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The Assumption Of S. Virgin Mary -Written in Cairo - Egypt -12 ${ }^{\text {th }}$ April 2020 Abstract
This paper tries to answer 2 basic questions which are:
( $1^{\text {st }}$ Question) -If it's real that, Mars had immigrated from its original orbital distance ( 84 mkm ) to its new current one ( 227.9 mkm )- So Why Mars had immigrated?
( $2^{\text {nd }}$ Question)-If Mars Immigration is a fact- Why Titius -Bode Law expresses Mars (current) orbital distance ( $\mathbf{2 2 7 . 9 \mathrm { mkm } \text { ) normally without disturbances? }}$
Let's remember "Mars Immigration Theory" in following:

- Mars original orbital distance was 84 mkm . and Mars had immigrated from it to its current orbital distance 227.9 mkm
- Through Mats Motion from 84 mkm to 227.9 mkm , Mars had collided with Venus and then Mars had collided with Earth also.
- From the Collisions debris Earth Moon was created -and Mars had found its moons. And the rest debris was attracted by Jupiter and created The Asteroid Belt
The Giant-impact hypothesis is in consistency with Mars immigration theory
But
- Instead of the (Supposed Planet) Theia, Mars itself made the collisions- and caused the Earth -Moon Creation -
Mars Immigration Theory solves The difficulties of Giant-impact hypothesis:
I. Why Venus Has No Moon? - Because Mars moved from 84 mkm to 227.9 mkm and pushed all debris in its motion direction - far from Venus - but Earth has greater Mass and the debris lost their motion high momentum - so Earth could attract some debris and create its moon
II. The Lunar Magma Ocean (LMO) Origin- is Venus - because the moon is created by 3 planets debris (Venus - Earth - Mars) - So their rocks are found in it Why The Iron Oxide (Feo) of the Moon=(13\%)? Because The rate (13\%) is a middle between Mars rate ( $18 \%$ ) and the terrestrial mantle ( $8 \%$ ).
3IV. Why Mars diameter is decreased through the history? Because of the collisions - Mars diameter lost around (5\%) (and Mars mass also which causes difficulties for Mars gravitation equation)
Shortly: the Giant-impact hypothesis supports Mars Immigration Theory
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## 1- Introduction

This paper discusses the basic questions behind Mars Immigration Theory
Let's provide the questions in following:
1- Why Mars original orbital distance was $=84 \mathrm{mkm}$ ?
2- Why Mars had immigrated from its original orbital distance?
3- Why Mars had immigrated specifically to the point 227.9 mkm ? Could Mars immigrate to any other point?
4- If Mars Immigration is a fact, Why Titius-Bode law express about Mars orbital distance ( 227.9 mkm ) normally as The other inner planets?
5- Mars Displacement $=144 \mathrm{mkm}$ (as the theory supposed), has this value 144 mkm any specific significance?
6- What are the available proves for mars immigration theory?
For better explanation we have more 2 questions -
7- Why there are no more general equation (as kepler laws) which express all planets? (because Bode law fails to define Neptune distance! Bode law can't be a general law for planets as kepler laws, why there are no more general laws?
8- Is there a relationship between the planet diameter and orbital distance? If yes why this relationship is found?

Mars Immigration Theory Proves ( 5 proves)
( $\mathbf{1}^{\text {st }}$ proof) The Giant -Impact Hypothesis (The Geological Proves)
( $\mathbf{2}^{\text {nd }} \mathbf{~ p r o o f ) ~ P l a n e t ~ d i a m e t e r ~ \& ~ o r b i t a l ~ d i s t a n c e ~ r e l a t i o n s h i p ~ ( P l a n e t s ~ O r d e r ~ A n a l y s i s ) ~}$
( $3^{\text {rd }}$ proof) Planet effect on its neighbor
(4 ${ }^{\text {th }}$ proof) Mar Immigration Motion Direction
( $5^{\text {th }} \mathbf{~ p r o o f ) ~ M a r s ~ I m m i g r a t i o n ~ r e s u l t s ~}$
To find a clear approach for the discussion - we will start with $1^{\text {st }}$ question
Mars original orbital distance was $\mathbf{8 4} \mathbf{~ m k m}$ because Mars diameter was $7070 \mathbf{~ k m}$
The planet orbital distance is defined depending on its diameter and Not Mass -
Planet orbital distance is defined by the general equation
Planet Orbital Distance $=$ Planet Diameter $\mathbf{x} 109^{2}$
Why Mars diameter was decreased (around 5\%)? because of Mars collisions with
Venus and then with Earth through its motion from ( 84 mkm ) to ( 227.9 mkm )
More discussion will be in point No. 3

## Why had Mars immigrated from its original orbital distance?

this question will be discussed in point No. 6 of this paper
Let's provide the paper contents

## 1 Paper Contents

## 2- Methodology

3- Mars Displacement From Its Original Orbital Distance (84 Mkm) To Its Current One (227.9 Mkm)

4- Planet Diameter And Orbital Distance Relationship
5- Can Titius-Bode law disprove Mars Immigration Theory?
6- Why had Mars immigrated from its original orbital distance?

