

# Theory on Formation of an Atom from a Different Perspective

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**Abstract:** *This paper proposes a theory on the creation of Atom that has never been explained properly. In spite of much scientific advancement in centuries, possibilities of science are not unleashed due to less information on the creation and basic properties of an atom but this theory could explain creation, properties and basic principles of an atom in a different perspective that has never been explained to this world.*

**Keywords:** Atom, Nuclear, electron, magnetic field

## 1. Introduction

In ancient days, the ideas of atoms are represented in Holy Scriptures and lots of non-secular writings, however solely as a theoretical thought. In 1808, chemist John Dalton disclosed the famous Dalton's Atomic Theory. He revealed in an exceedingly paper titled "A New Chemical Philosophy"; so the philosophy was new for that era. With the contribution of scientist, J. J. Thomson and Ernest Rutherford, atom was practically proved and the year 1869 is considered as the discovery of the Periodic System by the Russian scientist, Dmitri Mendeleev [1]. From that date, several explanations on atoms are postulated. However, in-depth logical explanations are with missing details. The theory that is proposed during this paper is connected through logic that will solve the mysteries and will break everlasting question concerning basic principles of atom. This theory is developed by the amount of outcome of sensible observation on atoms that has been conducted by mankind. This theory is created by convincing many likelihood associate degree potentialities that an atom may be formed from scratch. The theory uses the essential principle of physics to unravel mysteries of an atom.

## 2. Theory

### 2.1. Nothing to something

Everything in this universe has different structure, potential, working and properties. We know energy cannot be destroyed nor created but change one form to another [2]. This vast universe is a form of energy. Here we consider energy as charges.

Charges classified into three; positive, negative and neutral (neutral is combination of both positive and negative). Here we should take some assumptions for the theory. These assumptions are made from observed abilities of proton, neutron and electron.

**Assumptions: 1.** Consider charges as positive, negative and neutral (energy) as sphere of size less than an atom.

**Assumption: 2.** Positive charge has high intensity, less wave length and less penetrating capacity and attracts negative charges.

(This assumption is made on observed abilities of proton and it has high mass, which exhibits high intensity. Matter with high mass can travel only a short distance with certain amount of force and cannot penetrate an object without affecting the surrounding matter. Since proton is positive. The positive charges has the similar attributes of proton)

**Assumption: 3.** Negative charge has low intensity, high wavelength and high penetrating capacity and attracts positive charges.

(This assumption is made on observed abilities of electron and it has less mass, which exhibits less intensity. Matter with less mass can travel a long distance with certain force and can penetrate an object without affecting the surrounding matter. Since electron is negative. The negative charge has the similar attributes of electron.

**Assumption: 4.** Neutron is combination of both positive and negative charges. So it has high intensity, high wavelength and high penetrating capacity and has ability to attract both positive and negative charges.

At the beginning of time there is nothing except energy, which in size lesser than an atom. In according to first assumption consider energy as spheres. So at the initial stage, spaces are filled with energy spheres of positive and negative. Consider neutral are absent in this state.

Here we take the positive and negative sphere as  $p_o$  and  $n_e$ , there are number of positive and negativesphere so,

$$p_o_1 + p_o_2 + p_o_3 + p_o_4 + \dots + p_o_n(1)$$

$$n_e_1 + n_e_2 + n_e_3 + n_e_4 + \dots + n_e_n(2)$$

Now energy spheres are in contact due to attracting property of positive and negative charges, which create layers of chain formation (CF). And matter in or below molecular level, do not stay in rest but vibrate. So the spheres in chain formation (CF) vibrate. It causes energy spheres to scatter a small amount of positive and negative charges around it [3]. (Refer figure1 for the chain formation (CF))

Consider a small part of  $p_o$  and  $n_e$ : ( $p_o_1, p_o_2, n_e_1, n_e_2$ )

$$CF = (p_o_1 + p_o_2 + n_e_1 + n_e_2)$$

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$$CF = (po_1 + po_2) + (ne_1 + ne_2) \quad (3)$$

Basically  $po_1$ ,  $po_2$  are positive, so consider it as  $po_n$ , and  $ne_1$ ,  $ne_2$  are negative, so consider it as  $ne_n$ .

