

A New Explanation for Dark Matter Based on the Principle of Inflation 2025

Gh. Saleh

Saleh Research Centre, Amsterdam, Netherlands

The Big Bang is a natural phenomenon in which, due to the collision of masses and particles and their subsequent explosion, an extremely large cloud comes into existence far from the central point. This immense cloud forms nebulae which serve as the birthplace for future stars.

However, it is important to note that when cosmic inflation ends, particles begin to cluster together under the influence of magnetic forces and other gravitational forces. These clusters eventually form larger objects, such as moons, planets, stars, and so on.

It is notable that during the early inflationary period, when everything existed as gas and tiny particles, each particle in the universe's space was suspended, as gravitational effects from any specific point did not act upon it. In other words, inflation involved both linear and rotational movement, but no central force acted on these particles. Each particle remained suspended in infinite space, gradually combining with other suspended particles to form larger celestial objects.

In systems like galaxies that possess a central black hole, the black hole exerts a gravitational effect on the particles suspended in infinite space, which are not influenced by any external forces. In such systems, the central black hole can, with minimal force, hold the suspended particles-such as stars, planets, moons, and others-in orbit around itself.

Conclusion

If we consider the particles existing in the universe during the inflationary period, these are the same objects that later form stars or moons. In fact, it can be stated that dark matter is the results of particles being suspended in the infinite space during the inflationary period.

Reference:

- [1] [Saleh, Gh, M. J. Faraji, and R. Alizadeh. "New Explanation for Dark Matter and Dark Energy." *24th International Conference on Particle Physics and Cosmology \(COSMO'21\)*. 2021.](#)
- [2] [Saleh, Gh, et al. "A New Theory to Explain the Dark Matter." *APS Meeting Abstracts*. 2020.](#)
- [3] [Saleh, Gh, R. Alizadeh, and A. Dalili. "The Proof of Nature of Dark Matter." *3 International Conference and Expo on Condensed Matter Physics \(ICECMP-2019\)*. 2019.](#)