## 2- Methodology

Why Jupiter diameter $=142984 \mathrm{~km}$ ? ..... Why we need to answer such question?
I use the planets data analysis in my study for the solar system geometry - I try to test our vision toward the solar system creation and Motion -
So - in my research - clearly - I compare between the planets data and the physics acceptable theories to see if there's a consistency between both
Why Jupiter diameter $=142984 \mathrm{~km}$ ? is a question has no clear answer - the diameter creation is attributed to different (unknown) historical circumstances \& records ...
Based on that:
(1)

If Jupiter diameter $=142984 \mathrm{~km}=8$ planets diameters total - such data - has no any geometrical effect in the solar system understanding - the data simply is found by pure coincidence...! Also
(2)

If Jupiter diameter $142984 \mathrm{~km} \times 5040=720.7 \mathrm{mkm}$ (Mercury Jupiter Distance)
Where Mercury Day needs 5040 seconds to be $=176$ solar days and Mercury moves during its day period ( 175.94 solar days) a distance $=720.7 \mathrm{mkm}-$ or
(3)

If Jupiter diameter $142984 \mathrm{~km}=1$ million $\mathrm{km} / 7$ where Mercury orbital inclination $=7$ degrees and 1 degree $=1 \mathrm{mkm}$ because Mercury orbital circumference $=360$ degrees $=360 \mathrm{mkm}$
Such data also gives us no better understanding for the solar system...
How The Matter Is Created? the ancient question - is removed from the book - and we accept that the matter is a continuous miracle found without an explanation!
That's why I use the planets data to discover the solar system geometry ...
I accept the historical records about how the planet is created if there's a proof- For example - a person had an accident and his arm was cut in this accident - So can this person still have 2 arms Now? We need a proof for the historical record
About what we argue here?
The person has lost his arm but still can live... the planet has changed its data but still can revolve around the sun! the person personality is still (almost) the same - and the planet still can do its geometrical role-

The person is not a body- And - The Planet Is Not Just A Matter
That's why I ask - why Jupiter diameter $=142984 \mathrm{~km}$ ? because we try to discover the geometrical power which is found behind the planet diameter creation!

## Earth Circumference = the (5) inner planets diameters total! Why...?

The planet is NOT just a matter - The Matter Is Created By A Geometrical
Powerful Hand - the matter is created as one player in a team - with the space - the time -the energy - the motion - many other players -
BUT
If the person is over-bleeding - he will die and his personality will be disappeared
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The body is the main key behind which the human power is hidden
The planet matter is the key behind which the geometrical great power is hidden That's why we ask how the matter is created? can Kepler help us?
"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 ( $\mathrm{T}^{2}$ varies with $\mathrm{a}^{3}$ ) and absorb into physical Astronomy" "From Eudexus to Einstein A history of Mathematical astronomy"(page 198-199) C.M. Linton-Cambridge university Press...

## Deep Discussion

Why the planet density is changed relative to its orbital distance?!
Kepler - Since hundreds of years- told that - the solar system is one building and each planet is a part of this same building - or
The solar system is one machine and each planet is a gear of this same machine...

## We don't like this idea! Why?

Because our eyes see the planets are separated matters from each other- we consider that- Where the space separates the planets from each other - so they are independent planets (matters)! - Our eyes see by this way and refuse to understand any other idea - So we see the mirage and believe it's a real water
What if we wrongly see this vision? Let's test it - do we know what's the space? How the space is created or from what stuff? The naïve vision tells us -the space is the nothingness - and found without creation!
Kepler told - Planet matter is created based on geometrical rules- it's Not the Big Bang description (Why? because it's NOT The Random Creation Concept)
The planets were created (as parts of the same one building - which necessitates to create these planets data depending on each other -and because of that the data shows this dependency)
Based on this explanation - can the planet diameter (matter) is created in relationship with Planet orbital distance (Space)? i.e the matter and Space are created with specific rates to each other to do one geometrical job, Can that be possible?!
Lorentz Length Contraction Phenomenon tells the answer! Why?? BECAUSE
Lorentz Length Contraction Phenomenon deals with a Particle length as a distance both are contracted by high velocity motion!

## As if the matter (a particle length) is equivalent to the space (a distance)

So the ancient question- how the matter is created- was not negligent completely but there are different tries accumulate the knowledge to support our investigation.
Shortly
The Planets Data analysis is a way to test our ideas and review our visions to know if we see the real water or just a mirage.
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## 3- Mars Displacement from its original orbital distance ( 84 mkm ) to its current one ( 227.9 mkm )

3-1 Mars original orbital distance $=84 \mathrm{mkm} \quad 3-2$ Mars Immigration Theory Proves 3-3 Mar Displacement $=144 \mathrm{mkm}$

## 3-1 Mars original orbital distance $=\mathbf{8 4} \mathbf{~ m k m}$

I- Data

Group No. (I)

## Planet Orbital Distance $=$ Planet Diameter x 109 ${ }^{2}$

(1) Mercury orbital distance $57.9 \mathrm{mkm}=$ Mercury diameter $4879 \mathrm{~km} \times 109^{2}$
(2) Earth orbital distance $149.6 \mathrm{mkm}=$ Earth diameter $12756 \mathrm{~km} \times 109^{2}$
(3) Saturn orbital distance $1433.5 \mathrm{mkm}=$ Saturn diameter $120536 \mathrm{~km} \times 109^{2}$
(4) Mars distance $81 \mathrm{mkm}=$ Mars diameter $6792 \mathrm{~km} \quad \times 109^{2}$
(5) Venus Diameter (12104 km) $=109^{2} \quad$ (error 1.8\%)