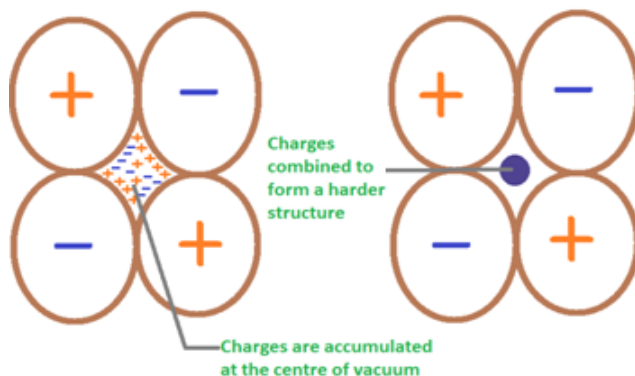
$$CF = (po_n + po_n) + (ne_n + ne_n) \\ CF = (2po_n + 2ne_n) \quad (4)$$

Since charges has magnetic property, a small amount of scattered positive charge (psc) attracted towards negative sphere and scattered negative charge (nsc) attracted towards positive sphere.

So, we add nsc and psc to CF

$$CF = (2po_n * psc) + (2ne_n * nsc) \quad (5)$$

As we know energy spheres are in contact and due to it, gaps are present in-between spheres of (CF), since there is no atom or element to fill the gap, the gaps are filled with vacuum with high tendency to pull surrounding matter towards it. Now vacuum pull the scattered charges towards center of vacuum area, where the capacity of vacuum is high.



**Figure 1:** Conversion of scattered charges into harder structure

In Figure 1, charges are accumulated in the vacuum area. And due to vacuum and heat generated by friction of sphere, make charges at the gap to combine and creates a stronger structure at the center of the gap [4].

## 2.2. Creation of Electron, Proton and Neutron

Now harder structure is formed and its density is high, due to the high intensity of vacuum and heat produced by friction of energy spheres. The harder structure consists of positive and negative charge, so it has the possibility of that it can be a proton, neutron or an electron. It is based on the number of positive and negative charges present in the harder structure. There are different kinds of possibilities that a harder structure can be a proton, neutron or electron.

The harder structure consist only of scattered charges, so neglecting  $po_n$  and  $ne_n$ , we get

$$CF = (psc + nsc) \quad (6)$$

- 1) Possibility of being a proton (PT). Positive charge  $\gg$  negative charge. The harder structure can be a proton if the content of positive charges is doubling greater than negative charges.

- 2) Possibility of being an electron (ET). Negative charge  $\gg$  positive charge. The harder structure can be an electron if the content of negative charges is doubling greater than positive charges.
- 3) Possibility of being a neutron. There are different criteria for forming a neutron, due to the equal or negligible positive and negative charge ratio. Neutron is a unique kind of matter with both negative and positive charge characteristic that has different types.

## 2.3 Types of neutron

The probability of being a neutron is based on the content of positive charges and negative charges in a harder structure. Type: 1 Positive charge = negative charge. The harder structure can be a neutron if it consists of positive and negative charges at an equal rate. Type: 2 Positive charge  $\Rightarrow$  negative charge, to a particular limit. In this type, positive charges are a little bit high to a particular limit, which is negligible. That does not overwhelm the property of negative charges. Type: 3 Positive charge  $\leq$  negative charge, to a particular limit. In this type, negative charges are a little bit high to a particular limit, which is negligible. That does not overwhelm the property of positive charges.

## 2.4. Step to form the nucleus

### 2.4.1 Attraction

Now electron, proton, and neutron are formed, according to their number of positive and negative charges in the harder structure. Now neutron has an equal or negligible amount of positive and negative charge. Here, let us consider neutron a negative charge.

Neutron is considered negative, because it has an even or negligible amount of positive and negative charge. Here positive has high intensity which is high potential and every machine or system in-universe is not 100% efficient. So potential of positive charge is leaked from it, and we know negative charge possess less intensity, that has less potential, so negative charge gains leaked potential of positive charges and increases the potential of negative charges.

This increases the normal properties of negative charges characteristic to high wavelength, high penetrating capacity, and high intensity. The potential of negative rises to a peak and due to it, the neutron is considered negative.

Here a question raises that, even proton and electron have positive and negative charges then why does the potential of proton and electron is not increased?

In the case of proton, the content of positive charges is doubling greater than negative charges. So when the potential of positive charges is leaked, there will be very few negative charges to capture it. Due to it, the small amount of increase in the potential of negative will not affect the overwhelming positive charge characteristic.

