

TITLE: Emission of Light & Heat by skin Diffusion of moving Electrons

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BACKGROUND ART:

Light is accepted in the background art as an **Electromagnetic Radiation**.

'Light is [electromagnetic radiation](#) within a certain portion of the [electromagnetic spectrum](#). The word usually refers to **visible light**, which is [visible](#) to the [human eye](#) and is responsible for the sense of [sight](#).^[1] Visible light is usually defined as having [wavelengths](#) in the range of 400–700 [nanometres](#) (nm), or 4.00×10^{-7} to 7.00×10^{-7} m, between the [infrared](#) (with longer wavelengths) and the [ultraviolet](#) (with shorter wavelengths).^{[2][3]} This wavelength means a [frequency](#) range of roughly 430–750 [terahertz](#) (THz)'.

(With gratitude to the world best knowledge base WIKIPEDIA)

CHALLENGING NEW CONCEPT:

Light is a line projection of energy particles (Photons) shot out by Skin Diffusion of moving electrons.

It also rejects the so far acceptance such as;

1. There are no **Electromagnetic Waves** in the world rather than **Medium Waves** of frequency modulation (FM) and amplitude modulation (AM). Only the initiation (vibration) could be executed through electromagnetic means (apparatus) but the medium waves have no relation with electromagnetism.
2. There are no **Electromagnetic Radiations** too, in the world rather than normal shooting of energy particles (Photons) with a high frequency could be represented in the **Wave Spectrum**. Then Light has no relation with electromagnetism.

It also introduces something novel to the so far developed subject field such as;

1. **Speed of Light** is not a property belongs to Light but it is the **Critical Speed**, a property, belongs to the free space medium called **Vacuum**.
2. **Heat** too is made up of **Photons** and it is as same as Light but less energetic as a ray due to drop of **momentum** of the particles by resistance of the medium.

3. **Vacuum Medium** is made up of closely packed particles of speed lost **Photons** and **Electrons**. The Vacuum has a **Density** and a **Pressure** as well, which could be mathematically derived. (Practical proof is also possible)

ANALYTICAL METHODOLOGY:

Distant Realities behind the nature phenomena such as 'Light', 'Time', 'Matter' and 'Life' etc. cannot so easily be proven through laboratory experimentation of Science.

Mind Exploration therefore has to be accepted as the essential analytical skill of a Scientist to strike at the distant realities. It is a scientific deduction by reasoning through available data, observations and a struggle with building of many different **conceptual models**. **Logics** and **Mathematics** are the essential analytical tools and **Philosophy** is the compass to guide showing the proper **Direction** of the exploration.

DESCRIPTION:

01. What is Light?:

First of all we have to verify whether 'Light' is of **Mass** or not. If it is of mass then it is a material.

MASS OF LIGHT?

Light is not a wave but a ray of line projection of particles. It is a material of Mass and Heat is the bit slowed down phase of Light.

Students can prove that by a laboratory experimentation of low cost.

STAGE-1 STAGE-2

Increased volume due to the energy input $= \Delta V = \frac{4}{3} \pi (R^3 - r^3)$
 Work done by the balloon against external atmospheric pressure $= P_a X (\Delta V)$
Energy input = Work done
 $mc^2 = P_a X (\Delta V)$

(Say increased volume $\Delta V = 100 \text{ cm}^3$ and atmospheric pressure $P_a = 1.013 \times 10^5 \text{ dynes/cm}^2$)
 Mass of light energy input $= m = P_a X (\Delta V) / c^2 = (1.013 \times 10^5)(100) / (2.998 \times 10^{10})^2$
 $m = 1.12 \times 10^{-13} \text{ g}$

Figure-1(laboratory experiment to evaluate mass of Light)

