Bifocal Premise of Solar System

A.A. Shah

Department of Mathematical Sciences
City Campus, Institute of Business Administration
Karachi, Pakistan

Abstract

The elliptical motion of the planets of solar system is discussed. The existence of the second focus other than the Sun is professed. It is argued that the planets are very slowly increasing their elliptic orbits so that their moving foci coincide with the other focus of the Solar system. A theory governing the Solar System is presented.

Key Words: Solar System, Moving Foci, Black Hole, Elliptic Orbit.

1-Introduction

A number of authors like Boss [1], Seager [7], Seager [8], Perryman [5], Schnelder [6], Marcy et al [3], Villard et al [10] and Bruce [2], Yahoo [12] and Website [11] have indicated that many universes exist similar to ours. These universes have a star like sun at one focus and planets revolving around them. A number of achievements of mankind in edifying the clandestine of these universes including our own universe are also not surreptitious. We are proud of these attainments but still they look like a few pieces of a big puzzle. For example we know that a universe does not disintegrate because its pull of gravity is opposed by forces which are not up till now entirely tacit. The knowledge of "dark matter" is very common but its character is blurred. The planets revolve round the sun in elliptic orbits but why the path is elliptic is not fully known. At one focus of the trajectory there is sun but the existence of the other focus is not known. The planets are very slowly moving away from the sun but the literature does not mention the reasons and where are they heading? The mystery of the Big Bang is until now not resolved. Vera [9] talks about the Rotating Galaxies and particularly the M31 Galaxy which is about 2.25 million light years away. NASA [4] has released recently [on 15th August 2011] eye-catching image of Necklace like planetary nebula taken on 2nd July 2011 using the Hubble Space Telescope. The image shows the smoldering of Hydrogen [blue], Oxygen [green] and Nitrogen [Red], which they claim shining remnants of a usual, Sun-like star. The image indicates that Stars also die. The question arises how the star behaves when it is exhausted? The other question is what happened to the planets revolving round this fading Sun, the Necklace Nebula, which is located 15,000 light-years away in the constellation Sagitta?

The gravity dragging in and pressure shoveling out are common activities in an ordinary star besides Nuclear reactions in its hub. The star remains steady because amount of gravity is equal to amount of pressure in it. With the passage of time this equation loses its balance. The increase in pressure results in the creation of a new planet or a dwarf planet etc orbiting round the star. However, when the gravity increases or the nuclear fuel of the star expires the material in the interior of the star shrinks. In the first case the stars loses its mass and in the second case it crumples under its own weight.

In the literature there is mention of the "white dwarf" and "supernova." A white dwarf is a small star in which the nuclear fuel is pooped out and there are no more nuclear reactions to brawl gravity, the repulsive forces among electrons within the star eventually produce enough pressure to bring to an end further gravitational subside. The star then cools and dies. A very massive star explodes as a supernova when its nuclear fuel finishes. The central part of the star collapses completely under its own weight while the outer parts are viciously thrown out into space.

The birth of a planet disturbs the elliptical paths of the existing planets which are already orbiting in a very complex system of gravitational pull. The optical paths are adjusted and some space is given for the newly born planet.

It is strange that this disturbance does not change the shape of the path of the existing planets i.e. it remains elliptical with sun on its one of the foci. This shows the existence of an external massive body or a black hole which is exerting a gravitational pull on the planet in the line of the two foci of the elliptic paths of the planets. All planets are attracted towards the black hole situated at a very large distance from the sun. The gravitation force of the black hole is very feeble on the planets which are nearer to sun but it is a constant force. The result is that the planets are moving towards the black hole with a very very slow pace. The black hole will naturally be on the straight line passing through the foci of the elliptical path of planets and at a point where the light from the sun bends and does not escape. This happens when a black hole reaches at a singularity phase. At this stage the volume of the black hole trims down to zero volume and density becomes inestimable. The escape of any object, at this juncture, entails a velocity greater than the speed of light. Any ray of light or any object that get ahead of event horizon of the black hole experiences everlasting ensnare as no object can reach the speed of light. At one focus of the path of a planet there is sun, the position of which is fixed, the other focus is moving towards the black hole and eventually it will coincide with it. At this time the planet will complete an elliptical path in which there is a sun on one focus and a black hole on the other. At this time the motion of the planet is reversed and the planet falls into the black hole. This process has been going on. When all the fragments of sun will be swallowed by the black hole the existing sun will become a black hole and the existing black hole will start giving radiations and will act as a new sun.
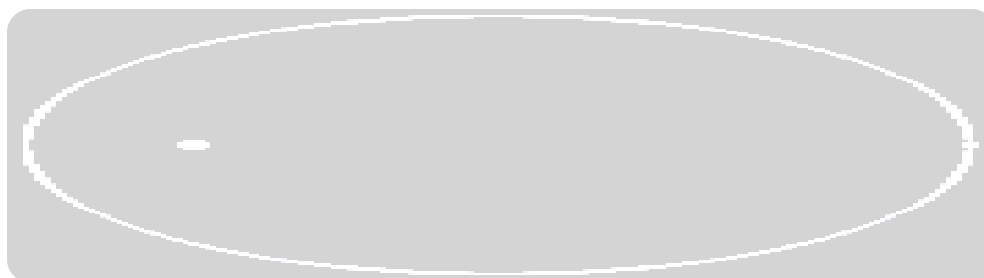
2-Different Shapes of Orbits with the passage of time
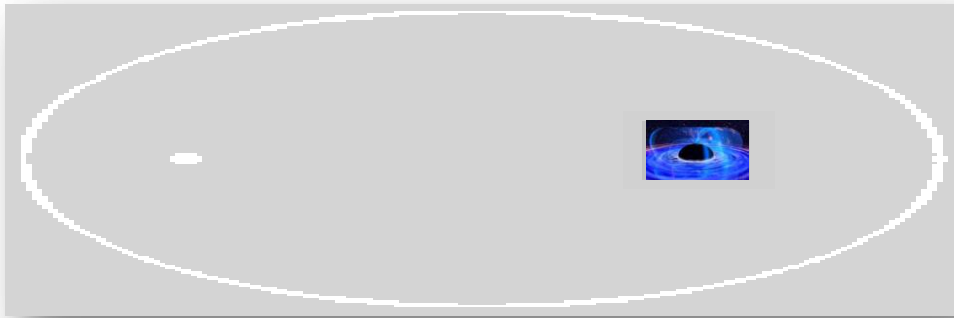

