

**Kepler 3<sup>rd</sup> law Explanation (Part No.2)**  
**(to support my claim against Nobel Prize Board Decision in physics 2018)**  
**By Gerges Francis Twadrous**

2<sup>nd</sup> course student – Physics Department - Physics & Math Faculty –  
Peoples' Friendship University – Moscow – Russia -2010-2013

TEL +201022532292 [georgytawdrous@yandex.ru](mailto:georgytawdrous@yandex.ru) / [mrwaheid@gmail.com](mailto:mrwaheid@gmail.com)

The Assumption Of S.Virgin Mary -Written in Cairo – Egypt – 30<sup>th</sup> October 2018

**Abstract**

Kepler 3<sup>rd</sup> Law tells that

$(d^3/t^2) = \text{constant}$  where (d= Planet orbital distance, and t= Planet orbital period)

Why  $(d^3/t^2) = \text{constant}$ ?

Because...

**$d^3$  is Energy In Space Form**

**$t^2$  is Energy In Mass Form**

Kepler 3<sup>rd</sup> Law supports my claim.. That

The solar group is one machine or one body each planet is a member in this body

That tells us

From the same energy the planet matter and his orbital distance are created which provides one source for the whole solar group and guarantees the Planets Motions General Harmony...

This paper aims to support my claim against the Nobel Prize board decision- in physics - 2018)

This claim details are written in my previous paper

Kepler 3<sup>rd</sup> 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](mailto: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>

All my papers

[http://vixra.org/author/gerges\\_francis\\_tawdrous](http://vixra.org/author/gerges_francis_tawdrous)

## **1-Introduction**

In my previous paper

Kepler 3<sup>rd</sup> Law Explanation (a Claim against Nobel Prize Board Decision in Physics 2018)

<http://vixra.org/abs/1810.0053>

I have discussed another vision for Kepler 3<sup>rd</sup> law...

In that paper I claimed, Kepler 3<sup>rd</sup> Law proves that, the solar group is one machine or one body where each planet should be considered as a member in this same body...

Also I claimed, Kepler 3<sup>rd</sup> law contradicts Newton Mechanics basically because Newton Mechanics considers each planet is separated and independent from other planets in his data and motion where the gravity forces produce the harmony in their motions...

In this paper we'll discuss one more question ...let's ask it here?

Do we understand correctly Kepler Laws' Vision? And why we misunderstood them?

Let's see deeply as possible...

Kepler stated a clear rule that,

**"The Planet Velocity varies inversely with his Orbital Distance"**

What did we conclude from this rule? The force is related to the sun, So The further Planet from the sun the slower velocity he has....!

The meaning is clear ..... this idea is the base on which the gravity concept is created

Let's try to see Kepler 3<sup>rd</sup> Law with more depth...

$d^3/t^2 = \text{constant (C)}$  (Kepler 3<sup>rd</sup> Law)

But we know that...

$a$  (acceleration) =  $d/t^2$  .....that means.....  $a$  (acceleration)  $\times d^2 = \text{constant}$

i.e.

$$d^2 = \text{Constant} / a \text{ (acceleration)} \quad (\text{I})$$

The equation tells us that, the planet acceleration varies inversely with his squared orbital distance! Is this meaning = the previous one?!

### **The Space is Energy**

Can we deduce another vision from Equation No. I ?!

Let's use my description to explain this Equation....let remember it...

- The solar group is one body each planet is a member in this body
- The mass is Energy ( $E=mc^2$ ), and the space is energy (my hypothesis), and planet motion needs energy...
- The mass and distance are created from the same energy which guarantees the planets motions general harmony.

**Now let's suppose that,**

- **Each planet has an equal amount of Energy for these 3 purposes (mass, distance and motion)**

That means

More area from the sun needs more energy which means the planet velocity will be decreased because the mass energy is fixed and can't be changed in ordinary cases ...

That's the meaning we have got from Equation No. (I) which told us the area (not distance) varies inversely with the planet motion acceleration....

### **Deep Discussion**

I try here to explain the negative effects which are resulted because of basic definitions absence

Where we have no definitions of Space, matter, time ...etc and have no explanation how the matter is created or by what mechanism the gravity works.... Many basics were ignored in the way to create a description for the solar group Geometry and the result of this process is to create an imaginary description has no proof.

Again I try to attribute this process to Newton Mechanics and not to Kepler Laws....

Let's read C.M.Linton words while he claim that kepler knew there's a relationship between the planet diameter and his orbital distance.....

