

Demonstration of Rotational Particle Motion During Inflation (Post-Big Bang) Using the Energy Discrepancy Between the Giant Planets and the Dwarf Planets of the Solar System

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When the kinetic energy values of the large planets of the Solar System around itself, such as Jupiter, are considered relative to Earth, the following equations are obtained:

$$E = \frac{1}{2} I\omega^2 = \frac{1}{5} mr^2\omega^2$$

The ratio of Jupiter's kinetic energy to Earth's kinetic energy is equal to the mass of Jupiter multiplied by the square of its tangential velocity ($v = r\omega$), divided by the mass of Earth multiplied by the square of Earth's tangential velocity:

$$\frac{E_j}{E_e} = \frac{m_j r_j^2 \omega_j^2}{m_e r_e^2 \omega_e^2} \cong 3.2 \times 10^5$$

Where m_j, m_e are the mass of Jupiter and Earth, r_j, r_e are their radius and ω_j, ω_e are their angular velocity.

These calculations clearly demonstrate that the rotational kinetic energy of Jupiter around itself differs very substantially from that of Earth. When the respective distances of Jupiter and Earth from the Sun are considered, the gravitational effect of the Sun would be expected to be greater for Earth than for Jupiter, which is consistent with expectation. An explanation for this marked discrepancy may be proposed as follows: during the initial period of inflation, all particles possessed rotational motion in addition to linear motion. As particles subsequently aggregated to form planets, this rotational motion was retained, and during the process of planetary formation, the combined rotational motion of the aggregating particles gave rise to the considerable rotational energy observed in the giant planets of the Solar System.

References:

- [1] Saleh, Gh. "An Answer to the Questions Raised in the NASA Challenge (APOD) Concerning Planetary Orbital Speeds, the Axial Tilt of Uranus, and the Retrograde Rotation of Venus." Saleh Theory, 30 May 2026, <https://saleh-theory.com/article/an-answer-to-the-questions-raised-in-the-nasa-challenge-apod-concerning-planetary-orbital-speeds-the-axial-tilt-of-uranus-and-the-retrograde-rotation-of-venus>
- [2] Saleh, Gh. *The Reform Book: A Revolution in Modern Physics*. Volume II, Saleh Research Centre, 2026, <https://saleh-theory.com/files/article/pdf/the-reform-book-a-revolution-in-modern-physics-vol2-2026.pdf>



[3] Saleh, Gh. "A New Explanation for the Formation, Nature, Radius, Density and Other Properties of Cosmic Inflation in the Universe." Saleh Theory, 21 Mar 2026, <https://saleh-theory.com/article/a-new-explanation-for-the-formation-nature-radius-density-and-other-properties-of-cosmic-inflation-in-the-universe>

[4] Saleh, Gh. *The Reform Book: A Revolution in Modern Physics*. Vol. 1, Saleh Research Centre, 2026, <https://saleh-theory.com/files/article/pdf/the-reform-book-a-revolution-in-modern-physics-2026.pdf>

[5] Saleh, Gh. "A New Explanation for Dark Matter Based on the Principle of Inflation 2025." Saleh Theory, 05 Jan 2025, <https://saleh-theory.com/article/a-new-explanation-for-dark-matter-based-on-the-principle-of-inflation-2025>

[6] 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>

