## Introducing Photon as the Basis of the Theory of Everything

## Gh. Saleh

## Saleh Research Centre, Netherlands

If we want to name the various types of energies found in nature, we should mention energies such as radiant, thermal, kinetic, potential, magnetic, gravitational, and so on. For instance, let's consider radiant energy. Its nature is that of photons emitted from a source, radiating onto a surface. Now, we will calculate its energy. For this calculation, we can utilise Planck's law and kinetic energy.

$$E_T = \frac{1}{2}m_p V_T^2 \Rightarrow E_T = \frac{1}{2}m_p (3.3\ C)^2$$
$$E_L = i\ E_T = hf\ ;\ \frac{1}{4} \le i \le \frac{3}{4}$$
$$i\ \left(\frac{1}{2}m_p (3.3\ C)^2\right) = hf \Rightarrow 5\ m_p C^2\ i = hf$$
$$s \equiv \frac{1}{2}m_p C^2$$
$$hf = n_1\ s$$

It can be readily shown that  $E_T$  is the radiant energy of the photon, and its energy can be calculated using two robust relationships.

If we consider electrical energy, it is equal to the kinetic energy of the electron current passing through a wire.

$$E_I = RI^2 t = N'E_K = N'(\frac{1}{2}m_eC^2)$$

Given that each electron is composed of approximately 50,000 photons, it can be written as such.

$$m_e \cong 50,000 m_p = \alpha m_p$$
  
 $E_I = N' \left(\frac{1}{2} \alpha m_p C^2\right)$   
 $RI^2 t = n_2 s$ 



In general, these relationships can be generalized, such that we can write as follows:

$$hf = RI^2t = E_K = U = \dots = N s$$

Considering the relationships above, it can easily be stated that any type of energy can be represented as a multiple of a constant "s".

Indeed, the nature of all energies can be defined based on the energy of the photon. In other words, all energies can be expressed in terms of a fundamental basis of photon energy, which is the mass of the photon multiplied by its total velocity.

$$E = N s$$
$$N \epsilon \mathbb{N}$$
$$s = \frac{1}{2}m_p C^2$$

## **References:**

[1] Saleh, Gh. "New Discoveries in Quantum and the Theory of Everything (2025)." Saleh Theory, 15 Dec. 2024, <u>https://www.saleh-theory.com/article/new-discoveries-in-quantum-and-the-theory-of-everything-2025</u>

[2] Saleh, Gh. "New Marvelous and Revolutionary Discoveries About Gravity." Saleh Theory, 08 Nov. 2023, <u>https://www.saleh-theory.com/article/new-marvelous-and-revolutionary-discoveries-about-gravity</u>

[3] <u>Saleh, Gh. "The Theory of Everything and Its New Mathematical and Physical Explanation." APS</u> *New England Section Fall Meeting Abstracts.* 2023.

[4] <u>Saleh, Gh. "Mathematical and physical explanation of the theory of everything." *APS April Meeting Abstracts.* Vol. 2022. 2022.</u>

[5] Saleh, Gh. "New Discoveries About Gravity?!!!." Saleh Theory, 07 Nov. 2021, <u>https://www.saleh-theory.com/article/new-discoveries-about-gravity</u>

[6] Saleh, Gh. "New Discoveries About Gravity?!!! 2." Saleh Theory, 12 Dec. 2021, <u>https://www.saleh-theory.com/article/new-discoveries-about-gravity-2</u>