Fig:1

Fig:2

Fig:3

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Fig:N Sun and Black Hole at two Foci

Transformation of a Black Hole into a Star.

When the 2nd focus of the orbit become very close to the black hole α_1 tends to zero. At this time the Planet experiences a tremendous gravitational pull of Black Hole and it has to change its path and ultimately sinks into the BH. These sinking increases the gravitational force of the BH and the second foci of the orbit of the planets move in the direction of the BH on the major axis a little further. Which forces a segment of the burning sun to come out and in this way the birth of another planet takes place. The whole process is repeated and sinking of another planet near to the BH takes place. This plummeting of planets into the black hole increases its energy and at a certain stage the black hole will start burning like sun and the sun will become a black hole.

The closest planet from the Sun, Mercury is at a distance of 63 million km away from the Sun. Are there other planets between Mercury and the Sun which the astronomers cannot see or these planets are in a form that is not visible to astronomers or there are no planets between Mercury and the Sun? It is not known. The farthest dwarf planet the astronomers have found is Pluto which is 7.5 billion km away from the Sun. Is it human limitation that the astronomers cannot see beyond 7.5 billion km or there are no planets after Pluto or the other planets are in the form which is not visible? This is not known. The objective of this paper is to present a theory that answers most of these questions.

Proposed Theory

1. Each galaxy consists of a Sun and a Black Hole which are invertible with the passage of time.
2. The Sun produces planets under the influence of the pull of gravities of surrounding other galaxies and planets. The nuclear reactions in the Sun also help create a planet.
3. A planet revolves round the Sun in an elliptic orbit with Sun at one focus and the other focus moves towards the Black Hole very slowly and ultimately the planet is swallowed by the Black Hole.
4. Each Planet which is ingested by the Black Hole increases the Black Hole's energy and eventually the nuclear reactions start in the Black Hole. This gulp down also generates tremendous gravity and a lump is pulled out from the Sun which becomes a planet.
5. Because of the pull of the Sun the planets remain in the solidified state up to 230 million km after this distance the matter of the planet changes its state to a gaseous state and at a distance 7.5 billion km it become solid again under the pull of the Black Hole.
6. Each planet has some form of life at a distance 150 million km away from the Sun.

Mathematical Calculations

If r is the radial distance and $\emptyset$ is the polar angle then the equation of motion for a planet in an elliptic orbit is given by:

$\frac{d^2u}{d\emptyset^2} + u = \frac{\mu}{h^2}$, where u $= \frac{1}{r}, \mu = GM, G = Gravitational\ Constant$ and M = Mass of the Sun. The solution of the differential equation is given by:

$\frac{1}{r} = \frac{\mu}{h^2} + A\cos\emptyset + B\sin\emptyset$, when r is very large i.e. when the planet is near the black hole the solution reduces to $A\cos\emptyset + B\sin\emptyset = -\frac{\mu}{h^2}$; where h = specific angular momentum or angular momentum per unit mass $= \frac{L}{m} = \frac{r \, X \, p}{m}$; p = Linear Momentum. When r is very large h is also very large and the solution of the differential equation reduces to $A\cos\emptyset + B\sin\emptyset = 0$ or $\tan\emptyset = -\frac{A}{B} \Rightarrow A = 0$ as $\emptyset = -180^0$.

It G is the constant of gravitation, the balance of forces on any mass m in the galaxy is
G M m/r^2 = m V^2/ r $\Rightarrow$ V^2 = G M/ r $\Rightarrow \lim_{r \to \infty} V^2 \Rightarrow \lim_{r \to \infty}$ G M/ r $\Rightarrow$ V^2 = 0 $\Rightarrow$ V = 0.
$\Rightarrow$ The movement of the planet stops at the Black Hole and subsequently the planet is swallowed by the Black Hole.

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