In the case of electron, content of negative charges are double greater than positive charges, since the number of negative charges are high, potential leak of positive cannot be shared to all negative charges, so the potential may

increase slightly which doesn't have effect on neighboring matter.

We know that positive attracts negative, thus proton is positive, electron and neutron is negative. So, proton attracts neutron and electron. But only neutron is attracted to the proton.

#### 2.4.2. Proton attracts neutron but not electron

We know proton is positive and neutron is negative. But proton attracts only neutron, because neutron has a similar property of positive and negative charge of high intensity, high wavelength and high penetrating capacity, which gives the neutron a first preference to attract towards the proton. But in the case of electron, it has low intensity. So, electron is a weaker opponent than neutron. Due to it, the electron does not have the potential to overcome the strength of neutron to attract proton.

#### 2.4.3. Formation of nucleus

Now protons and neutrons are attracted together. Now take the N number of proton and neutron that are bonded together as a single particle, like N number of protons into a single proton, and the N number of neutrons into single neutron. [NOTE: This assumption is for easy calculation.] Now the protons and neutrons are attracted together and bounded by the law of magnetism [5] and produce a magnetic field around it due to the flow of charges in and around the neutron and proton. The magnetic field around neutron and proton is called nuclear and the whole bunch of proton and neutron inside the nuclear is nucleus.

The flow of charge is due to high energy possessed by the neutron and proton, and we know that potential of neutron is greater than the proton. So the charge flows from neutron to proton and then proton to neutron this creates a cycle in and out of the proton and neutron which forms a flow of magnetic field around it. The magnetic field is strong but only for a short radius; it creates a shell-like structure called nuclear. Proton (PT) and neutron (NT) are present together inside the shell (nuclear) called nucleus.

$$NU = (PT + NT) \quad (7)$$

#### 2.5 Potential of the nucleus

Now nucleus is formed and we know that, matter at or below the molecular level vibrates. Thus the proton and neutron in the nuclear vibrates, thus produces the heat and friction in nucleus.

#### 2.6 Scattering of charges from proton and neutron in nucleus

Everything below molecular level vibrates, causing friction between the proton and neutron, they lose their charges (psc and nsc) and it scatters inside the shell (nuclear). The shell (nuclear) does not allow the charges to go out, because of the magnetic property of it and due to it, scattered opposite charges attracted towards each other. The charges inside it are frequently increased due to the vibration of proton and neutron. The increase of scattered charge increases pressure and the heat in the nucleus.

$$NU = (PT * psc) + (NT * nsc) \quad (8)$$

#### 2.7 Heat affects the magnetism partially

Heat is increased, due to friction and increase of charges, which affects the magnetism of negative and positive charge partially [6]. But the heat is in a small amount, which could not affect the magnetic property of nuclear, proton and neutron. Due to losing of magnetic property partially, charges get detached from each other. The positive charges have high intensity which is heavier, acquires the bottom portion. The negative charges have low intensity which is lighter, acquires at the upper portion of the nucleus.

#### 2.8 Leakage of charges at nuclear

After a particular time, pressure inside exceeds the holding capacity of nuclear. We know that the flow of charges from a proton to neutron and neutron to proton creates the shell (nuclear). In figure 2, the magnetic field at the particular area of north and south are high, which partially exceeds the boundary of nuclear and this tends to be the weaker points to hold the charges. When pressure exceeds the holding capacity of nuclear, then charges leak at high velocity at the weaker points of north and south in the nuclear. At this stage, the leaking points at the north and south are smaller and the pressure inside is larger. So when charge exerts nuclear, the velocity increases and charges get atomized.

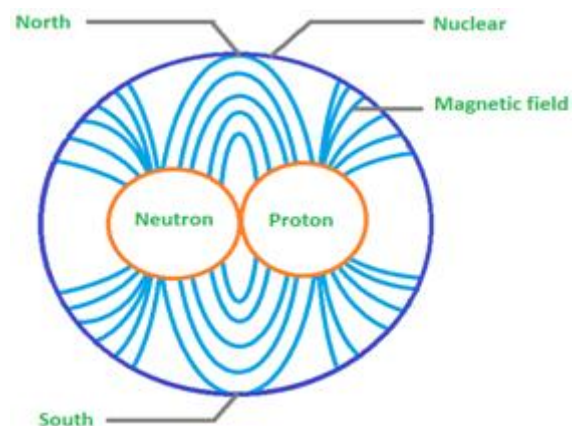


Figure 2: Magnetic field inside the nucleus

#### 2.9 Atomized charges

Higher pressure creates higher velocity. So, when the charges excreted at high velocity through the leaking point, the charges are reduced to a smaller size. These atomized charges are called wages.

