Formation of Planets with its Elements and Compounds

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Abstract— The Planets were formed as a part of formation of the Galaxies. Planets were formed from huge plasma like liquid and gaseous masses ejected by rotating high angular velocities of a star. The masses for stars come from the core matter of galaxy. The semi liquid and gaseous masses just like plasma ejected from a central star to form the planets. The masses ejected from a central star follow the path of ellipse to take final shape of a round sphere. The variables which play prominent role in formation of planets with its Elements and Compounds were centrifugal forces, weight of masses due to acceleration due to Gravity and Temperature due to heat energy. Centrifugal forces help to stratify elements and compounds in a layer by layer varying from lighter to heavier elements as per the acceleration due to Gravity of respective Planets which imparts weight to the masses. That is centrifugal forces of masses balanced by its self weight makes whole Planet stable. So let us form mathematical equations to find the various elements and compounds formed at various layers of the Planets along with its state of matter and the temperature at various radii points due to the variation of all the above mentioned variables. Since all the Planets do not have same acceleration due to Gravity, velocity and hence centrifugal forces, the constituent of Planets may also differ from Planet to Planet but some elements may remain same due to all the planets have common origin or have same coincidental variables mentioned above at various different radii points of Planets.

Index Terms— Elements, compounds, acceleration due to gravity and weight per density

I. INTRODUCTION

The Galaxies were formed from central high rotational angular velocities of huge molten semi liquid and gaseous masses just like plasma which ejects masses at regular intervals due to high momentum which in turn produces various arms of Galaxies. This again in turn ejects some masses due to high momentum to produce further stars and planets of their respective solar system. The stars were said to be formed from the ejected mass from the central core of Galaxy due to high rotational angular velocities of its central core. The high momentum of rotating and revolving stars in turn ejects masses from it to form its rotating and revolving Planets. These rotating and revolving planets develop accelerations due its two velocities rotation and revolution also known as acceleration due to Gravity which was explained in an article "Acceleration due to the motion of the Planets inferred as Gravity". We need to study how this acceleration, velocity and centrifugal forces play an important role during its preliminary Planet formation. Another factor is how much heat content it possesses at various distances from the central core of the Planets which is measured by its temperature. All these factors decide the type and state of

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masses at various points as it gradually cools. In other words the photons of different energy levels with different heat energy contents convert in to electrons in their respective suitable orbital energy levels around the central atomic nucleus due to cooling of masses resulting in formation of various Elements and Compounds. As per new theory on Light described in the articles "Light is a particle in a wave motion" and "Spectra" which predicts that Electrons are made of sub particles also known as Photons. The Photons exist as particles in the form of sine waves called as Electromagnetic radiations. When it comes near central nucleus of atoms it gets converted into respective electrons orbiting around central nucleus according to its suitable energy levels due to gradual cooling which matches with the corresponding energy levels. Heat is nothing other than the measure of change in magnetic field of fundamental particles which is explained in the article "Heat, Electricity and Magnetic field" This article also gives equation which predicts Heat is inversely proportional to change in magnetic field. The cooling results in change in magnetic field which facilitates the formation of Electrons around the central nucleus giving rise to formation of different Elements along with formation of other different Compounds by bonding with various suitable Elements.

II. THE MATHEMATICAL DERIVATION TO FIND THE STRATIFIED LAYERS OF DIFFERENT ELEMENTS AND COMPOUNDS DUE TO CENTRIFUGAL FORCES BALANCED BY ITS RESPECTIVE WEIGHTS OF MASSES AT VARIOUS VELOCITIES AND RADII POINTS OF THE PLANETS

The formation of Planets is nothing other than formation of its various elements and compounds due to the mechanical momentum of planets imparted during its formation along with cooling of matter from its central core to outer periphery of planets. We can say that the weight of masses caused by acceleration due to Gravity of the respective planets at different radii points equals its centrifugal forces at those respective radii.

All the Planets are in the shape of Sphere.

Hence the volume of Sphere is given by $V = 4\prod r^3/3$

Volume is also given By $V = Mass/density = m/\rho$

Then $m/\rho = 4\prod r^3/3$

Multiply both sides by acceleration due to Gravity "g" and rearranging the above equation

We get $mg/\rho = 4\prod r^2 \, r \, g/3$ .... (1)

Surface area of sphere is given by $4\prod r^2$

The weight of the body is given by $W = mg$

The Planets are rotating and it is subjected to centrifugal forces on its masses which also mean that the weight of the body balances this centrifugal force.