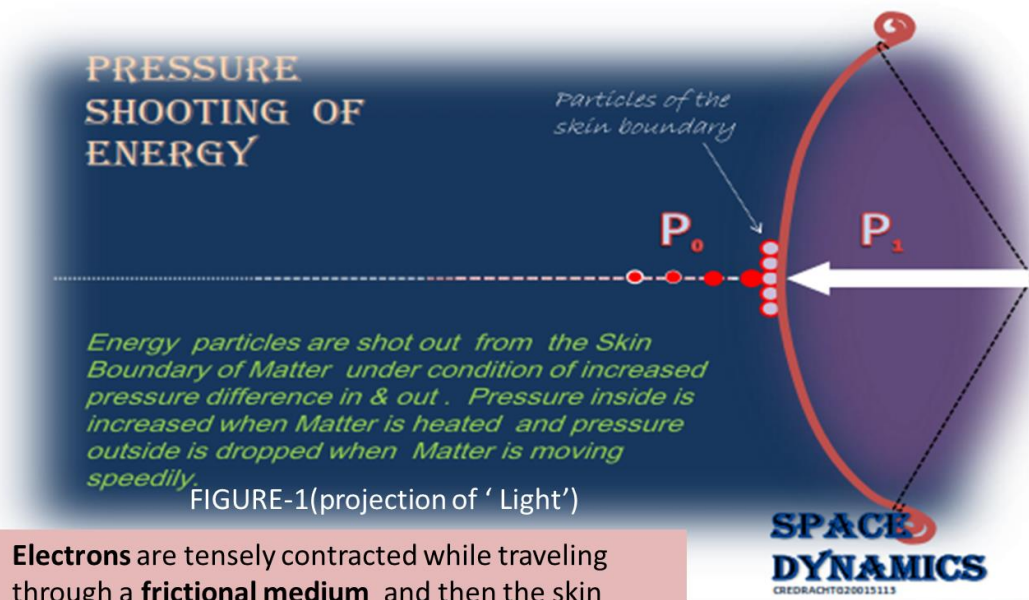
Above experiment of the simplest form proves that Light and Heat as well are substantial and they are of Mass.

02- What is the shape of Light particles?

2.1- It is our common experience that Light is born from **Electrons**. Electron has a mass and therefore Light too should possess a **mass**. Any object of mass should have a volume and a **body shape**.

2.2- Reflection of light is the phenomenon as the best proof for its shape to be sharp **spherical** just as a Ping-Pong ball. If it were of the shape of a rugger ball, then the symmetry in reflection could not be possible at all.

03-How Photons are shot out from Electrons?



Energy particles are shot out from the Skin Boundary of Matter under condition of increased pressure difference in & out . Pressure inside is increased when Matter is heated and pressure outside is dropped when Matter is moving speedily

FIGURE-1(projection of ' Light')

- **Electrons** are tensely contracted while traveling through a **frictional medium** and then the skin particles are shot out as '**Light**' and '**Heat**' as well. (Proof: arc welding and lightning)
- Light is densely shot out from moving electrons of Sun's radiating layer. 'Light' particles (Photons) too are diffused to shoot skin particles (more finer scale of Photons) at the initial lap of the shooting (exceeding of the velocity of light) and that is the white shining around Sun exhibited at an eclipse.



Figure-02-(shooting of energy particles by skin diffusion)

3.1- Electron is known to have a mass but with no inner structure of any significance. Therein we have to surmise that electron has a body of the shape of a transparent

water bubble. It should possess only a balloon like skin but it must be tightly tensioned to give some **rigidity** for the particle. Why should it be rigid? because a speedy beam of electrons is capable of even destroying a building (eg. lightning strokes)

3.2- How could the skin of an Electron be so hard?

