A New Explanation for the Helical Motion of Celestial Objects (Moons, Planets, Stars, Galaxies, etc.) in Relation to the Einstein-Rosen Wormhole Theory in the Universe

Gh. Saleh

Saleh Research Centre, Netherlands

Looking at our own Moon, it's clear that it orbits the Earth, which in turn orbits the Sun. If an observer were to view the Moon and the Earth together, they would see both moving around the Sun. The Earth's path is a closed curve, returning to its starting point after a year. In contrast, since the Moon orbits the Earth while also orbiting the central Sun, it's straightforward to conclude that the Moon follows a simple helical path.

Now, if we consider the motion of the Sun, which is orbiting the supermassive black hole at the centre of the Milky Way galaxy, the Earth follows the Sun in its path as it orbits in a closed curve. When an observer considers the motion of the Earth and the Sun within the galaxy, they can undoubtedly demonstrate that the Earth has a helical motion. We can now express this rule in a general way: whenever a celestial object, such as the Moon, other moons, planets, stars, galaxies, or anything else, has 'n' orbits, one can easily show that we can consider it to have n-1 helical paths.

Given that the Milky Way galaxy belongs to a higher-level structure called a cluster or even a supercluster, it's easy to show that, in addition to its closed curve motion within a cluster, the Milky Way can have more helical paths. For example, to explain this simply and clearly, within the Milky Way's system, a moon like our own has at least two helical motions: one orbiting the Earth, another orbiting the Sun, and a third around the Milky Way's galactic centre. Similarly, the Earth has at least one helical motion within the Milky Way. Since our galaxy and others have higher-level paths, they can create in clusters or superclusters, it's safe to say that galaxies must also possess helical motion.

Based on the principle of the helical motion of celestial objects in the cosmos, one might conceptualize the central axis of a helical motion as analogous to an Einstein-Rosen bridge — though this remains a theoretical interpretation. In simple terms, an axis passing through the helical motion of celestial objects can be defined as the Einstein-Rosen wormhole.

Conclusion:

In brief, it can be said that every celestial object, including galaxies, exhibits helical motion. And between two galaxies that are situated next to each other, their complex, combined helical motion can create tunnels in a spiral or helical shape, which serve as pathways for the Einstein-Rosen wormholes. In fact, it can be said that the combined helical motion of galaxies relative to each other and their own motion, or generally the helical motion from the smallest moons to galaxies or a combination thereof, can interpret and justify the theory of Einstein-Rosen wormholes.



References:

- [1] Einstein, Albert, and Nathan Rosen. "The particle problem in the general theory of relativity." *Physical Review* 48.1 (1935): 73.
- [2] Oks, E. "Stable conic-helical orbits of planets around binary stars: analytical results." *The Astrophysical Journal* 804.2 (2015): 106.
- [3] Saleh, Gh. "The Principle of Helical Motion from the Smallest Particle (Photon) to the Largest (Galaxies)." Saleh Theory, 14 Sep. 2025, https://saleh-theory.com/article/the-principle-of-helical-motion-from-the-smallest-particle-photon-to-the-largest-galaxies
- [4] Saleh, Gh. "A New Explanation for the Helical Motion of Galaxies Based on a Hubble Telescope Image (Observer's View) in the Universe." Saleh Theory, 01 Sep. 2025, https://saleh-theory.com/article/a-new-explanation-for-the-helical-motion-of-galaxies-based-on-a-hubble-telescope-image-observers-view-in-the-universe
- [5] Saleh, Gh. "10 Identical Characteristics in the Motion of Objects, From the Smallest (Photons) to the Largest (Galaxies)." Saleh Theory, 12 Jul. 2025, https://saleh-theory.com/article/10-identical-characteristics-in-the-motion-of-objects-from-the-smallest-photons-to-the-largest-galaxies
- [6] Saleh, Gh. "10 Permanent, Constant and Common Principles of Motion Among the Smallest Particles (Photons, Electrons, etc.) and the Largest Objects (Moons, Planets, Stars, Black Holes, etc.) in the Universe." Saleh Theory, 11 May 2025, https://saleh-theory.com/article/10-permanent-constant-and-common-principles-of-motion-among-the-smallest-particles-photons-electrons-etc-and-the-largest-objects-moons-planets-stars-black-holes-etc-in-the-universe
- [7] Saleh, Gh. "A New Explanation for the Repeating Nested Helical Path of Motion; from the Smallest Particles of Existence, Photons, to Moons, Planets, Stars, Galaxies, etc.!." APS April Meeting Abstracts. Vol. 2024. 2024.
- [8] Saleh, Gh. "A New Calculation of the Speed of Objects in Nested Paths in the Universe." *APS April Meeting Abstracts*. Vol. 2024. 2024.
- [9] Saleh, Gh. "New Explanation for Different Types and Models of Helical Motion of Galaxies." *EAS2024* (2024): 2163.
- [10] Saleh, Gh. "A New Explanation for the Repeating Nested Helical Path of Motion from the Smallest Particles of Existence, Photons, to Moons, Planets, Stars, Galaxies, etc.!." Saleh Theory, 15 Jul. 2023, https://saleh-theory.com/article/a-new-explanation-for-the-repeating-nested-helical-path-of-motion-from-the-smallest-particles-of-existence-photons-to-moons-planets-stars-galaxies-etc
- [11] Saleh, Gh. "The Principle of Complex Helical Motion, From Photon to Planets, Stars, Galaxies, ... in the Universe." Saleh Theory, 13 May 2023, https://saleh-theory.com/article/the-principle-of-complex-helical-motion-from-photon-to-planets-stars-galaxies-in-the-universe