The centrifugal forces at various radii points of planets along with its velocities and weights decide the type of Elements and compound it forms

Hence equating centrifugal force to weight of the masses "m" $F_c=W_m$ where F_c is centrifugal force given by mv^2/r and W_m weight of masses given by mg

We get $mv^2/r=mg$

Where m= mass, v= velocity, r= radius and g=acceleration due to gravity at the respective radius

From the above equation we get $v^2=rg$......... (2)

Substituting equation (2) in (1) and rearranging the equation (1)

We get $W/\rho = 4\prod r^2 v^2/3$.............. (3)

Therefore, Weight per density= (surface area of sphere * velocity squared at the respective radius)/3

Velocity is given by v = 8r/t=8* Radius of Planet/time in seconds for one complete rotation of Planet.

Here velocity is given by the 8r/t because the Planets not only rotate but also revolve, due to this both rotation and revolution, any point of the planet traces cycloid curve whose distance is 8 times r.

In other words the length of cycloid curve is 8* Radius of Planet. Hence distance divided by time gives velocity. By substituting the various velocities corresponding to respective radii of the Planets we get the value of weight per density of the respective planets at various points. By conducting experiments in laboratory we can find the values of the standard weight per density of various elements and compounds at different temperatures. Thereby by comparison with the standard chart, we can predict the elements and compounds made at the respective distances or radii from the centre of the Planets along with its temperature and state of matter such as solid, liquid, gas or Plasma. Hence the formation of its various elements and compounds are seen to be stratified under different layers as per the velocities, accelerations and temperatures at different points from its central core to its outer periphery of the planets. The gases at the outer surface of planets which are formed also known as atmosphere depend upon the type of gases formed during Planets formation, temperature and escape velocities of the Planets.

III. THE MATHEMATICAL METHOD TO FIND THE TEMPERATURE AT THE INNER CORE OF THE PLANETS

The heat also an important factor in deciding the state of Elements and compounds were made. It is indicated with the help of temperature. Temperature is a measure of level of hotness or coldness of masses. Hence there is need to find the temperature at various radii of Planets. The Planets gets cooled from outer surface to inner surface after its formation. Due to this cooling of the Planet, the formation of Elements and Compounds takes into shape. Since the Planets are in the shape of sphere. We can imagine heat flow through hollow sphere.

Heat flow through hollow sphere is given by

$Q= (4\prod KR_1R_2 (T_1-T_2))/ (R_2-R_1)$.......... (4)

Where Q= heat flow, K=thermal conductivity, R_1= inner radius of planet, R_2= outer radius of Planet, T_1=temperature at R_1 and T_2= Temperature at radius R_2

Let us rearrange the equation (4)

We get $T_1= ((Q/K) (R_2-R_1)/ (4\prod R_1R_2)) +T_2$........... (5)

The charts for (Q/K) (Elements) are erected for all the known elements and compounds experimentally in the laboratory. Then by substituting appropriate values of (Q/K) taken from the chart of respective elements as found from the equation (3) with which the planets are made of at corresponding radii along with substituting other known variables like inner radius, outer radius and Temperature at radius R_2 in the equation (5), we can get the temperature at the inner core of Planets. The temperature at the inner core gives approximate clue to the state of matter present such as solid, liquid, gas or Plasma state. Hence by knowing temperatures at various radii from the centre of Planets we can draw some conclusion about temperature distribution at various radii of Planets and how it plays an important role in formation of its Elements and compounds.

IV. CONCLUSIONS

Hence by the above explanation we can say that by knowing the velocities at the respective radii of Planets, we get ratio of weight per density of respective planets at various radii points. By comparing with Standard weight per density of various elements and compounds found experimentally in the laboratory, we can approximately predict the types of elements and compounds which are stratified at various layers from inner core to till the outer periphery of the respective planets along with the state of matter such as solid, liquid, gas or Plasma at the respective radii. In other words we can find weight per density of moving heavenly bodies. We can also approximately predict the temperature at the inner core by substituting both experimental (Q/K) for all the types of elements found from equation (3) and other appropriate values in the equation (5).Thereby with the help of both the above equations (3) and (5) it is possible to find approximately the type of Elements and Compounds, weight per density of heavenly bodies along with its approximate state of matter present in the inner core of the Planets. Since we can find the type of elements and its state present in the inner core of the heavenly bodies from the above equations, we can be able to predict the causes or reasons for production of magnetic field encircling around the some heavenly bodies by conducting laboratories test of respective elements present at core.

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