Group No. (II)
(6) $(\text { Venus Diameter })^{2}=$ Mars diameter x Mars circumference $=144 \mathrm{mkm}$
(7) Venus Diameter $=$ Mars diameter $\mathrm{x}(\pi)^{1 / 2}$

This data discussion will be in the point (3-3) Mars Displacement $=\mathbf{1 4 4} \mathbf{~ m k m}$ (Note please if Mars diameter $=7070 \mathrm{~km}$ - so based on the previous equation Mars orbital distance will be 84 mkm - so Mars diameter is decreased with around (5\%) why? because of the collisions with Venus \& Earth which supports the theory.

## 3-2 Mars Immigration Theory Proves

( $\mathbf{1}^{\text {st }}$ proof) The Giant -Impact Hypothesis (The Geological Proves)
( $\mathbf{2}^{\text {nd }} \mathbf{~ p r o o f ) ~ P l a n e t ~ d i a m e t e r ~ \& ~ o r b i t a l ~ d i s t a n c e ~ r e l a t i o n s h i p ~ ( P l a n e t s ~ O r d e r ~ A n a l y s i s ) ~}$
( $3^{\text {rd }}$ proof) Planet effect on its neighbor
(4 ${ }^{\text {th }}$ proof) Mar Immigration Motion Direction
( $5^{\text {th }} \mathbf{~ p r o o f ) ~ M a r s ~ I m m i g r a t i o n ~ r e s u l t s ~ ( M a r s ~ D i a m e t e r ~ d e c r e a s i n g ~ - ~ A s t e r o i d ~ b e l t ~ C r e a t i o n ) ~}$
(1st proof) The Giant -Impact Hypothesis (The Geological proves)
As the paper abstract shows how Mars theory is in consistency with The GiantImpact hypothesis - also Mars immigration theory answers many basic questions face the giant -impact hypothesis -as we have discussed- why Venus has no moon? the theory solves it- because Mars Motion was from the point ( 84 mkm ) to (227.9 $\mathrm{mkm})$ - so the direction of Motion is defined - and Mars Motion pushed all debris to move with Mars that made a wave pushed all debris far from Venus - So Venus Couldn't create a moon for it. then these debris lost their high motions momentum when reach to Earth position and because Earth mass is greater than Venus - Earth could attracted some debris and created from them its moon - Now Mars Moons supports this same description because Mars with small mass could attracted 2 moons - How? Because the debris high momentum is lost already, and its motion became so weak even Mars could attracted its moons - the rest debris was attracted by Jupiter and created the asteroid belt.

## Please review The Giant -Impact Hypothesis -

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(2 $2^{\text {nd }}$ proof) Planet diameter \& orbital distance relationship (Planets Order Analysis) Mars immigration theory is born basically based on the planets order analysis
The planets order analysis shows real puzzles ... for example
(Mercury - Venus - Earth) this order of planets shows an order in planets diameters, masses and orbital distance - (the order rule is - A Greater Diameter Or Mass Needs A Greater Orbital Distance) if this order controls all planets so Mars should be the second planet after Mercury - But -
(Jupiter - Saturn -Uranus - Neptune - Pluto) the outer planets order shows that the rule depends on planet diameter (and not mass because Uranus Diameter is greater than Neptune but less Mass) and the rule is reversed from the previous one i.e. A Greater Diameter Needs A Shorter Orbital Distance - this analysis refers to that Mars may be found in a wrong position in the planets order and this wrong position causes a disturbance for the planets order - based on this analysis Mars immigration theory can be concluded ... to get the correct answer we need to know if There's A Real Relationship Between Planet Diameter And Orbital Distance. - which we should discuss in more details in next point (No. 4)
(3 ${ }^{\text {rd }}$ proof) Planet Effect On Its Neighbor
I claim any planet effect on its neighbor
Example
687 days $($ Mars orbital period $)=365.25$ days $($ Earth orbital period $) \quad$ x 1.9
687 days $($ Mars orbital period $)=27.3$ days $\quad($ The moon orbital period) $\quad 25.2$
But 25.2 degrees $=$ Mars axial tilt and 1.9 degrees $=$ Mars orbital incaution
Also $25.2 \mathrm{deg}($ Mars axial tilt and $)=(1.9 \mathrm{deg}$. Mars orbital incaution) x 13.18 deg .
Where
The moon motion degrees daily $=13.18$ degrees
We should not limit our discussion for just Data consistency - let's see its depth
Because
Mars moves per solar day $=0.524$ degrees $(=360$ degrees $/ 687$ days $)$
The value 0.524 degrees $=(1 / 1.9)$ where 1.9 degrees $=$ Mars orbital incaution
That means
Mars Data (25.2, 1.9, $0.524 \ldots$. etc) depends on the solar day period of time
This point still needs more analysis
The direct conclusion is:

## There's an effect from Earth and Moon on Mars Motion (their neighbor)

Can we prove this effect?
Jupiter also effect Mars Data - by the same method
4331 days $($ Jupiter orbital period) $=687$ days $($ Mars orbital period) $\times 2 \pi$
Based on that If we find an effect of Mercury data on Mars - can that support Mars immigration theory?
But if Mars is immigrated, why (as supposed) mercury still have effect on it? If the Earth Moon is created by some debris from Mars, Venus \& Earth, can the 3 planets effect on the Moon Motion? (planet diameter \& orbital distance may answer)!
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## (4 ${ }^{\text {th }}$ proof) Mar Immigration Motion Direction

There's one known motion in the solar system which is the planets revolution around the sun - but Mars immigration Motion is a different direction from the revolution around the sun- in more clear words - this motion corresponds to the light motion direction which is sent from the sun to Mars current Point ( 227.9 mkm)
Such motion direction is unknown in the solar system
But
This motion same direction we have found in Jupiter Energy analysis which shows that there's some motion (for energy from Jupiter Toward Pluto)
That tells - Mars immigration Motion direction is not unusual Direction - on the contrary -
Please review Jupiter Energy analysis
The Giant-impact hypothesis supports,, Mars Immigration Theory,, (III) https://vixra.org/abs/2003.0521
( $5^{\text {th }}$ proof) Mars Immigration results which are:
1- The Earth Moon Creation
2- Mars Moons Creation
3- The Asteroid belt Creation
4- Mars diameter Decreasing (5\%)
5- Mars Mass Decreasing (5\%)
Simply we have a reason to answer why Venus has no moon but Mars (mass $=1 / 13$ ) has 2 moons?!
The fact shows itself clearly - there were no debris around Venus to create a moon for her! Why? but mars has!? Why? because of the Motion Direction
Imagine a car moves from the point 84 mkm to 227.9 mkm -so the car creates a wave pushes all debris in the same motion direction
That's simple and acceptable explanation...

## Simply - again - the fact shows itself

The gravitation equation works correctly only with Jupiter and Saturn where...
$\left((\text { Saturn orbital distance })^{2} /(\text { Jupiter orbital distance })^{2}\right)=($ Jupiter Mass/ Saturn Mass $)$
If Mars Mass is increased with 5\%......So
$\left((\text { Mars original distance } 84 \mathrm{mkm})^{2} /(\text { Mercury orbital distance57.9 mkm })^{2}\right)=($ Mars Mass/ Mercury Mass)
Also the gravitation equation tells us that, Mars orbital distance was 84 mkm - Mars was the Mercury neighbor and had to immigrate from its original orbital distance Why had to immigrate? (this will be discussed in point No. 6 of this paper) but now let's analyze Mars displacement 144 mkm ...

## 3-3 Mar Displacement = $144 \mathbf{~ m k m}$

The question is $\qquad$ could Mars immigrate to any other point? Or it had to immigrate to this specific point 227.9 mkm with a displacement $=144 \mathrm{mkm} ?$ ?
It's simple question - when the person is healthy, he will go to any place, but when the person is patient he will go to the hospital - Obligatory Motion -
So- Mars had no other choices! Let's try to prove that

## I-Data

## Group (I)

(a) $25920 \mathrm{mkm} \quad=\mathbf{1 4 4} \mathbf{~ m k m ~ x ~} 180$
(b) 4495 mkm (Neptune orbital distance) $=144 \times \pi^{3}$
(c) 144 mkm
$=180 \mathrm{mkm} \times 0.8$
(d) $144 \mathrm{mkm} \times \pi \quad=2 \times 227.9 \mathrm{mkm}$ (Mars orbital distance) Group (II)
(e)
$\left(\right.$ Venus Diameter) ${ }^{2}=$ Mars current Diameter $x$ Mars current circumference $=\mathbf{1 4 4} \mathbf{~ m k m}$
(f) Venus Diameter $=$ Mars current Diameter $x \pi^{1 / 2}$
(g) Venus Axial Tilt $\quad=\pi^{1 / 2} \times 100$ degrees
(h) Earth Diameter $\quad=$ Mars diameter x 1.9 (mars orbital inclination =1.9 deg)

## II-Discussion

It's very complex to explain the previous data- so let's summarize the idea

- If there's a relationship between the planets diameter and orbital distance- so this relationship is recorded in Venus and mars diameters
- i.e. Mars before to move in its immigration, knew where it will move- the displacement value 144 mkm was written in its diameter and in Venus diameter also - So the recording was double! Why? to save the solar system general geometry.
- The solar system is NOT separated planets from each other - the solar system is one building and each planet is a part of this same building - now if Mars will immigrate that should be done by a cooperation between all planets - Venus recorded Mars immigration displacement - to save the solar system geometry
- Mars immigration forces us to accept the vision that - the solar system is one building or one machine -it's Not consisted of separated points- it's one system and any change for any planet will effect greatly on all others -
Spite of that
- Mars immigration Process was a violation for the solar system general geometry because the planet position in the solar system depends on its diameter and mars immigration violated this rule which caused many difficulties for the solar system general geometry
- Shortly- Mars immigration was a great earthquake in the solar system -and just because Jupiter and Saturn unified their powers perfectly, the solar system could still in life spite Mars immigration
This discussion will be in more details in point no. (6) of this paper
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4- Planet Diameter And Orbital Distance Relationship
3-1 Planet Diameter And Orbital Distance Relationship
3-2 Venus Diameter Analysis

## 3-1 Planet Diameter And Orbital Distance Relationship

How to prove there's a relationship between the planet diameter \& orbital distance?

