

Orbits without Newton or Relativity – EPICYCLES?

ABSTRACT

Arguing that Einstein's support for an "Aether" during a lecture (Germany 1922) and a hypothesis based on Aether mass and Paul Gerber's (1890) equation, simplifies Planetary precession values and at the same time overcomes the anomalies in the Standard Model elliptical mathematics. Also reference to Colin Ronan "Changing Views of the Universe" Appendix II :- "The epicycle and deferent..." Paul Gerber's 1890 equation is employed in lieu of Relativity in deriving planetary precession.

Miles Mathis has written extensively over the years on the "Greatest Standing Errors in Physics". In this report the foundations of Newtonian Physics and associated arithmetic are also now called into question. Collecting bits of various hypotheses, from Miles Mathis, Prof. Kanarev, Alfred Evert, Colin Ronan and extrapolating to areas not mentioned in their writings, form the basis of this summary.

Alfred Evert's extensive papers on Aether, as the sole substance of mass and energy, in construction of atom components to Galaxies is similar to Mathis in the respect that both identify a single substance as mass and energy. Two sides of the same coin, so to speak.

A search of the WEB has not revealed an 'Epicycle' Model of planetary Ellipses? for the Solar system although mentioned in histories, so here goes;

UNIVERSE

The hypothesis considers the Solar System as a mere dust spec in the 'Milky - Way' and therefore having no source of independent energy which is equivalent to a normal dust spec floating in the Pacific Ocean. Separation of physical components for individual treatment by mathematical hypotheses cannot but generate other than anomalies. In the Physics "Standard Model -(S.M.)" anomalies are an occupational hazard. As a basis for this discourse, we can observe the following:-

- A) Newton's basic equation for planetary orbits, $F = G.M.m/r^2$ expresses a need for a perfectly circular orbit for its functionality. Any deviation from the circle must result in some catastrophic event. Planets do not follow any such circular paths according to Kepler's Laws; which state explicitly that elliptical paths are the norm. Thus a circular path equation has no application as observed by current data on the behaviour of the Solar System planets. Although the mathematics attached are described as "Newtonian" Aphelion and Perihelion require gravity to increase at Aphelion in opposition to Newton's equation.

Mathis has suggested there are two forces at work, with a repulsive force from the Sun being more active during close ups.

X-Z is = 2.a (in Fig.1)

In the application of control forces in normal Engineering applications, unbalanced force changes are considered to rebalance after five fluctuations.

- A) Kepler stated that the Sun is at one focus of the 'elliptical' orbits, without stating the location of the second focus required as per the maths. Extensive Mathematical Papers throughout Physics are developed around an ellipse with two focal points. 'NAAP Labs' has published such an explanation and clearly states the planets are continually changing speed, being faster at perihelion.
 - B) A detailed, seven page paper, by Musa D. Abdullahi, published in "The General Science Journal" defines the mathematical development of such an Elliptical Path. The Figure F1 is a copy of the main constructional elements contained in his paper. The significant feature is the requirement of a second focus F2. e.g. either two Suns! or an oscillating Sun?
- 'NAAP Labs' requires speed change being achieved without application of any force vectors! while Newton based his numbers on a single 'innate motion'.

INTRODUCTION

The centre line axis of the Solar System is speeding through SPACE at 220k/s + towards a fixed point and planets are travelling in parallel with substantial kinetic energy $\rightarrow \text{mass} \times 220^2$, which must seriously dwarf orbital K.E. It is noted that this energy is not acknowledged as existing. Newton's innate force vector must be a disturbance added to the 220k/s and causing planetary helical spirals as observed. Michael Vacaitis has suggested all motion is gyroscopic and precession is the norm, from the DNA construction to planets and galaxies.

The application of 'Epicycles' will now be utilised to overcome the impossibilities of a circular equation describing Forces in an eccentric ellipse and where Kepler's laws being adapted to require continual application of varying speed vectors. Abdullahi shows how the Standard Model requires two focal points F1, F2.