#### 2.10 Wages

The atomized charges is lighter, faster and can travel at high speed due to lightweight, so let us call this atomized charges as wages (W). The atomized positive charges are positive wages and atomized negative charges are negative wages. Pressure of charges (Pc) is directly proportional to the wages (W) and wages are of two types, negative (Wn) and positive (Wp).

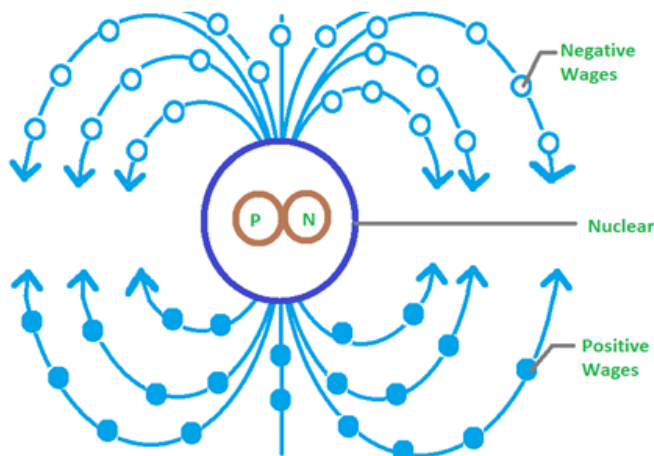
$$P_c \propto W \tag{9}$$

$$P_c = IW$$

$$P_c = I(W_n + W_p) \tag{10}$$

**2.11. Formation of magnetic lines**

When the wages exerted to some distance from the nuclear it cools down and gains magnetic property, which is lost, due to the heat that was produced by the frictional vibration of proton and neutron.



**Figure 3:** The exerted positive and negative wages attracted each other

As shown in figure 3, now by attaining magnetic property, positive wages attract negative wages. The intensity of negative wages is lower than the positive. So the negative wages act as a passage in which the positive wages could flow through it.

[SIMILAR PROCESS: To explain it, assume the hose pipe and water flowing through it, and consider the pipe as negative and the water flowing through it as positive. In this case, the hose pipe and water travel in opposite direction and the hose act as a passage for the water to flow through, this shows the similar working of the magnetic lines of the nuclear.]

After a particular amount of charges are exerted, high pressure inside the nuclear is reduced and a minimum amount of low pressure is created in nuclear. Now the low pressure tries to neutralize itself, and we know that positive wages use the negative wages as a passage to flow from one point of the south to another point of the north through outside of the nuclear.

When the positive and negative reaches the maximum distance outside the nuclear, the minimum low pressure inside the nuclear increases, the positive and negative wages that are flowing in opposite direction are absorbed by the potential of low pressure into the nuclear through the flowing direction of the charges.

The negative is absorbed through the south and the positive is absorbed through the north. When the negative enters south point and positive enters north point, then the pressure inside the nuclear is increased again, at this stage when the positive wages enter the nuclear in the north, it has two force

which is gained by the attracting property of negative-positive wages and the force gained by the minimum low-pressure point in the nuclear, the force gained by positive wages makes it to travels from north to south point inside the nuclear.

It converts low-pressure point inside the nuclear to high-pressure point, the high pressure makes the positive to gain additional force, and exits at a high velocity at the south point and again the positive travel in the passage of negative and this cycle continues in and out of the nuclear. This process runs similarly to the negative charges and forms the magnetic lines (ML). Since magnetic lines (ML) are made of positive and negative wages.

$$ML = (W_p + W_n) \tag{11}$$

Substituting equation 11 in 10, we get

$$P_c = I(ML) \tag{12}$$

**2.12. Magnetic lines are formed:**

The positive wages flow through negative wages and form magnetic lines. Unlike the magnetic property of charges, these magnetic lines have a huge radius. The radius of magnetic lines is determined by charges that are excreted by huge internal pressure of the nuclear into huge-ranging velocity, which leads the positive and negative wages to form magnetic lines.