"Kepler thus assumed that the volumes of the planets were proportional to their distances to the sun and the quantity of matter they contained to the square root of this distance, so that planetary densities varied inversely as square root of the orbital radius and is this ad hoc way be could reproduced his third law ( $T^2$  varies with  $a^3$ ) and absorb into physical Astronomy" "From Eudexus to Einstein A history of Mathematical astronomy" (page 198-199) C.M. Linton – Cambridge university Press...

From that, we can conclude Kepler Laws were created in environment tried to define the **matter origin and creation**...

So, the gravity force description which assumes that each planet is independent from the others... this description is the strange one from Kepler Laws environment, that tells us, Kepler laws were cut from their environment to be used in strange environment can't provide its basics...

So again the contradiction is clear enough...

Kepler Laws provide a description for the solar group as one body or one machine where the planets integrate with each other to provide the motions general harmony, at the contrary Newton Mechanics provides a vision of separated points (separated plants) which cause difficulties to provide the motions general harmony.

This paper tries to answer 2 questions

- 1- Why  $d^3/t^2 = \text{constant}$ ?
- 2- Why the inner planets are distinguished from the outer planets?

### 3- Why $(d^3/t^2) = \text{constant (A)}$ ?

#### 3-1 The Constant (A) proves that the solar group is one machine.

##### I- Kepler 3<sup>rd</sup> law Constant $(d^3/t^2)$

Frequently I have referred to the constant A in Kepler 3<sup>rd</sup> law... where we found it =25  
As the following table tells us....

$$P^2 \text{ (or } t^2) * 25 = d^3 \text{ (or } a^3) \quad \text{(Kepler 3<sup>rd</sup> Law)}$$

- P : The Planet orbital period
- d : The Planet orbital distance
- **25.2: Mars Axial Tilt**

The results are shown in the following table

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

##### **Comment on table No. 1**

- So The Constant (A) =  $(a^3/p^2) = 25..$
- We know that Mars Axial tilt =25.2 degrees (error 0.8%)
- The previous table tells us how Mars axial tilt is important

We have discussed this table in the previous paper

##### - Kepler 3<sup>rd</sup> law Constant $(t^2/d^3) = (1/A)$

$$(1/A) = (1/25.2) = 0.03968 \text{ degrees}$$

We know 1 degree = 1 million km (because Mercury orbital circumference = 360 mkm and 360 degrees)

So the value 0.03968 degree be equal 0.03968 mkm = 39680 km =0.99 Earth Circumference  
We have seen the rate 0.99 frequently before and we know that this rate is a basic one in the solar group Geometry.....

Let's see Earth Circumference effect on the solar group Geometry in following....

## **II- Earth Circumference Relationship**

<b>Table No.2</b>		
<b>"The Solar Planets Diameters Total Relationship with the Moon Orbit"</b>		
If Earth diameter = 12756 km, is considered to be = 1		
i.e. The Earth Circumference = 40080 km, will be just = $\pi$		
So The Following Is Correct		Error
Earth Circumference	= $\pi$	-
Solar Inner Planets diameters total	= $\pi$	-
Lunar orbit distance from perigee point to apogee point (free space without the moon)	= $\pi$	1.3%
Moon Orbital Radius (at perigee point)	= $9\pi$	
Solar outer planets diameters total	= $9\pi$	
Moon Orbital Radius (at apogee point)	= $10\pi$	1.2
All Solar Planets Diameters total	= $10\pi$	1
2 Jupiter diameters + Saturn diameter	= $10\pi$	-
Saturn Circumference =Moon Orbit radius at total solar eclipse	= $9.5\pi$	-
Jupiter Circumference	= $11\pi$	1.9
The Sun diameter	= $11\pi^2$	1.2

### **Comment on table No. 2**

We may remember here also that

1- Earth Circumference = diameters total of (Mercury+ Venus+ the moon+ Earth + Mars)

2- 2 x Neptune Circumference = diameters total of (Jupiter + Saturn + Uranus+ Pluto)  
(Error 1%)

I wish the reader sees easily that, there's a geometrical structure behind these relationships...

### **III- The Discussion**

Let's summarize the idea clearly as possible

Kepler 3<sup>rd</sup> law tells us that  $(d^3/t^2) = \text{constant (A)}$

And we have found that **A and 1/A** both values have great effects on the planets data....

The current theories tell us that have occurred by pure coincidences...!!

No one will accept this weak claim where we can't see the straight logic behind

So, let's ask the main question

Why both values are so effective on the solar group Geometry?

Because....