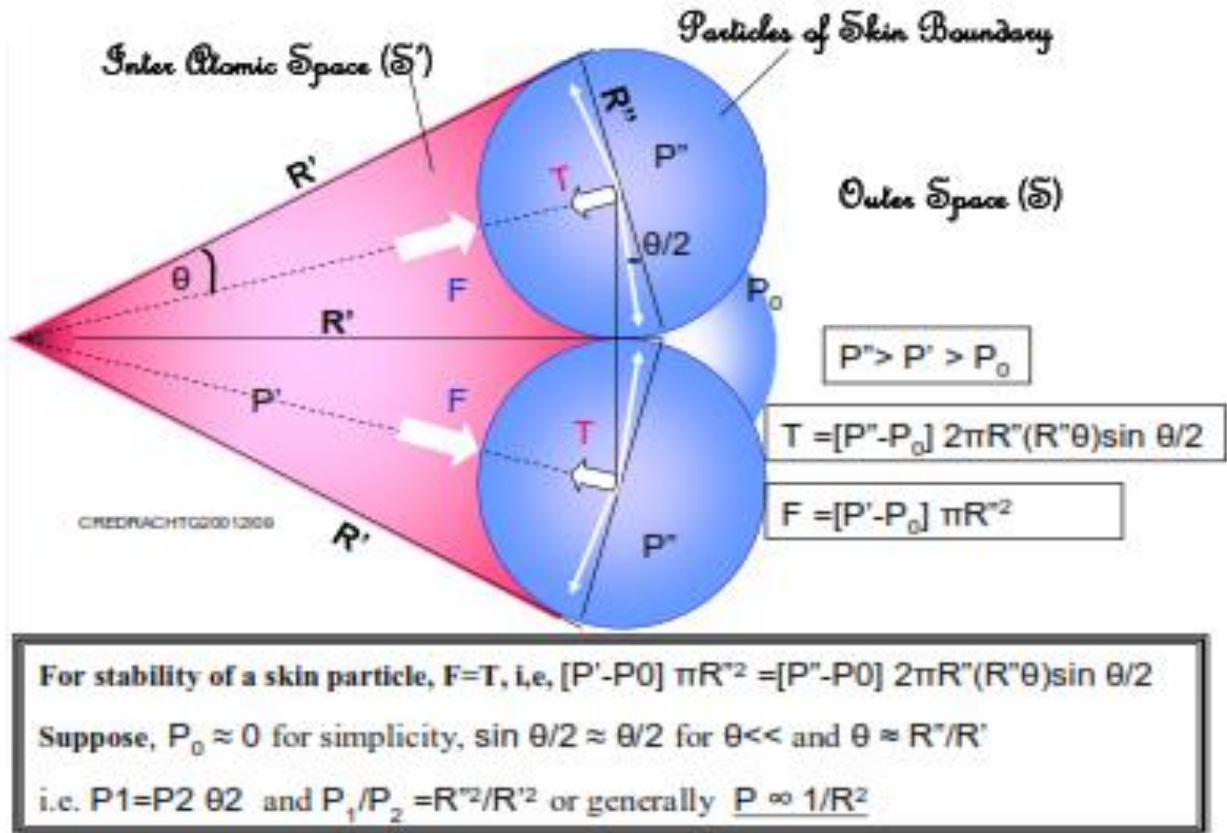


Figure-03 (Theory of skin tensioning of particles)

The spherical array of the skin particles has created a tendency to tighten the skin automatically when outer pressure is dropped. Outer pressure is dropped when the Electron is moved through a frictional medium. It is our practical experience that the atmospheric medium is highly resistive for electron motion. (eg: Arc welding and lightning strokes)

3.3- When the skin is too tightened the internal pressure goes highly up and then the skin particles are shot out in every direction like bullets. That is the theory behind skin diffusion of Electrons to shoot energy particles. At the beginning of the projection speed could be higher than the speed of light. Then the momentum of photon particles is reduced by the same diffusion of skin particles and that is what we observe as a luminous white fog around Sun at an eclipse (figure-02).