**2.13. Formation of orbit:**

So let’s consider the point where positive wages getting inside the nuclear is the North Pole and the point where positive wages getting outside of the nuclear is the South Pole. The various exerted velocity of the wages create different layers with different radius of magnetic lines.

The different radius of the (ML) creates layers, such as A, B, C..... and A1, B1, C1..... A2, B2, C2..... Are the different points of the layers A, B, C..... formed by different excreted pressure ratio of wages in the nuclear. The potential of each layer varies with radius. As shown in figure 4, consider different points in a single layer of magnetic field A as A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, which means the forces of each point on the single layer is same.

Consider A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12 = A. shows the same radius of the single-layer, that creates an orbit around the nucleus. The radius of orbit, from the center of nuclear to the orbit that the electron stand (Or), is directly proportional to the pressure of charges (Pc) inside the nuclear.

$$P_c \propto Or$$

$$P_c = I Or \tag{13}$$

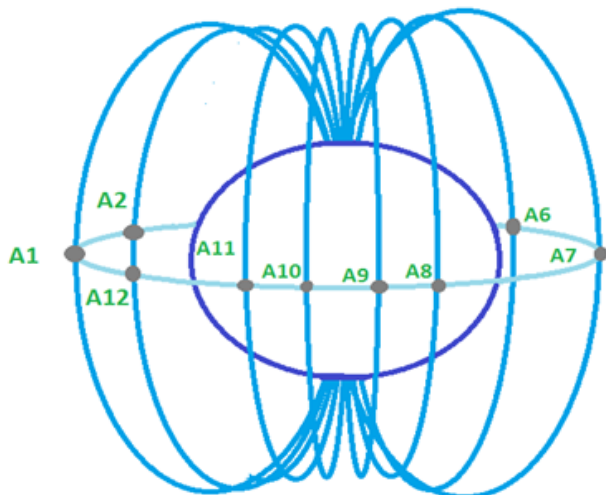


Figure 4: Magnetic field of the nucleus of the single layer

2.14. Layers of orbit

Similarly, for the second, the third layer of different radius creates a different orbit of varying potential ratio. The layer of orbit increase with proportion to the exerted pressure of nuclear, and after a particular distance from the nuclear, pressure excreted is reduced. The magnetic line fades and so the orbit disappears after a particular distance.

2.15. Attracting property of magnetic lines:

Now assume a small part of a magnetic line, since it is said that positive charges are flowing in the passage of negative charges. Shown in figure 5 consider the small part of the magnetic line. The dotted lines are negative wages (waveform). The non-dotted lines positive wages (waveform). Now positive wages travel from down to top and negative wages travel from top to down in the path of the field.

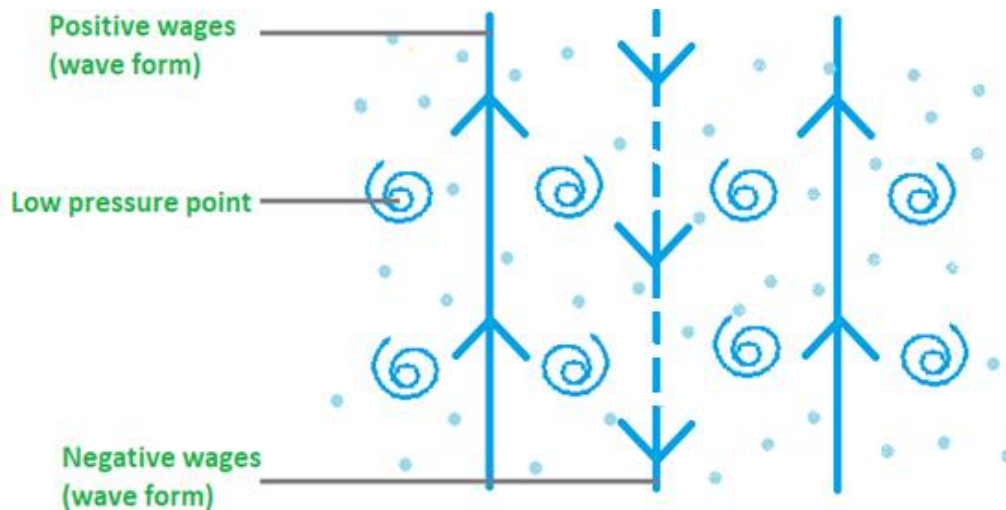


Figure 5: Low pressure points between magnetic lines

The wages of two opposite charges passing in the opposite direction on the path, the traveling speed of wages is directly proportional to the pressure inside the nuclear. We know that no cycle is 100% efficient. So the small amount of wage losses from magnetic lines in the paths, which creates an energy atmosphere in between the paths of positive and negative wages. And the energy atmosphere neutralizes the vacuum present in that particular area. The energy atmosphere has magnetic property since it is created by the energy of positive and negative wages.