- The Solar Group is created from one energy, where this energy creates the planet matter and orbital distance
- The energy creates the planet matter and orbital distance to enable the energy to pass through the solar group
- The energy uses a geometrical structure by which the energy creates the solar planets data to be in harmony with each other to cause the planets motions general harmony, for that both constants A and 1/A are players in the solar group geometrical structure
  
- We may notice that, the solar group behaves as a light beam. In light behavior we saw that the falling light beam and reflected one both of them are real energies and effective on the geometrical structure... that's the same situation where the value (A) and its reflex (1/A) both of them are effective greatly on the solar group geometrical structure.... That may support my claim "the solar group is created based on light beams coherence"

Solar Group Geometrical Structure

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

### **3-2 Why $P^2$ (or $t^2$ )? What does this value mean?**

Kepler 3<sup>rd</sup> law tells us that,  $(d^3/t^2) = \text{Constant}$

$d^3$  should be considered as a volume of the distance where the volume value is known value in physics science.... But what's the Value ( $t^2$ )? For example 365.25 days is Earth orbital Period approximately but what does mean  $(365.25)^2$ ?

Why Kepler Equation uses this value? And how he had published this law if there's no definition for the value  $t^2$  (or  $P^2$ )?

#### **3-2-1 the Space = Energy**

I suppose that the distance (space) is energy, so the energy is related to the distance volume... means when we think about distance as energy we should consider this distance as a volume that because the volume is the ordinary consideration for any distance...

We have to ask here one main question.... "How Kepler had defined the distance? What's the distance according to Kepler Vision?"

#### **3-2-1 The Time = Energy**

What's  $t^2$  or  $P^2$ ? Where we can find this value?

$$E = mc^2$$

Now let's suppose that the light moves 1 second only ... so the value  $c^2$  will be  $d^2$  where  $d$  is the distance the light passed in one second....

But

We have discussed frequently, that in the solar group sometimes the distance and time values can be equivalent...

That means the value  $c^2$  will be  $d^2$  and in some cases will be  $t^2$

So

$$t^2 = c^2$$

So the term  $t^2$  is Energy also

That's why both terms are proportional to each other

$d^3$  proportional to  $t^2$

That because

$d^3$  is Energy

and

$t^2$  is Energy also

The Equation tells us that the Energy is equivalent to Energy....! Is it clear?

**$d^3$  is Energy Is Space Form**

**$t^2$  is Energy In Mass Form**

So the same energy creates the space and mass which moves through this space....

That means

Kepler 3<sup>rd</sup> law is a form of the time and distance values equivalence...

For the time and distance values equivalence please review

**The Time Definition**

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

### **3-3 Is the value $t^2$ real one?**

#### **I-Data**

1- 5040 seconds =  $(71)^2$

2- 71 seconds            x 1.16 mkm/second            = 41.4 mkm x 2

3- 5040 seconds        x 1.16 mkm/second        = 5870 mkm

4-  $(294)^2 = (71)^2$     x  $(\pi+1)^2 = 86400$         = 5040 x 17.2

But

5-  $294 = (180/\pi) \times 5.13$

#### **II- Discussion**

##### **Equation No. 1**

5040 seconds are needed for Mercury Day to be = 176 days

1.16 mkm/ seconds = a light velocity I supposed it's found in the solar group

I provided the previous Equations to explain that, the Value  $t^2$  isn't very strange value in the solar group...

The very value 5040 seconds which we have studied in

##### **84 Minutes Are Required for Mercury Day**

<http://vixra.org/abs/1807.0412>

This value 5040 seconds and its square root 71 both of them produced defined distances which tell us that

The value " $t^2$ " and "t" both are geometrical players in the solar group geometrical structure...but we know only the defined periods such as 5040 seconds but not its square root 71 seconds because we don't use the planets data analysis, but we use only the observational results...

#### 4- Why the inner planets are distinguished from the outer planets

The outer planets together can be considered as a holder carries the inner planets

The inner planets produce the sun rays from the solar planets motions total Energy...

That's why the outer planets are distinguished from the inner planets...

This idea we need to discuss its details in another paper...

#### Author Other Papers

The Observer Effect On The Observation Results (Space = Energy=mc<sup>2</sup>)

<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>

Metonic and Saros Cycles Harmony Reason

<http://vixra.org/abs/1809.0559>

The Solar Group Main Equation (Part 2)

<http://vixra.org/abs/1809.0468>

The Solar Group Main Equation

<http://vixra.org/abs/1809.0186>

The Solar Group Main Energy

<http://vixra.org/abs/1809.0152>

Jupiter Uranus Distance (Metonic Cycle Reason) (revised)

<http://vixra.org/abs/1809.0043>

#### Gerges Francis Tawdrous

TEL +201022532292

E-mail [georgytawdrous@yandex.ru](mailto: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>

All papers

<https://www.slideshare.net/search/slideshow?searchfrom=header&q=gerges+francis+papers+>