RESEARCH

A 'Typical Paper' labelled "Anomalous Precessions" takes the above discrepancies as being 'normally correct', then proceeds to develop a mathematical explanation for 'Anomalous Precession' which boils down to discrepancies between mathematical applications and observations E.g. But NOT Physics. The "Anomalous Precession" paper is a follow on from Abdullahi's paper and produces eight pages of discussion and associated detailed calculus with a double Sun position for the Elliptical focal points. Fourteen equations were developed including a complex series, with some terms truncated etc. etc. After some variables substitution, two equalities are derived

$$\mu = (U1 + U2)/2 \quad \hat{e} = (u1 - u2)/(U1 + u2); \text{ the eccentricity ratio}$$

where: U1 = Aphelion value and U2 = Perihelion value

The significance of these values will now be illustrated in the "Epicycle Model"

AN ALTERNATIVE MODEL THE AETHER – EPICYCLE

Following is a hypothesis based on 'Aether Space Matter'. Many Physicists deny the existence of such a substance, despite Einstein's support in 1922, so one question is '...where does the car ignition H.V. coil, store it's energy stress?' other's dodge behind the term 'Field' as a substance for storing this energy stress, without admitting such a stress cannot be stored in a 'nothing!'

Figure 1 is a graphic of Abdullahi's existing Standard Model ellipse and Fig 2 is the theory applied to Mercury showing the construction of such a mathematical ellipse, That is a single Sun and a Ghost mass which has the same properties. The term 'ghost' as a mass is borrowed from Mathis.

The "Aether-Epicycle Model" alternative develops an ellipse from two physical spheres with a single Sun, shown in Figure 3 as section of two circles. Aether Spheres are travelling in the 'Z' direction at 220k/s towards a fixed constellation while precessing and transporting the Solar System planetary masses. The spheres are labelled 'O2' (or orbit two). It is this O2 sphere orbiting around Sun – Centred aether spheres of various Perihelion radii. In this hypothesis it is assumed these aether spheres are a construction generated by the Galaxy (and are also the construction for binary stars),. Figure 3 shows the physical structure and how a single 'Sun' delivers the data as observed. Here each planetary mass is located in a fixed position on it's transporting sphere, O2, with respect to the galaxy. i.e. Aether envelopes the planets, not planets moving the Aether.

Circle O2 has a diameter of difference between (Aphelion – Perihelion) ; (with a Radius labelled R2) and the diameter of O2, is same distance as between F1 and F2 as in the standard model. The locus of circle O2 travels around the Sun at the Kepler radius 'a' as used in the equality Constant a^3/t^2 , where the ellipse line X-Z is = 2.a (in Fig.1)

The Aether Model shows:-

Length 'a' = $R_p + 2 \times R_2$; where R_p is perihelion radius

R_k = Kepler Radius = $R_p + R_2$ (a constant value)

Eccentricity 'n' = R_2 / R_k (a constant value)

These three lines of "Maths?" derive the identical mathematical definitions as derived by the six pages of Standard Model calculus, as observed above. The S.M. planet mass only touches it's elliptical path twice per orbit at the Kepler radius.

In the S.M, eccentricity is the distance between the two Sun? "locations?" and these Sun positions are situated on the major axis Z-X. This line Z-X must also precess when a planet processes, inferring Fi-F2 precession. If such a Sun oscillation is needed it must be a constant distance for all planets. The attached spreadsheet results show the diameter O2 is not a constant and each planet has a separate value for this imaginary oscillation. Hence the need to disguise this eccentric 'fudge' with a term 'eccentric ratio'.

Applying the radius of R_2/R_k to calculate the eccentricity ratio 'n' for precession calculations in " Paul Gerber's (1890) formula for precession 'İ' " (in lieu of 1905 Relativity)

$$\ddot{I} = (6.\pi.G.M.)/[c^2.a.(1- n^2)] \text{ :- Radians}$$

Gerber's values developed in this spreadsheet are in close agreement with the Standard Model, using simple High School arithmetic.

The value Konstant = $(6.\pi.G.M.)/[c^2.]$ dimensionally:- kg, m, s,

The formula was also applied to fixed orbits of aphelion and perihelion values as a check of precession, which values are virtually zero.

SPREADSHEET

The attached summary from the spreadsheet calcs. show clearly in Columns 'N' (Gerber) for planetary precession based on "the two sphere" model and 'R' (Standard model) The two sphere model has comparative values based on physical orbits as defined above and processed by the spreadsheet. The Standard Model cannot offer a physical model for it's associated mathematics.

Precession is not fully explainable by the fixed location of planetary mass attached to a sphere O2, so Fig. 3 and Fig 4 (Fig4A) is a variation of possible elliptical paths, developed to show a secondary orbit which may have a small out of phase rotation, leading to physical precession.