- The Solar Planets Order Analysis May Support This Relationship
- The General Equation $\left(\right.$ distance $=$ diameter x $109^{2}$ ) may support it also
- Mars \& Venus Diameters Interaction may support this same direction

But the basic support for this relationship is found by Lorentz Transformations

- Lorentz Length Contraction Phenomenon provides a puzzle can't be understood basically because Lorentz deals with the matter ( Particle length) as a distance (Space) - both are contracted by the same equation and because of the same reason (High Velocity Motion) - Why??
- Because in the physics book there's a fighting to define if Lorentz length Contraction Phenomenon is a real effect done for the particle own nature (for which I agree) or it's illusion for measurements (which I refuse) - because of this fighting in definition - we leave this fighting point and move for more general one


## - How The Matter Is Created?

## - Is The Matter Created Dependent Or Independent From The Space?

These ancient questions - cause the real puzzle -and we will ask again...
Is there a relationship between planet diameter and orbital distance?
Kepler assumed it simply - but no proof till now!

## Again - 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??

Because the matter is created with its space! Why? because the matter is created in motion and the motion necessitates the space creation to enable the matter to move

So -the question - is there a relationship between planet diameter $\&$ orbital distance? Was more deep question- i.e. -is the matter created with the space? Is the matter is created base on geometrical rules relative to its space to enable both to perform their (both) geometrical role in the solar system geometry and motion
The planet diameter (matter) \& orbital distance (space) relationship is a qualified answer for many different questions which were left behind -
If there's a relationship between Planet diameter and orbital distance -so that means Mars was (indeed) the next planet after Mercury and that supports Mars immigration theory

## 3-2 Venus Diameter Analysis

Why Venus doesn't follow the equation $\left(\right.$ distance $=$ diameter $\left.\times 109^{2}\right)$ ?
If Venus does, many questions can be solved based on that! many Venus didn't and left us with the puzzles!
(1) Venus Diameter $=109^{2}$ (error $1.8 \%$ )! Why? and then
(2) $(\text { Venus Diameter })^{2}=(\text { Mars Diameter } 6792 \mathbf{k m})^{\mathbf{2}} \mathbf{x} \boldsymbol{\pi}=\mathbf{1 4 4} \mathbf{~ m k m}$
(3) Let's suppose that, the solar system is one building, so, how this building is created? such building need a unification unit - one player unifies all planets together- I hope to explain my idea correctly... Let's use one example to do that Example No. 1
A triangle 2 angles $=80$ degrees and 60 degrees respectively, what's the third angle value?! 40 degrees! How to know that? because the triangle angles total $=180$ degrees How to know? Euclidian Geometry

But the solar planets have no Euclidean book! What they should do?!
They write the geometrical rules in their data
The rate $(109)^{2}$ which we use in the general equation (distance $=$ diameter $\times 109^{2}$ ) this same rate is recorded in Venus diameter - they have no book - they write on their bodies
That means - the rate $109^{2}$ - or- Venus diameter is the responsible to define the planets orbital distances

## Gerges Equation For Venus Diameter <br> $\mathrm{D}=\mathrm{AR}^{2}{ }_{\mathrm{v}} \Pi^{\mathrm{n}}$

Where
$\mathrm{D}=$ the planet distance to the sun or to another planet
$\mathrm{A}=$ constant $\quad \mathrm{R}_{\mathrm{v}}=$ Venus diameter

| Table No. 1 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Constant | * $\Pi^{\mathbf{n}}$ |  | The distance | Error |
| (Venus diameter) ${ }^{2}$ | * $\Pi^{0}$ |  | 149.6 mkm Earth orbital distance | 2\% |
|  | * $\Pi$ |  | 455.8 m km Mars Orbital diameter | - |
|  | * $\Pi^{2}$ |  | 1433.5 mkm Saturn Orbital distance | - |
|  | * $\Pi^{2}$ | /2 | 720.3 mkm Mercury Jupiter distance | - |
|  | * $\Pi^{2}$ | *2 | Uranus orbital distance | - |
|  | * $\Pi^{2}$ | *4 | Pluto orbital distance | 1.4\% |
|  | * $\Pi^{3}$ |  | Neptune orbital distance | 1.1\% |
|  | * $\Pi^{-1}$ | *2 | Earth Mercury distance | 2\% |
|  | * $\Pi^{-2}$ | *4 | Mercury orbital distance | 2.5\% |
|  | * $\Pi^{-2}$ | *8 | Venus Mars distance | - |

Venus Diameter effects on the solar system geometry with more deep effect than this table ability - Venus diameter discussion will extend in Point No. 6 of this paper.