The magnetic property of the nuclear attracts and allows the energy atmosphere (EA) to stabilize between the magnetic lines and the nuclear do not allow the atmosphere to get dissolved in the vacuum outside the nuclear.

Substituting equation 13 in 12, we get.

$$I Or = I (ML) \tag{14}$$

Since charges from magnetic lines get separated and form Energy atmosphere, so

$$I Or = I (ML * EA) \tag{15}$$

$$Or = (ML * EA)$$

$$ML = Or / EA \tag{16}$$

The positive wages move upwards and negative wages move downwards, creating an upward and downward drag force along the paths of positive and negative wages. The drag force drags the charged atmosphere nearer to the magnetic lines. The positive wages drag the charges in the atmosphere in upwards direction and negative wages drag the charges in the atmosphere in a downward direction.

The drag force is weak in between the magnetic lines and the drag force is strong, nearer to magnetic lines. The strength of the drag force is decided by the velocity of the exiting wages (charges) from the nuclear. Now due to the strong drag force in opposite direction near the magnetic lines, it creates a low-pressure point at the center between magnetic lines and the low-pressure point tries to neutralize itself by absorbing the nearer object towards it [7]. And we know neutron and proton combine to form nuclear so the low-pressure point would have no other option to attract electrons.

**2.16. Electron towards the orbit**

At the initial stage, electrons are formed according to the number of negative and positive charges, so the size of the electron is based on the content of positive and negative charges. Each layer has different potential to attract electron due to different low pressure between the magnetic lines, so different layer requires the different sizes of electrons to accommodate and stabilize the low-pressure point between the magnetic lines.

Now the electrons are pulled towards the low-pressure point in according to the potential of low-pressure point that is created between the magnetic lines. Since the electron is a negative charged it repels against another electron. This allows them to maintain a particular distance between them in the orbit. And the number of electron in the orbit varies with the potential of the nuclear [8].

After a particular distance, the potential of the orbit to hold electrons is reduced when the radius between the nuclear

and the orbit is increased; it is due to the potential of orbit fades after a certain distance. So the radius of orbit is directly proportional to the holding capacity of the electron by orbit.

The holding capacity of the electron can be considered as the number of electron present in the orbit.