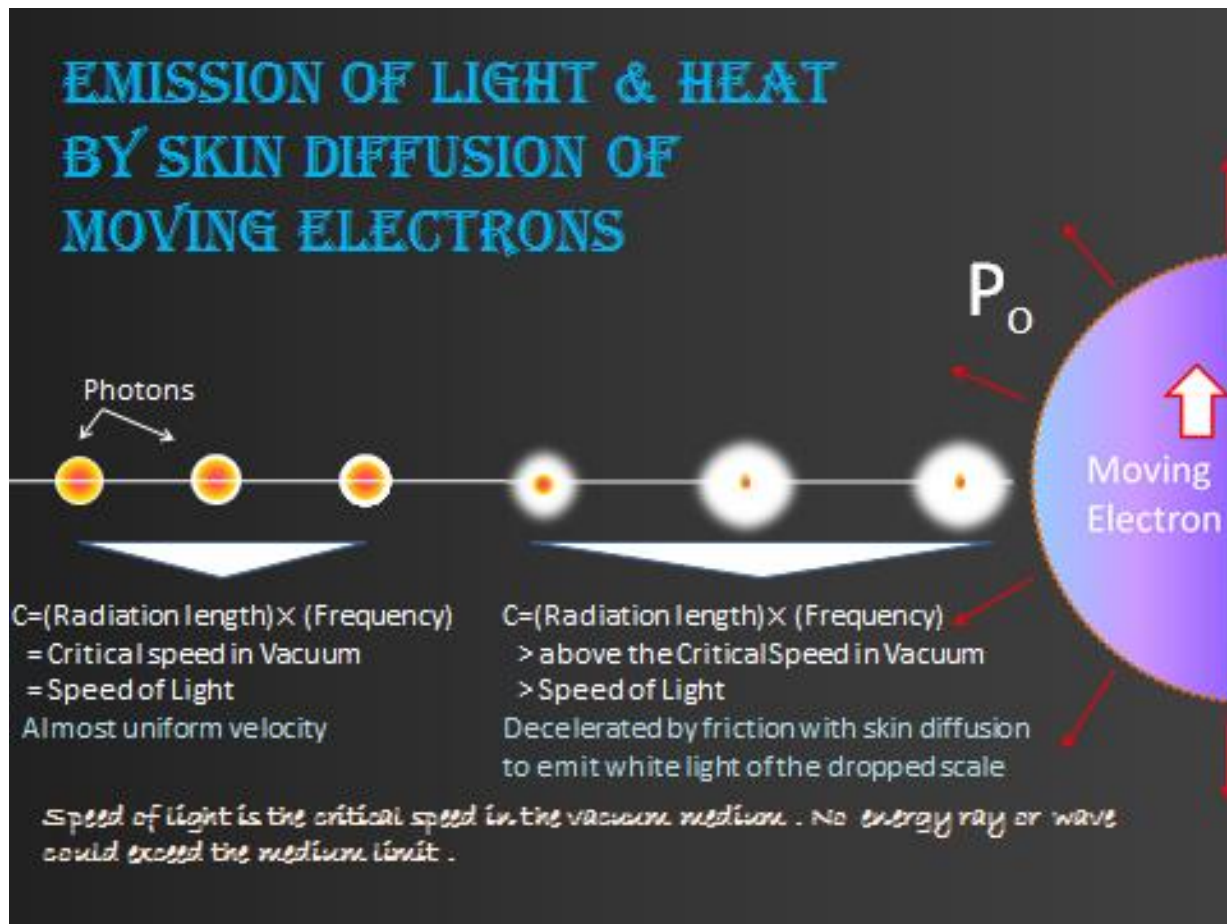


Figure-04 (Diffusion of Light and Heat from moving Electrons)

3.4- Have you ever seen an Electron at a station? Never.. because, energy particles such as Electrons, Light and Heat could never be recognized at the stationary state.

3.5- What is the end of Light?

Has any definition given for the end of Electrons and Light particles by any theorizations from the 20th century such as **QM** or **GR**?

“With the gradual drop of speed, **Energy Particles** are expanded in to the **Medium Particles** of **zero momentum**. The galactic medium(Vacuum) is therefore made up of speed lost Electrons and Photons”.