## 5- Can Titius-Bode law disprove Mars Immigration Theory?

## 5-1 Preface

5-2 Planet orbital distance equation (as a planet effect on its neighbor)
5-3 Planet gravity equation (as a planet effect on its neighbor)
5-4 Planet diameter and orbital distance equation 5-5 Mars Axial Tilt

## 5-1 Preface

Why Titius- Bode law couldn't predict Neptune orbital distance? If the law predicted all other planets, why can't predict Neptune distance?

Let's ask another question
Why there's no more equations which are followed by all planets as kepler Laws?
I provide here 3 new equations - but no one is used for all planets! Why?
Bode law also anther example for this same puzzle?! An Equation works for 6 planets but not for the rest! We have to suppose that, the 6 planets followed the same one equation by pure coincidences! (even Bode law was considered as pure coincidence!) This is NOT an easy question.... The answer pure coincidence will be removed...

We need a real explanation....! What's going on here?
We deal with a classified order had a disturbance for some reason Many equations and analysis show that Mars was exceptional in its data There's a disturbance caused by Mars immigration

But - what then- the life is stopped! No- the life is continuous

So -Mars will find some configuration in its new orbital distance - the planet still in life and does its geometrical job

Now we have 2 different stories - in the ancient one Mars was in 84 mkm - and in the modern one Mars is in 227.9 mkm from the sun - and Mars in its new orbital distance creates its configuration with the other planets

Shortly -
Why Titius-Bode law shows no difficulties with Mars (current) orbital distance ( 227.9 mkm )? Because of 2 reasons
( $\left.1^{\text {st }}\right)$ Mars created its configuration in its new orbital distance ( 227.9 mkm )
( $\left.2^{\text {nd }}\right)$ because Mars current orbital distance ( 227.9 mkm ) is (an obligatory displacement) defined by the solar system geometry, means, the displacement is found by a general cooperation between all planets which support the configuration for Mars current orbital distance ( 227.9 mkm )

Let's try to prove that as possible in following

## Mars Displacement Equation

## $25920 \mathrm{mkm}=144 \mathbf{m k m} \times 180$

- A light with known velocity ( $0.3 \mathrm{mkm} / \mathrm{sec}$ ) during a period 86400 seconds (a solar day) travels a distance $=25920 \mathrm{mkm}$
- Also - all solar planets move together during (a solar day) a distance $=17.75 \mathrm{mkm}$ and so during 1461 solar days they move a distance $=25920 \mathrm{mkm}$
- If 180 degrees is a geometrical value in the soalr system - so the value 144 mkm must be an obligatory one
Also
- $180 \mathrm{mkm} \times 0.8=144 \mathrm{mkm}$ where $(0.8$ degree $=$ Uranus orbital inclination $)$

Now the rate 0.8 is found frequently in the solar system - for example

- Earth Jupiter distance $=0.8 \times$ Jupiter orbital distance -
- I want to say that - the rate 0.8 defines many distances relative to each other - this effect is one of Uranus important effects on the solar system geometry - please review it
- In this point we need to show that the value 144 mkm was defined by 2 ways at least
- (1 $\left.1^{\text {st }}\right)$ by the planets diameters (Mars and Venus Diameters)
- $\left(2^{\text {nd }}\right)$ by the general solar system geometrical structure -which tell us that Mars had 2 choices only which were to stay in 84 mkm or to move to 227.9 mkm and no more chances are available because the value 25920 mkm control all data
- So the question is, Why Mars had to immigrate? This question will be discussed in the next point (Point No.6)


## Discussion

In following I provide 3 equations which show that Mars Data was exceptional -Titius-Bode law doesn't refer to this fact (that Mars is exceptional) but instead -
Titius-Bode law refers to Neptune as an exceptional -

## I want to say that

- Mars immigration caused a disturbance for the solar planets order - and this disturbance is seen in the equations breaking points (and because of that we have no more general laws as kepler- but we have broken equations- as Titius-Bode law or my next equations)
- The breaking point isn't necessary to be found always with Mars - Because Mars created a configuration with its neighbors, so the breaking point can be transported to another planet (as happened with Neptune in Bode law)
- So my equations and Bode law supports each other, they show a breaking in the equations and inconsistency for the data order and because these equations are followed by some planets (but not all planets) so we can conclude that there's some order is confused here which results these equations breaking points.
- i.e.
- Kepler Laws were so rare because of Mars Immigration Theory

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## 5-2 Planet orbital distance equation (as a planet effect on its neighbor) Gerges Equation For Planet Orbital Distance

## $\mathrm{d}^{2}=4 \mathrm{~d}_{\mathrm{o}}\left(\mathrm{d}-\mathrm{d}_{\mathrm{o}}\right)$

Where
d= Planet Orbital Distance
$\mathrm{d}_{0}=$ Previous Planet Orbital Distance
There are 3 exceptions which are:

- Earth depends on Mercury
- Mars depends on Venus
- Pluto depends on Uranus

The equation disturbances are found only with Mars, Pluto as we expected and Earth also as a result of Mars immigration

