Hubble's Invariable Law and Its 10 Excellent and Useful Applications

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Before explaining the practical applications of Hubble's Law, we will briefly describe this law. Hubble's Law is a fundamental principle in cosmology stating that:

The farther a galaxy is from the Earth, the faster it moves away

$$V = HD$$

D: the distance to the galaxy (in megaparsecs)

H: Hubble constant, approximately 70 km/s/Mp

10 Useful Applications of Hubble's Law:

1. **Calculation of the tangential speed of celestial objects in the Universe**

According to the article "New Discoveries about Hubble's Law," it has been established that the speed of celestial objects derived from Hubble's Law is, contrary to previous astronomical understanding, actually their tangential speed and not their linear one.

2. **Definition and calculation of the universal constant**

Edwin Hubble, in 1929, combining his observations with data from other astronomers, especially Vesto Slipher, discovered a relationship between galaxy distances and their speed, now known as Hubble's Law. This relationship led to the calculation of Hubble's Constant (H).

3. **Proof of the rotational motion in the Universe**

The article "New Discoveries about Hubble's Law" from the Saleh Theory Group proves that Hubble's Law actually indicates the rotational speed of celestial objects. This, in turn, demonstrates the rotation of celestial objects and, in a way, proves the existence of rotation in the Universe.

4. **Calculation of the rotational speed of the Universe**

Based on the aforementioned article by the Saleh Theory Group, it has been proven that Hubble's Constant is actually the angular speed of celestial objects. Since the Universe is homogeneous, Hubble's Law also indicates the rotational or angular speed of the Universe.

5. **Calculation of speed of galaxies in the Universe**

The primary use and application of Hubble's Law (V=HD) is to determine the speed of celestial objects, which also applies to galaxies.

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6. **Proof of the breaking of the speed of light using Hubble's Law**

Given Hubble's Law (V=HD) and the observable Universe's radius of approximately $5 \times 10^{26}\ m$, a simple calculation shows that at the edges, and even elsewhere, the speed of celestial objects exceeds the speed of light.

7. **Proof of the existence of expansion in the Universe**

Hubble's Law states V= HD, which indicates that as “D” (distance) increases, “V” (speed) increases. This, in a way, demonstrates the expansion of the Universe.

8. **Derivation of the equations of motion for celestial objects in the Universe**

Based on Hubble's Constant, which, according to the Saleh Group's articles, represents the angular speed of the Universe, and the initial energy of the Universe obtained using the Monte Carlo method, general equations for the motion of celestial objects at different moments can be derived. These equations are found in the Saleh Theory Group's article "New Calculation of the Time of the Universe from Beginning to End."

9. **Derivation of the energy equations for celestial objects in the Universe**

Similar to point 8, where the velocity equations for each celestial objects can be derived, here too, using the equations of motion, the energy equations of the Universe can be obtained at any given moment.

10. **Derivation of the structural model and shape of the Universe**

According to the Saleh Theory Group's article "Calculating the Angular Velocity of the Universe and the Photon, and the Tangential Velocity of the Universe and the Photon Part B," the shape and structure of the Universe can be derived using the equations of motion and Hubble's Constant.

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