A planet	B	C Kms	L precession radians	N Berger Precession a-s with ecc orbit	P ecc as distance value	Q ecc as sun dia. value	R S.M. st model precession value
mercury	Aphelion	69,816,900,000	5.02E-07	0.103575204	1.19E+10	8.55	0.1034
	kepler R	57,909,175,000					
	perihelion	46,001,200,000					
venus	Aphelion	108,939,000,000	2.57E-07	0.053088387	7.31E+08	0.53	0.053
	kepler R	108,200,000,000					
	perihelion	107,477,000,000					
earth	Aphelion	152,100,000,000	1.86E-07	0.038408627	2.50E+09	1.80	0.0383
	kepler R	149,600,000,000					
	perihelion	147,100,000,000					
mars	Aphelion	249,232,432,000	1.23E-07	0.025422367	2.13E+10	15.29	0.0254
	kepler R	227,943,824,000					
	perihelion	206,655,215,000					
jupiter	Aphelion	816,001,807,000	3.49E-08	0.007209910	1.88E+10	13.53	0.0074
	kepler R	778,340,821,000					
	perihelion	740,697,835,000					
saturn	Aphelion	1,503,509,229,000	1.96E-08	0.004038112	7.68E+10	55.20	0.0040
	kepler R	1,426,666,422,000					
	perihelion	1,349,823,615,000					

A planet	B	C Kms	L precession radians	N Berger Precession a-s with ecc orbit	P ecc as distance value	Q ecc as sun dia. value	R S.M. st model precession value
neptune	Aphelion	4,537,039,826,000	8.09E-09	0.001669274	8.83E+11	634.08	0.0013
	kepler R	4498396441000					
	perihelion	2771753056000					
pluto	Aphelion	7,376,124,302,000	5.02E-09	0.001036743	1.47E+12	1055.81	0.0010

reproduced from a paper by Musa D Abdullahi

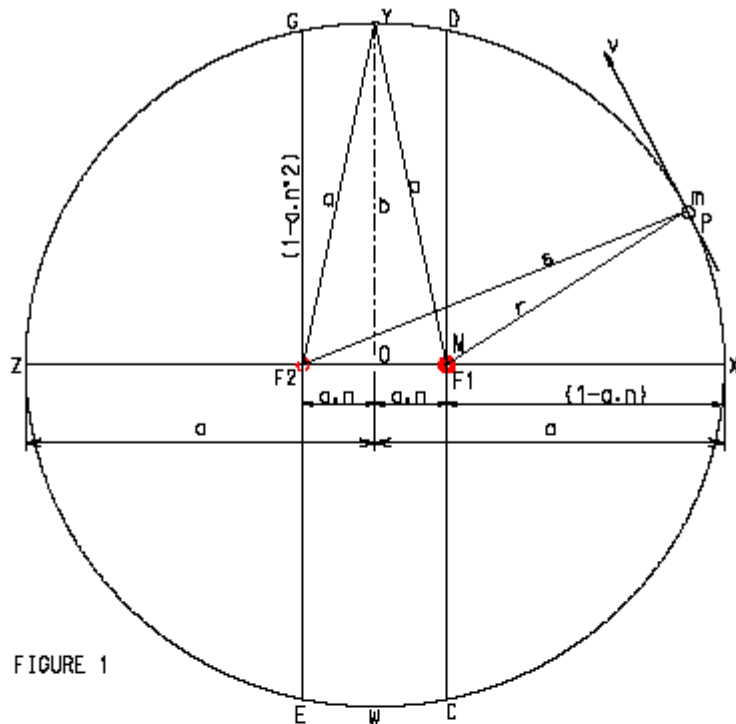
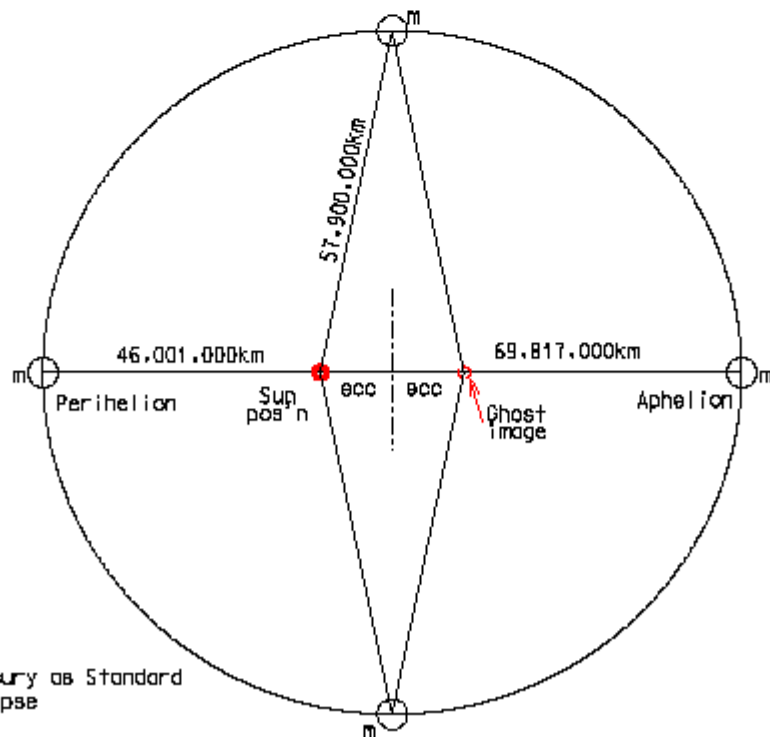