## Let's see this equation using in following

 1-Venus Orbital Distance 108.2 mkm$)^{2}=$ 4* Mercury Orbital Distance $57.9 \mathrm{mkm} \times 50.3 \mathrm{mkm}^{\text {( }}$ Mercury Venus distance.
(No error)
2-
(Earth Orbital Distance. 149.6 mkm$)^{2}=$ 4* Mercury Orbital Distance $57.9 \mathrm{mkm} x 91.7 \mathrm{mkm}^{\text {m }}$
Mercury Earth distance)
(2.5\%)
$3-$
(Mars Orbital Distance 227.9 mkm$)^{2}=$ 4* Venus Orbital Distance $108.2 \mathrm{mkm} \times 120 \mathrm{mkm}^{\text {m }}$ Venus Mars distance)
(No error)
4-
$(\text { Ceres Orbital Distance } 415 \mathrm{mkm})^{2}=4^{*}$ Mars Orbital Distance $227.9 \mathrm{mkm} x 187 \mathrm{mkm}$ Mars Ceres distance)
(No error)
5-
(Jupiter Orbital Distance 778.6 mkm$)^{2}=$ 4* $^{*}$ Ceres Orbital Distance $415 \mathrm{mkm} \times 364 \mathrm{mkm}$ Ceres Jupiter distance)
(No error)
6
(Saturn Orbital Distance 1433.5 mkm$)^{2}=$ 4* Jupiter Orbital Distance $778.6 \mathrm{mkm} \times 655.7^{7}$ mkm Jupiter Saturn distance)
(No error)
7-
$(\text { Uranus Orbital Distance } 2872.5 \mathrm{mkm})^{2}=$ 4* Saturn Orbital Distance $1433.5 \mathrm{mkm} \times 1439^{\text {* }} 10$ mkm Saturn Uranus distance)
(No error)
8 -
(Neptune Orbital Distance 4495.1 mkm$)^{2}=$ 4* $^{*}$ Uranus Orbital Distance 2872.5 mkm x 1622 mkm Uranus Neptune distance)
9 -
(Pluto Orbital Distance 5870 mkm$)^{2}=4^{*}$ Uranus Orbital Distance $2872.5 \mathrm{mkm} \times 2997.5$ mkm Uranus Pluto distance)
(No error)

## II- Discussion

The Equation works perfectly except with Mars, Earth and Pluto .... Why?
Because I claim that Mars was nearer to the sun with orbital distance $=84$ million km and Mars had to immigrate to his new point with orbital distance 227.9 mkm -

Mars Orbital Distance Is Changed Through History http://vixra.org/abs/1905.0510

## Table No. 2

| Planet | Equation | Resulted | Registered | Error |
| :--- | :--- | :--- | :--- | :--- |
| The Sun | $(\text { (Earth/Sun diameters rate })^{\mathbf{2}}($ Sun Mass/ <br> Earth Mass)* earth gravity <br> $=(\mathbf{1 / 1 0 9})^{2 *} \mathbf{3 3 3 0 0 0} \boldsymbol{* 9 . 8 = 2 7 4}$ | $\mathbf{2 7 4}$ | $\mathbf{2 7 4}$ | $\mathbf{0}$ |
| Moon | $(3.66)^{2} \times(0.073 / 5.97) \times 9.8$ | $1.6 \mathrm{~m} / \mathrm{sec}^{2}$ | $1.6 \mathrm{~m} / \mathrm{sec}^{2}$ | 0 |
| Mercury | $(2.61)^{2} \times(0.23 / 5.97) \times 9.8$ | $3.7 \mathrm{~m} / \mathrm{sec}^{2}$ | $3.7 \mathrm{~m} / \mathrm{sec}^{2}$ | 0 |
| Venus | $\left.(1.0538)^{2} \times 4.87 / 5.97\right) \times 9.8$ | $8.9 \mathrm{~m} / \mathrm{sec}^{2}$ | $8.9 \mathrm{~m} / \mathrm{sec}^{2}$ | 0 |
| Earth | 9.8 | 9.8 | 9.8 | 0 |
| Mars | $(1.878)^{2} \times(0.642 / 5.97) \times 9.8$ | $3.7 \mathrm{~m} / \mathrm{sec} 2$ | $3.7 \mathrm{~m} / \mathrm{sec} 2$ | 0 |
| Jupiter | $(0.0892)^{2} \times(1898 / 5.97) \times 9.8$ | $24.7 \mathrm{~m} / \mathrm{sec} 2$ | $23.1 \mathrm{~m} / \mathrm{sec}^{2}$ | $6.9 \%$ |
| Saturn | $(0.10582)^{2} \times(568 / 5.97) \times 9.8$ | $10.44 \mathrm{~m} / \mathrm{sec}^{2}$ | $9 \mathrm{~m} / \mathrm{sec}^{2}$ | $16 \%$ |
| Uranus | $(0.25)^{2} \times(86.8 / 5.97) \times 9.8$ | 8.9 | 8.7 | $2.3 \%$ |
| Neptune | $(0.2575)^{2} \times(102 / 5.97) \times 9.8$ | $11.1 \mathrm{~m} / \mathrm{sec}^{2}$ | $11 \mathrm{~m} / \mathrm{sec}^{2}$ | $0.9 \%$ |
| Pluto | $(5.337)^{2}(0.0131 / 5.97) \times 9.8$ | $0.6125 \mathrm{~m} / \mathrm{sec}^{2}$ | $0.6 \mathrm{~m} / \mathrm{sec}^{2}$ | $2 \%$ |