$$\text{Or} \propto 1 / \text{No of electron} \tag{17}$$

$$\text{Or} = I * (1/ \text{No of electron}) \tag{18}$$

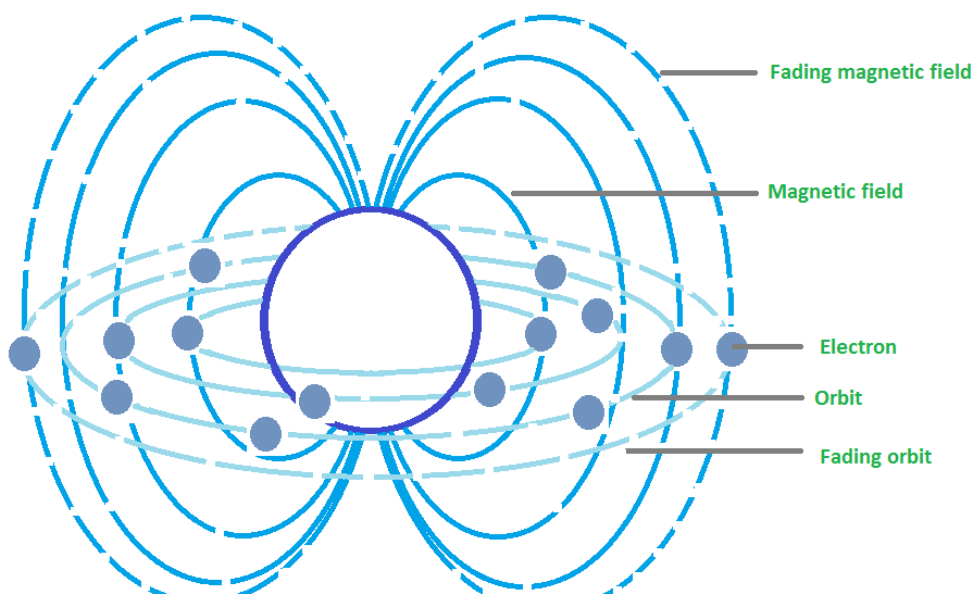
Substituting 13 in 18, we get

$$\text{Pc}/I = I (1/ \text{No of electron})$$

$$\text{Pc} = I^2 (1/ \text{No of electron}) \tag{19}$$

**2.17. Formation of orbit**

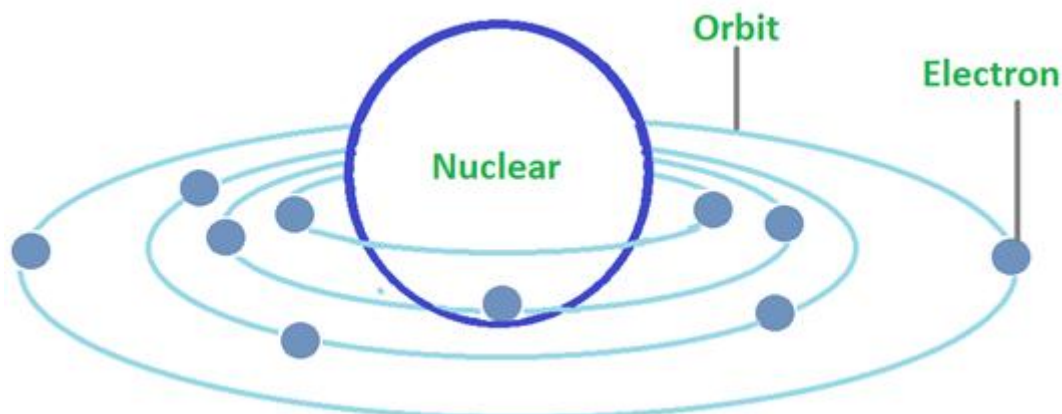
In figure 6 you can see the magnetic lines are fading when distance between the orbit and nuclear is increased.



**Figure 6:** Fading orbit of an atom

The dotted lines show the fading ratio of magnetic lines and orbit. By neglecting fading orbit or magnetic lines, we

obtain the orbit that holds the electron which is circulating the nuclear.



**Figure 7:** Atom

As shown in figure 7 now the Atom is formed.Hence, this theory described the formation of an atom from the scratch to the form that it is now, which enable us to destroy the obstacle between the humankind and science that leads to a path of advanced far future of science.

### 3. Conclusions

The development of science in modern days is so rapid.But still, mankind is facing many obstacles and mysteries in understanding the elements, but by understanding the basics of atoms the mysteries and obstacles could be extinguished and develops a better understanding about the depth of every matter in universe.

### References

- [1] Cregan, E. R. (2008). *The Atom*. Capstone.
- [2] Rifkin, J. (1980). Entropy: a new world view.[social and political implications of the Second Law of Thermodynamics].
- [3] Zhu, T., Cheng, R., Liu, Y., He, J., & Mao, L. (2014). Combining positive and negative magnetophoreses to separate particles of different magnetic properties. *Microfluidics and nanofluidics*, 17(6), 973-982.
- [4] Vetter, J. (1995). Vacuum arc coatings for tools: potential and application. *Surface and Coatings Technology*, 76, 719-724.
- [5] Gambhir, Y. K., &Patil, S. H. (1985). Neutron and proton densities in nuclei. *ZeitschriftfürPhysik A Atoms and Nuclei*, 321(1), 161-164.
- [6] Pisana, S., Mosendz, O., Parker, G. J., Reiner, J. W., Santos, T. S., McCallum, A. T., ... & Weller, D. (2013). Effects of grain microstructure on magnetic properties in FePtAg-C media for heat assisted magnetic recording. *Journal of Applied Physics*, 113(4), 043910.
- [7] Montgomery, M. T., & Farrell, B. F. (1993). Tropical cyclone formation. *Journal of the atmospheric sciences*, 50(2), 285-310.
- [8] Silverstone, H. J., &Sinanoğlu, O. (1966). Many-Electron Theory of Nonclosed-Shell Atoms and Molecules. I. Orbital Wavefunction and Perturbation Theory. *The Journal of Chemical Physics*, 44(5), 1899-1907.