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# HERETICAL PHYSICS-IV <br> EPICYCLE MOON TRANSPORT 

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#### Abstract

To analyse WEB data describing extreme moon orbit locations of Apogee and Perigee. Which appear to be impossible to analyse mathematically by the Newton formula, which can only apply to a perfect circular orbit.

\section*{KEY WORDS}

Angular Axis, Orbital planes, Ecliptic plane and Aether transport sphere.

\section*{INTRODUCTION}

Moon records have been discovered going back 5,000 years. Therefore scientific method has been in use and in this case some accurate form of timekeeping applied. Evidently by the time of the Greeks all moon data was 'old hat'. To the extent they built a complex geared, clockwork type mechanism, (The Antikythera) somewhere around 2,500 years ago, to foretell its coming events for Planets and also Moon eclipse stages. The associated data needed to be collected over many lifetimes. They managed this feat without the physics of 'The Standard Model', which claims to utilizes Newton's gravitational circular orbit equation to derive the behaviour of the Moon's elliptical gyrations. Despite the published data showing wide ranging orbital values and that the average value utilized for this circular equation is a rare event.


## DATA

Modern by Wiki:-
A) Perigee $356,400 \mathrm{Km} \rightarrow 370,400 \mathrm{Km}$ (Ave $=362,600 \mathrm{Km}$ )

Apogee $404,000 \mathrm{Km} \rightarrow 406,700 \mathrm{Km}($ Ave $=405,000 \mathrm{Km})$
Ascending Node period; 18.6yrs
Angle to Ecliptic $=5.145$ deg.
B) NASA ;- Moon - Earth, Distances vary $357,000 \mathrm{Km} . \rightarrow 407,000 \mathrm{Km}$. $14 \%$ variation, $\rightarrow 1 / \mathrm{r}^{\wedge} 2$ variation about $23 \%$ in gravitational attraction? There is no possibility for Newton's circular equation can be applied to analyze these extremes. Earth is not at the centre of this circular orbit, so the interacting masses are not applicable.

## HYPOTHESIS

From (A) Combining one Apogee and one Perigee to assemble closest pairings $356,400+406,700=763,100 \mathrm{Km}$ $370,400+404,000=774,400 \mathrm{Km}$
There are no reported acceleration or velocity vectors affecting the Moon orbits, which must surely be purely circular, by default.

1) $763,100 / 2=381,550 \mathrm{Km}$ radius; circular orbit
2) $774,400 / 2=387,200 \mathrm{Km}$ radius; circular orbit

These two orbital radii must now be analyzed, to find a physical circular construction, in which an encompassing envelope contains all orbital parameters.
i.e. The four maximum extremities as listed above at (A)

The moon orbit lies at an angle of 5.145 deg. to the Ecliptic, and the Earth lies on the Ecliptic Plane. An eclipse of the Sun or moon can only happen when all three are simultaneously touching the Ecliptic and in a radial line from the Sun.
The points where the moon orbit crosses the ecliptic is classified as a NODE, which are labeled Ascending and Descending with reference to Earth. For an eclipse to occur the nodes are in line on the Ecliptic and on a radial line from the Sun. Precession of the NODES is reported as 18.6 years. In this paper the terminology will be labeled 'forward' and 'trailing' where the movement of the Ecliptic, referencing all planets, as they travel in parallel at about $400 \mathrm{Km} / \mathrm{s}$. towards constellation Virgo. The Moon orbit is considered to be in front or trailing the ecliptic as it crosses the NODES.
As we search for a physical structure, let us consider first, these circular orbits lying in contact with the Ecliptic Plane. In this scenario there would be an eclipse of the Sun and Moon every monthly orbit (27.2 days). Consult the attached 'Figures' for a graphic demonstration for a derivation of the physical construction.

Figure 1. and Figure 2 following
Earth to Perigee $356,400 \mathrm{Km}$
Earth to orbiting centre $381,550 \mathrm{Km}-356,400 \mathrm{Km}=25,150 \mathrm{Km}$ offset.
Earth to the postulated orbiting centre $25,150 \mathrm{Km}$ in one direction
Figure 3 and Figure 4 following
Earth to Perigee $370,000 \mathrm{Km}$
Earth to orbiting centre $387,200 \mathrm{Km}-370,400 \mathrm{~km}=16,800 \mathrm{Km}$ offset Earth to the postulated orbiting centre $16,800 \mathrm{Km}$. In opposite direction, half a nineteen-year period later.

Small offsets when compared to NASA's Average $378,000 \mathrm{~km}$ centre-to-centre distance of Earth to Moon.
However these orbiting circles are at an angle 5.145 degrees to Ecliptic and so must these offsets from the Earth centre be at an angle 5.145 degrees. In turn defining the hypothesized axis of 84.855 degrees to the Ecliptic and at the two offsets from Earth. The two centres are separated 'very approx'. :- $25,150 \mathrm{Km}+16,800 \mathrm{Km}=41,950 \mathrm{Km}$ and also lay on a plane 5.145 degrees to the Ecliptic. Requiring the hypothesized transport sphere axis to precess ( 360 degrees per 254 Moon orbits)
Centre of precession;-
$41,950 \mathrm{~km} / 2=20,975 \mathrm{Km}$
Radial distance from Earth centre $25,150-20,975=4,200 \mathrm{Km}$

Radial distance from Earth centre $20,975-16,800=4,150 \mathrm{Km}$ These radial distances are in advance of the Ecliptic, at 5.145 degrees. To accomplish contact with the four limits the sphere centre also needs to have a precess orbit, in the advancing direction, around a circle diameter $12,200 \mathrm{Km}$ also in the time scale of 254 Moon orbits.

Figure 5.
This is part of the proposed epicycle transport mechanism. A section through a sphere with the Moon's orbits at right angles to the page, but showing their maximum diameters at opposite extremes during one nineteen year cycle. i.e. about nine and a half years apart (127 orbits).

This construction was prepared using a graphics drawing package in lieu of extensive computations.

Figure 6. and Figure 7.
Two sphere locations shown as they occur at separation period of 127 Moon orbits.
Figure 8
A section through the Ecliptic, with a plan view of how the centre of the moon orbits around a location around $4,200 \mathrm{Km}$ from Earth centre

HOTES


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[Raw data)


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NDTES
Dimensions in kms


Frpurb 3
[RdW datal


Frgurb 4
tFlgure. 3 converted to a circle)



- Earth centre

Flgure 7


On the Eallp+10
Flaure 8

## SUMMARY

i) The Moon is fixed on the surface of a transport Aether sphere (T.A.E.) and locked to position, without spin, such that the same face always looks to the centre.
ii) An Axis from the centre of the T.A.E, which is in advance of the Ecliptic, extends to the Moon orbiting centres, at an angle of 84.855 degrees to the Ecliptic.
iii) T.A.E. spins parallel to Ecliptic while axis rotates slowly one rev./nineteen years while maintaining angle to Ecliptic 84.855 degrees.
iv) To generate two Apogee positions and two Perigee positions, the centre of T.A.E. must precess in the forward travel direction around a circle of diameter of $12,200 \mathrm{Km}$. once per nineteen years.
v) Centre of T.A.E is in advance of Ecliptic $=236,340 \mathrm{Km}+/-6,100 \mathrm{Km}$ Precession.

## CONCLUSION

The variations in the Moon orbit, while in close approximation to Earth cannot be solved by gravitational equations, due to inconsistent distance variations. However a spherical Aether Sphere generating epicycles can explain the wide-ranging values.

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