FIGURE 1

A body of lighter mass 'm' revolving in an elliptic orbit, of eccentricity 'n', round a much greater mass 'M' at the centre of mass, the focus is F1



Mercury as Standard
Ellipse

FIGURE 2

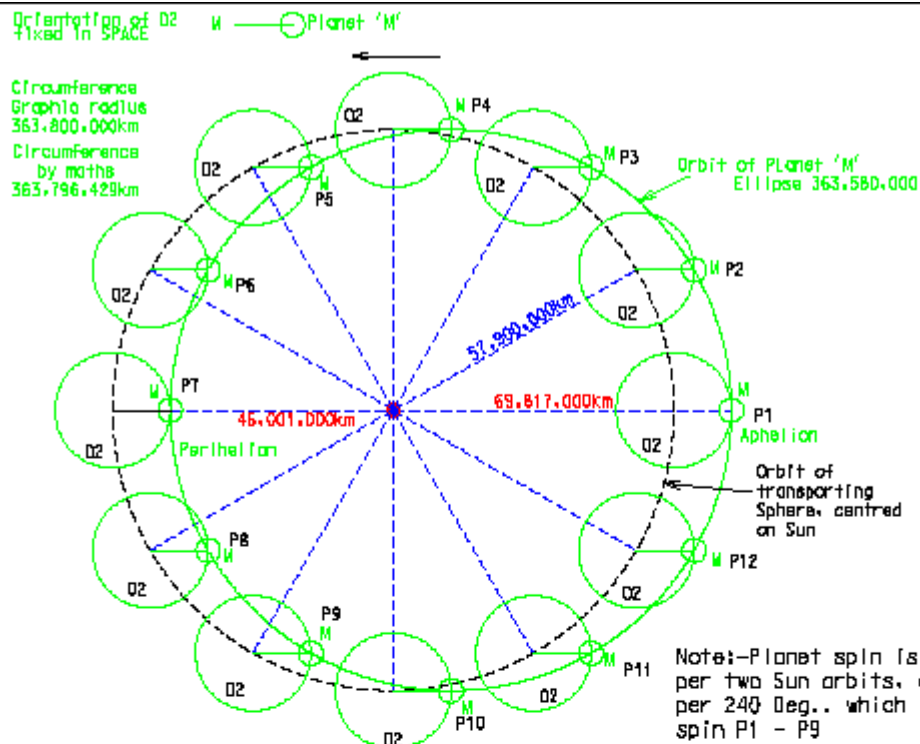


FIGURE 3

R2 Sun Orbit rotation with spin relative to SPACE

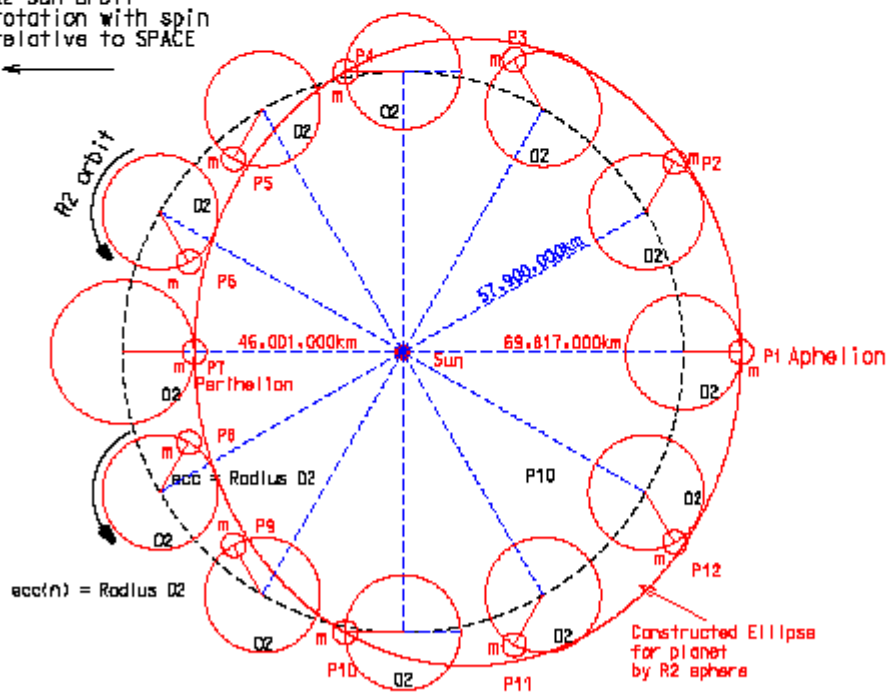


FIGURE 4

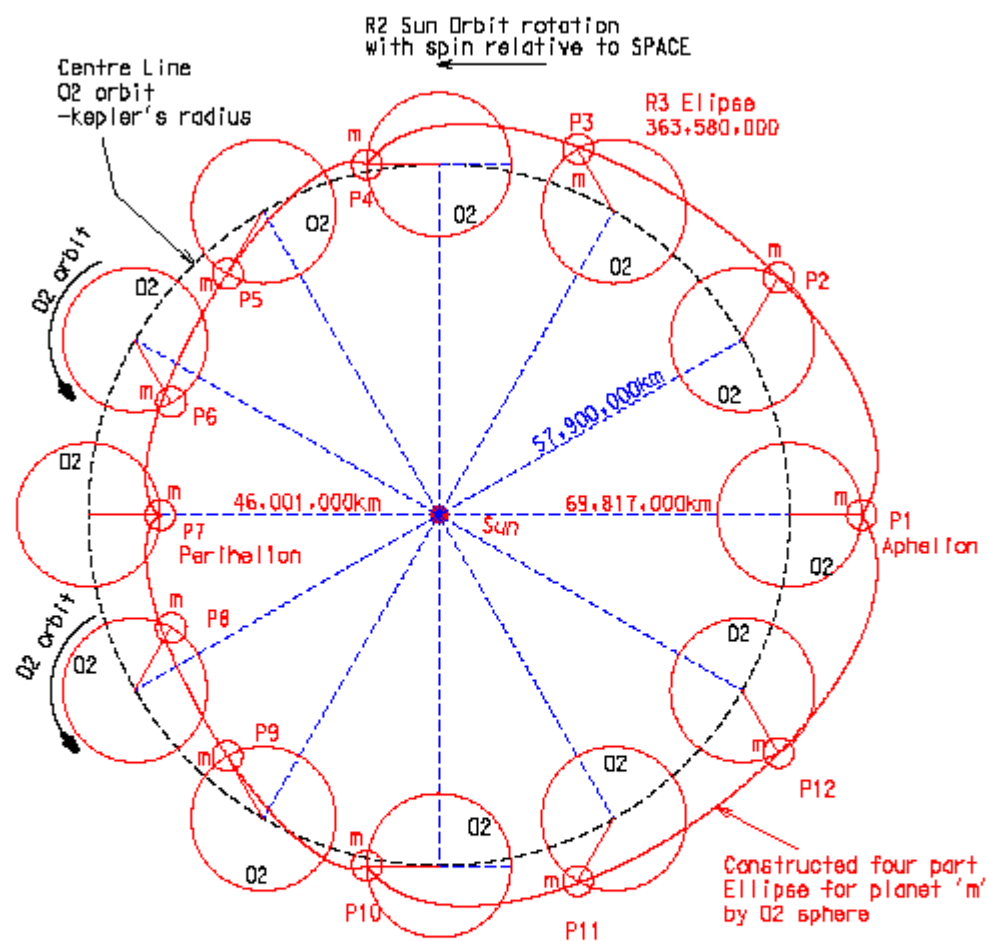


FIGURE 4A