## Gerges Equation For Planet Gravity

The planet gravity $=\left(\frac{\text { Earth Diameter }}{\text { The Planet Diameter }}\right)^{2} \times\left(\frac{\text { The Planet Mass }}{\text { The Earth Mass }}\right) \times$ Earth gravity

## I- Data

## II- Discussion

1. We can see that, the Equation is working sufficiently with all planets and even the sun follows this same equation, Except With Jupiter And Saturn There Are great Errors ( $6.9 \%$ and $16 \%$ respectively.... Why?)
2. I claim there are relativistic effects in the solar group and this 2 great errors are found basically because of these relativistic effects...
Please review -
There Are Relativistic Effects In The Solar Group http://vixra.org/abs/1903.0565 and
Solar Planet Gravity Equation http://vixra.org/abs/1808.0012
3. we need to observe and analyze deeply The Sun Equation in row No. 1 of the previous table, because this equation supports my claim that the sun is originated from the same source from which the solar group is originated, otherwise why the sun herself follows the same equation? That may support my claim that, the sun rays is created depends on solar planets motions accumulation....

## 5-3 Planet Gravity Equation (as a planet effect on its neighbor)

## 5-4 Planet diameter and orbital distance equation

## Gerges Equation For Planet Diameter And Orbital Distance Relationship

## $\mathrm{D}=\mathrm{R} * 109^{2}$

$\begin{array}{ll}\text { Where } & \mathrm{D}=\text { planet orbital distance } \\ \text { Let's see that in following } & \mathrm{R}=\text { Planet diameter }\end{array}$
Let's see that in following

- $109^{2} \mathrm{x}$ Mercury diameter $4879 \quad=57.9 \mathrm{mkm}$ Mercury orbital distance
$-109^{2} \mathrm{x}$ Venus diameter 12104
$-109^{2} x$ Moon diameter 3475
$-109^{2} \mathrm{x}$ Earth diameter 12756
$-109^{2} \mathrm{x}$ Mars diameter 6792
$-109^{2} x$ Jupiter diameter 142984
$-109^{2} \mathrm{x}$ Saturn diameter 120536
$-109^{2} \mathrm{x}$ Uranus diameter 51118
$-109^{2} \times$ Neptune diameter $49528 \times 2 \pi$
$-109^{2} \mathrm{x}$ Pluto diameter $2390 \mathrm{x} \pi$

$$
\begin{aligned}
& =57.9 \mathrm{mkm} \text { Mercury orbital distance } \\
& =144.9 \mathrm{mkm}(\text { Mars Displacement }) \\
& =41.4 \mathrm{mkm}(\text { Earth }- \text { Venus distance) } \\
& =149.6 \mathrm{mkm} \text { (Earth Orbital distance) } \\
& =80.5 \mathrm{mkm} \text { (Earth }- \text { Mars distance) } \\
& =1700 \mathrm{mkm} \text { (Mars }- \text { Jupiter Circumference) } \\
& =1433.5 \mathrm{mkm} \text { (Saturn Orbital Distance) } \\
& =607.5 \mathrm{mkm} \\
& =3700 \mathrm{mkm} \text { (Jupiter Neptune distance) } \\
& =89 \mathrm{mkm} \text { (Earth }- \text { Mercury distance- } 3 \% \text { error) }
\end{aligned}
$$

## II-Discussion

- Previous data tells us that D is Not only (the Planet orbital distance), but also a distance between 2 planets (or even the circumference of this distance) (i.e. D defines the planet position)
- I claim that, the Equation was consistent but the disturbance is found because of Mars immigration caused many disturbance for this equation

6- Why had Mars immigrated from its original orbital distance?
6-1 Venus Diameter More analysis
6-2 Why had Mars immigrated from its original orbital distance ( 84 mkm ) to ( 227.9 mkm )

## 6-1 Venus Diameter More Analysis

- Mars Axial Tilt = 25.2 degrees (on the horizontal level)
- Mars Axial Tilt $=\mathbf{1 1 5 . 2}$ degrees $\quad($ on the vertical level $115.2=25.2+90)$
- Mars Axial Tilt $=\mathbf{2 0 5 . 2}$ degrees $\quad($ where 205.2 degrees $=115.2+90)$

But

- Saros Shift angle $=115$ degrees $\qquad$ And
- Saros Cycle 6585.39 days $=115 \times(180 / \pi)$

Why Venus diameter is so specific one? And why there's a strong relationship between Venus \& Mars Diameter?

## Because

- The sun diameter $=115.2 \times$ Venus Diameter
- The sun diameter $=\mathbf{2 0 5 . 2} \mathbf{x}$ Mars Diameter

Why the displacement 144 mkm was obligatory ... because

- 627 mkm (Earth Jupiter distance)=144 x 4.37 mkm (the sun circumference)

6-2 Why had Mars immigrated from its original orbital distance ( 84 mkm ) to (227.9 mkm)?

## Because of

## The Sun Creation

The event which forced Mars to immigrate from ( 84 mkm ) to ( 227.9 mkm ) Was

## The Sun Creation

http://www.mathnet.ru/eng/person22119
List of publications on Google Scholar
List of publications on ZentralBlatt
https://mathscinet.ams.org/mathscinet/MRAuthorID/757317
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