04- Speed of Light

Scientists of the 20th century have loaded an unnecessary weightage upon ‘**Speed of Light**’ and hence even today, the majority of people believe that Light is the main **Governing Factor** in worlds.

4.1- What is speed of Sound?

It is the **critical speed** in the atmospheric medium. Then why it is critical? Because, no medium mass of the same **Density** could move faster than that speed. What happens if it goes? Fire comes out to burn the shearing surfaces due to the **Medium Friction**.

Let us calculate speed of sound when atmospheric pressure $P = 1.0 \times 10^6$ dynes/cm² and Density $\rho = 1.293 \times 10^{-3}$ g/cm³.

$$v = \sqrt{\frac{2P}{\rho}} = \sqrt{\frac{2(1.0 \times 10^6 \frac{\text{dyne}}{\text{cm}^2})}{1.293 \times 10^{-3} \frac{\text{g}}{\text{cm}^3}}} = 39,329 \text{ cm/s} = 393.3 \text{ m/s. (dependent upon temperature, humidity etc)}$$

Above analysis has proven that velocity of Sound is just a property of the medium. No wind or natural sound wave could exceed the critical speed. FM sound wave is just a medium vibration spread forward by the **Momentum** of the wave. At every instant the wave has hold a medium mass temporally. However the temporally held mass is to move but within the limit of speed.

4.2- What is the speed of light?

Let us calculate the critical speed of the free space medium(Vacuum) when free space pressure $P = 1.8 \times 10^{20}$ dynes/cm² and Density $\rho = 0.4$ g/cm³. (pl refer 'The dynamic Model of Atom'/2017 at www.cyrilhtgamage.com for the analysis for the parameters)

$$c = \sqrt{\frac{2P}{\rho}} = \sqrt{\frac{2(1.8 \times 10^{20} \frac{\text{dyne}}{\text{cm}^2})}{0.400 \frac{\text{g}}{\text{cm}^3}}} = 3 \times 10^{10} \text{ cm/s} = 300,000 \text{ km/s.}$$

4.3- Can't we exceed the Speed of Light?

There are lots of arguments upon the mater by observations of light from manmade moving platforms. It is very difficult to solve **thought paradoxes** but I assure certainly that the **Nature** itself is not so complicated to understand.

Why not? There are two materials which can exceed the Critical Speed in vacuum.

- 1) Neutrons-(Gamma Rays)
- 2) Dark Matter

Density is the unique property which decides ability to exceed the medium limit of speed. Bullets and supersonic jets can exceed the speed of sound, the limit of

atmospheric medium, owing to the high **surface density**. Any craft of wooden or plastic could be burnt due to medium friction at the speed of sound.

Similarly if you could make a craft out of neutrons or dark matter only the Astronauts would overtake light with no difficulty. But you can't use the outdated traditional technique of rocket engines to accelerate. (There is a technique to accelerate the craft from the inside, without any external outlets just as in rockets).

But the most difficult thing is to handle aforesaid materials, **neutrons** or **dark matter**, to build up our craft because neutrons or dark matter don't exist without moving at or above the speed of Light. (Then Readers may question, why not, neutrons can exist stationary in atoms?. Pl ref. 'The Dynamic Model of Atom'/2017 to comprehend that nucleus is rotating vigorously to keep pressure at the zero level.)

Then Astronauts have got therefore to think of a special technology to protect the craft surface from the frictional burning of vacuum medium.

4.4- Why waves could not exceed the Limit of speed?

Waves such as, Gravity, Radio, TV and Radar are just born due to spreading of a vibration in the vacuum medium. **Strength** of a wave is the **Momentum** and readers may question then whether a momentum could exist without mass. Yes.. a wave always gets hold of a certain medium mass temporally. So the wave which holds medium mass naturally cannot exceed the critical speed in the medium.

That's why we can't use any of above waves as messengers to bring information from the far galaxies. Also that's why, Gravity cannot extend any force beyond Galactic boundaries. Gravity has no power at all for centralization of Galaxies in the Multiverse.

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