A Novel Explanation for the Particles, Waves, and Subatomic Particles Entities of Universe Based on Photons

Part d) A Novel Explanation for Photons as Atom of Electrons and Protons

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The ancients believed that the materials are made up of four elements: fire, air, water and earth. Over time, with the progress of science, materials were classified based on the constituent molecules, and then they were classified based on the constituent atoms of the molecules, which are the same elements.

If you consider the periodic table of elements, the mother of all elements is hydrogen, which, by adding electrons, neutrons, and protons in atoms, we reach newer elements. The interesting point is that the elements with their structures are changed physically and chemically.

The next step is the structure of the Electron, Proton and Neutron. We have found that all of them must be made of photon and their structures are as follows:

- 1. **The Electron:** is an array of photons rotating on the surface of an imaginary sphere without any central core.
- 2. The Proton: is a dense, compact globe filled with photons getting together and,
- 3. **The Neutron:** is a sphere with the Proton core and Electron shell.

So, the "photon", in the true sense of the word, could be called the new atom, which is the primary building block of all material in the universe.

Building on our previous discussions, here are several scientifically supported reasons why the photon can be considered a primary building block of the universe:

1. Emitting photons from light bulbs

Wherever we go these days, we undoubtedly encounter numerous light bulbs emitting photons due to electron motion in wires and filaments. Simply put, photon emission occurs whenever an electron follows a specific trajectory. So, the electrons serve as the mother and generator of photons in nature.

2. Electron Generation via Wireless Charging for Mobile Phones, Watches, etc.

Observing a typical wireless charger—widely available today—reveals that mobile phones can recharge without a direct wired connection to transfer and store electrons. Instead, they recover lost electrons consumed by the display and other functions through electromagnetic waves transmitted between the phone and the wireless charging device. These waves effectively convert



into electrons, which are then stored in the phone's battery.

3. Nuclear Explosion of Heavy Atoms such as Uranium

If we consider a nuclear explosion, a few grams of uranium release an immense amount of energy in a fraction of a second, accompanied by intense light emission. This process occurs due to the release of nuclear energy stored in uranium, producing a tremendous amount of thermal and luminous energy. This abundant emitted light results from the breakdown of protons and neutrons of the nucleus, which are rapidly released, generating extraordinary numbers of photons.

4. Stellar Radiation in the Universe

Observing a burning star, one can see continuous photon emission, which sustains the surrounding cosmic environment. If a star loses 10% of its mass, it reaches the threshold of collapse. However, assuming it continues burning indefinitely, over billions of years, it gradually diminishes in size. Actually, this indicates that a significant portion of the star's mass is converted into photons. Consequently, elements such as hydrogen and helium, as they deplete, transform into free photons.

References:

- [1] Saleh, Gh. "A New Explanation for the Photon, a New Atom." Saleh Theory, 26 May 2025, https://www.saleh-theory.com/article/a-new-explanation-for-the-photon-a-new-atom
- [2] Saleh, Gh. "Photon as a New Atom, Cidtonium as an Atom of Photon." Saleh Theory, 19 Jun. 2025, https://www.saleh-theory.com/article/photon-as-a-new-atom-cidtonium-as-an-atom-of-photon
- [3] Saleh, Gh. "Proofing the Photon as Atom of Fundamental Particles (Electron, Proton, etc.) Utilizing Simple Existing Phenomenon and Mathematical-Physical Calculations in the Universe 2025." Saleh Theory, 19 Jun. 2025, https://www.saleh-theory.com/article/proofing-the-photon-as-atom-of-fundamental-particles-electron-proton-etc-utilizing-simple-existing-phenomenon-and-mathematical-physical-calculations-in-the-universe-2025
- [4] Saleh, Gh. "Discovery of a New Atom." Saleh Theory, 06 Sep. 2023, https://www.saleh-theory.com/article/new-marvelous-and-revolutionary-discoveries-about-photon
- [5] Saleh, Gh. "The structure and shape of the Electron." Bulletin of the American Physical Society 67 (2022).
- [6] Saleh, Gh, and M. J. Faraji. "The structure of a photon, a new atom which is the primary building block of all matter." 52nd Annual Meeting of the APS Division of Atomic. 2021.
- [7] Saleh, Gh, R. Alizadeh, and H. A. Boshaghi. "The new structure (external and internal structure) for the proton, as a subatomic particle and its nature." *APS Texas Sections Fall Meeting Abstracts*. 2021.
- [8] Saleh, Gh, and M. J. Faraji. "Photon, a new atom (Primary building blocks of Electrons, Protons and Neutrons)." *Joint Fall 2020 Meeting of the Texas Sections of APS*. 2020.
- [9] Saleh, Gh, et al. "Superstring Theory & The Structure of Electron, Proton and Neutron." *APS Division of Nuclear Physics Meeting Abstracts*. 2020.
- [10] Saleh, Gh. "Discovery of a New Atom." Saleh Theory, 16 Jan 2019, https://www.saleh-theory.com/article/discovery-of-a-new-atom



- [11] <u>Saleh, Gh, et al.</u> "Structure of electrons, protons and neutrons." *4th International Conference on Atomic and Nuclear Physics*. 2018.
- [12] Saleh, Gh, et al. "The Superstring Theory and the Shape of Protons and Electrons." *MATTER: International Journal of Science and Technology* 4.2 (2018): 149157.
- [13] Saleh, Gh, et al. "Ultimate Structure of Proton." 4th International Conference on Atomic and Nuclear Physics. 2018.

