an effective geometrical player in the solar group as much as the matter herself
- 3- The Moon Orbit geometrical Structure depends on the distance between Jupiter and Uranus
- 4- Jupiter – Uranus distance causes also Metonic Cycle which support the Moon motion general harmony

### **Equations No. 5**

**2095 mkm (Jupiter Uranus Distance) = 6939.75 second x 0.3mkm/sec (light velocity)**  
(error less than 1%)

Equation No. 5 supports the conclusion No 4, which tells that Metonic Cycle depends on Jupiter Uranus distance

We should discuss that in full details in following point (point 4 Metonic Cycle)

### **Note please**

The value  $(71)^2 = 5041$  and The Mercury day needs 5040 seconds to be 176 days, that tells me my conclusions are in the correct way where the numbers are found clearly because of the geometrical reasons...

#### 4- Metonic Cycle is a relativistic motion

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

I- Data

Equation No.1

$$6939.75 \text{ seconds} \times c \text{ velocity} = 2094 \text{ million km (Jupiter Uranus Distance)}$$

Equation No.2

$$6939.75 = 97.8 \times 71 = (71)^2 \times 1.392$$

a-  $(97.8)^2 \times c \text{ velocity} = 2872.5 \text{ mkm}$

b-  $97.8 \text{ second} \times 1.16 \text{ mkm/sec} = 113.45 \text{ mkm}$

c-  $97.8 \text{ degrees} = 122.5 \text{ degrees} \times 0.8 \text{ degrees}$

Equation No.3

$$86400 \times 2 = 6939.75 \times 25.2 \text{ (error 1\%)}$$

Equation No.4

$$86400 = 5040 \times 17.14$$

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

$$\text{(Mercury velocity/ Saturn Velocity)} = (6939.75/1407.6)$$

## II- The Discussion

### Equation No.1

6939.75 seconds  $\times$  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 (**That Means The Moon Follows The Light Motion But With Different Rate Of Time**)
- The previous description is just supposition, let's try to know if it's real in following

### Equation No.2

$$6939.75 = 97.8 \times 71 = (71)^2 \times 1.392 \quad \text{(error 1.1\%)}$$

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

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-  $(97.8)^2 \times c \text{ velocity} = 2872.5 \text{ mkm}$**

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 second)

b-  $97.8 \text{ second} \times 1.16 \text{ mkm/sec} = 113.45 \text{ mkm}$

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-  $97.8 \text{ degrees} = 122.5 \text{ degrees} \times 0.8 \text{ degrees}$

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

### **In brief**

#### **Equation No. 2**

**$6939.75 = 97.8 \times 71 = (71)^2 \times 1.392$**

The equation tells us that the Sun diameter is found based on this equation.

The sun is created depends on the light motion from Jupiter to Uranus using the Lorentz contraction effect to produce the sun

i.e.

#### **In fact the sun is created based on relativistic effects**

That explains to us why Uranus Orbital distance 2872.5mkm is the most important distance in the solar group

$C^2 = \pi^3 \times 2872.5 \text{ mkm}$  (error 1%)

This equation we knew, and we know that  $\pi^3$  is produced based on a relationship between Jupiter and Uranus, also we found that the period 6939.75 seconds is needed for the light to pass from Jupiter to Uranus

Also we know

The sun diameter = Jupiter diameter  $\times \pi^2$

All that confirms the same meaning of Equation No.2

**$6939.75 = 97.8 \times 71 = (71)^2 \times 1.392$**

That the sun is created based on this equation using Lorentz contraction

#### **Equation No.3**

$86400 \times 2 = 6939.75 \times 25.2$  (error 1%)

This equation has specific importance let's discuss its components

- 1-  $86400 \text{ mkm} \times 2 = \text{solar group total energy}$ , as we have studied in my paper Solar Group Geometrical Structure <http://vixra.org/abs/1805.0081>

- 2- The value 6939.75 is the main value of this chapter where 6939.75 seconds is the time needed by light to pass from Jupiter to Uranus, but 6939.75 days is Metonic Cycle
- 3- 25.2 is Mars axial tilt... that tells us why Mars axial Tilt is the constant in Kepler equation..... Please review 3-4

#### **4-2 Mercury Day**

##### **I-Data**

Equation No.4

$$86400 = 5040 \times 17.14$$

- Mercury Day needs 84 minutes = 5040 seconds to be 176 days (mercury day = 4222.6 hours)
- $5041 (71)^2$

##### **II- The Discussion**

##### **First: Mercury Day**

1- There's an idea we can conclude from this data as following:

Mars immigration caused Mercury day to be decreased for this period 84 minutes

The mechanism is unclear but the data supports that completely..

We should notice that the mechanism is absolute complex because this process is done through using Lorentz contraction effect to produce the sun...

Please review

Mars Immigration Proves (Revised)

<http://vixra.org/abs/1807.0268>

##### **Second: the Value 17.14**

Pluto Orbital Inclination= 17.2 degrees

Uranus day = 17.2 days

This value 17.2 in all its forms are found basically based on equation No. 4

Let's try to understand clearly as possible

- Solar inner planets orbital inclinations total = 17.4 degrees (7 Mercury + 3.4 Venus + 5.1 the moon + 1.9 Mars)

$$(17.2/17.4) = 0.99$$

This rate 0.99 is one of the main geometrical features of the solar group structure.. Let's provide the data in following

- 1- 4 planets Masses (Mercury + Venus + The moon + Mars) = 0.99 of Earth Mass
- 2- Lorentz contraction in all my discussion depends on a velocity =  $0.99c$
- 3- 361 degrees / 365.25 days = 0.99 (where 361 degrees is Metonic Cycle degrees = 19 degrees yearly x 19 years)
- 4- Mercury velocity in NASA Planet sheet is 47.4 km/sec but in fact Mercury needs a velocity = 47.8 km/sec to cover his orbital circumference 364 mkm in his orbital period 88 day .... So  $47.4/47.8=0.99...$  (that doesn't mean the recorded velocity is mistaken but there are 2 velocities, 0.99 and 1 ... we'll discuss that later)

## The Discussion

The previous Data tells us that the rate 99% is one of the solar group geometrical features... let's explain that clearly

- Pluto orbital inclination 17.2 defines the solar inner planets orbital inclinational total 17.4 based on the rate (99/100)
- Pluto received this same value 17.2 degrees from Equation No.4 theoretically, but in fact he receives this value from Uranus practically, where Uranus day = 17.2 days!

To understand that let's stud the following equation

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

The previous equation tells us that

- Solar group total energy = 60 x (Uranus Orbital Distance)
- But why 60 is important rate here?
- Because 1 hour = 60 minutes and 1 minute = 60 seconds....

In my previous paper

The Time Definition

<http://vixra.org/abs/1805.0523>

- I explained How the distance values become time value as relativistic effect... the rate 60 is very important because these same distances are work as time values .... In this previous paper we have discussed the concept which is "the solar group unifies the distance to make different rates of time to create the seconds, minutes, hours...etc."

In next I provide more data proves that this rate 60 is one of the basic geometrical features in the solar group...

- Neptune Orbital diameter = 60 x Earth orbital distance
- 2 x Venus Uranus distance = 60 x Mercury Earth Distance
- 2 x Jupiter Pluto distance = 60 x Mercury Mars distance
- 3600 mkm = 30 x Venus Mars Distance  
(note  $C^2 - 86400 \text{ mkm} = 3600 \text{ mkm}$  but we know that the solar total  $2x 86400 \text{ mkm}$  ..... means the value 3600 will be double and the number 30 will be 60)
- Moon orbital circumference = 60 x Earth Circumference
- Jupiter diameter = 60 x Pluto diameter  
(The greatest and smallest diameters)
- Solar planets diameters total = 60 x Mars diameter  
(we know that Mars is specific planet in the solar group)

Equation No. 7

$$(\text{Mercury velocity} / \text{Saturn Velocity}) = (6939.75 / 1407.6)$$

We use here Mercury velocity = 47.8 km/sec

In this equation all values are in seconds units

But Mercury rotation period = 1407.6 hours

How can we understand that..?

The equation explain to us how the second values are transferred into hours values... that depends on Mercury motion but the mechanism still hard to be seen

The concept is the same "the solar group unifies the distances to create changes in the rates of time"