

The Einstein-de Haas Effect as Empirical Validation for Celestial Induction Torque

"And these examples We present to the people that perhaps they will give thought." Surah (59:21)

In the architecture of the Quran, a recurring principle of education is the use of the small and often tangible to explain the vast and the often intangible, and the simple to explain the complex. Whether it is the split of a date-stone (6:95) or the design of a mosquito (2:26), the Creator invites the observer to witness universal laws within a localised frame. This methodology ensures that the reader is left with a lasting impression of the underlying Truth—a Truth that remains consistent regardless of scale, moving from an observable "sign" to a grander understanding of the "Balance" (Mizan) of the heavens.

Following this divine methodology, this paper presents the Einstein-de Haas effect as the primary tangible example required to explain the intangible mechanics of the Sun's orbital velocity. By demonstrating how a localised magnetic moment (μ) necessitates a specific mechanical angular momentum (L) in a laboratory setting, we provide the empirical "Key" to the Sun's perpetual "swim" (Yasbahun). We prove that the heavens do not rely on abstract, intangible geometries, but on the same rigid, Maxwellian induction that governs the smallest conductive bodies.

The Mechanical Derivation: Resolving the "Factor of Two" Anomaly

In the laboratory, the Einstein-de Haas effect proves that a change in the magnetic moment (μ) of a body results in a proportional change in its mechanical angular momentum (L). This is governed by the gyromagnetic ratio (γ).

1. The Fundamental Ratio and the Einsteinian Rejection

The relationship is defined as:

$$L = \frac{1}{\gamma} \mu$$

History records a profound moment of tension during the initial 1915 experiments. The results consistently produced a torque that was **exactly twice** the value predicted by classical orbital models. Einstein, tethered to a burgeoning geometric model that viewed bodies as passive participants in space-time curvature, initially struggled with this result, as it suggested a mechanical reality that his geometry could not account for. To save the geometric model, physics eventually "labelled" this discrepancy as the anomalous *g-factor*, attributing it to an abstract "quantum spin."

2. Validation through Celestial Induction

Under the model presented in this series, the "factor of 2" is not an anomaly, but an **Empirical Necessity**. While a passive body might follow the classical prediction, the Sun is a **High-Potential Electromagnetic Exciter**.

The "extra" torque observed in the laboratory is the tangible signature of the **Internal Exciter** interacting with the field. When we translate this to the Sun's orbital velocity:

$$L = m \cdot v \cdot r = \frac{\mu}{\gamma}$$

Solving for v:

$$v = \frac{\mu}{m \cdot r \cdot \gamma}$$

The discrepancy that Einstein rejected actually **validates** the inductive torque model. It proves that the "swim" (Yasbahun) of the Sun is driven by an active internal magnetic moment that couples with the Galactic Stator. The mechanical motion is the direct result of the Sun's own inductive work; the Sun "swims" through the medium, using the Earth as a localised "anchor" to stabilise and magnify the galactic inductive exchange.

3. The Barnett Effect: The Inverse Proof for the Earth-Stator

While the Einstein-de Haas effect shows that magnetization causes rotation, the **Barnett Effect**—also detailed in Michaud's work—demonstrates the inverse: mechanical rotation of a body creates a magnetic field.

- **The Mechanic:** Rotating a conductive rod (like iron) aligns the internal magnetic moments (μ) of its electrons, magnetizing the rod without an external field.
- **Celestial Alignment:** This is the lab proof for my "**Celestial Induction**". If a small iron rod becomes a magnet simply by spinning, then the Earth—a massive iron-nickel sphere—must be inherently coupled to a

universal magnetic circuit through its state of rest and induction. It proves the "Balance" (Mizan) is a bi-directional mechanical exchange between the body and the medium.

4. Carrier-Photon Pressure: The Cause of the "Stutter"

Michaud describes a "**constant pressure**" within the electron's "carrier-photon" that seeks to maintain its velocity.

- **The Mechanic:** In my model, this is the internal "push" for motion provided by the induction of the **Galactic Stator**.
- **The Galactic Stutter:** This now defines the "stutter" in galactic acceleration as the physical vibration that occurs when this **Carrier-Photon Pressure** meets the **Magnetic Impedance** of a thinning field. It is not "Dark Energy," but the mechanical "knocking" of a celestial rotor as it negotiates a change in its inductive torque.

The Universal Operational Range of Induction

To demonstrate the "Balance" (Mizan), we examine the Maxwellian mechanics across four scales, proving that the heavens function as a single, coherent machine.

1. The Micro-Scale: The Relativistic Electron

As an electron accelerates toward c , its field lines compress into a transverse disk, radiating light at 90° to its motion.

- **The Mechanism:** This is the **Maxwell Stress Tensor** in its most basic form. The radiation is the physical "kink" in the medium as it resists the velocity change.
- **The Lesson:** Motion is always a negotiation with the medium's impedance.

2. The Macro-Scale: The Galactic "Stutter"

Observations of distant galaxies show a non-linear acceleration—a "stutter" often misattributed to dark energy.

- **The Mechanism:** This is the macro-scale equivalent of the electron's kick. As a galaxy-rotor moves through a thinning **Galactic Stator** field, it encounters variable **Magnetic Impedance**.
- **The Lesson:** The "stutter" is the mechanical slip of the rotor as it adjusts to the localised flux density of the medium.

The Infinite Impedance Boundaries

The limits of the universal motor are defined by two opposite states of "Infinite Impedance," representing the "Broken Circuit" and the "Seised Gear."

3. Rarefaction Extreme: The Boötes Void (The Open Circuit)

- **State:** Ever-decreasing density / Maximum Reluctance.
- **The Mechanism:** Without magnetic flux lines, the **Magnetic Moment (μ)** of matter has no field to couple with.
- **The Result: Infinite Impedance.** Without coupling, there is no induced torque or angular momentum (L). Galaxies cannot enter the void because there is no "inductive road" to support their "swim" (Yasbahun).

4. Saturation Extreme: The "Black Widow" Pulsar (The Seised Gear)

- **State:** Ever-increasing density / Maximum Maxwell Stress.
- **The Mechanism:** The **Maxwell Stress Tensor** reaches a physical saturation limit where the field lines are so compressed the medium becomes "solid."
- **The Result: Infinite Impedance.** The system is so overloaded it seises. The collapse toward a "black hole" is the final mechanical failure of the motor under extreme saturation.

A brief Summary: The Mechanical Capacity of the Maxwellian Universe

- **The Small (Electron):** Shows the *Trigger* of the force.
- **The Large (Galaxy):** Shows the *Consistency* of the force.
- **The Empty (Void):** Shows the *Absence* of the force (Zero Coupling).
- **The Dense (Pulsar):** Shows the *Limit* of the force (Saturation).

This confirms that the "Balance" (Mizan) is not an abstract idea, but a specific range of **Electromagnetic Density** where life and motion are possible. Anything outside that range—too empty or too dense—results in **Infinite Impedance** and a cessation of the "Swim" (Yasbahun).

Reflections of the Pioneers

James Clerk Maxwell reminds us that the field is the reality:

"The vast interplanetary and interstellar regions will no longer be regarded as waste places in the universe... we shall find them to be already full of this wonderful medium; so full, that no human power can remove it from the smallest portion of space, or produce the slightest flaw in its infinite continuity."

André Michaud, reflecting on the relationship between the magnetic moment and the mechanical motion of the Moon (paraphrased here), concluded with a perspective that validates this entire series:

"It is an amazing speculation to think that the same mechanical law that governs the microscopic orientation of an atom's magnetic moment could also be the very mechanism that drives the orbital movement of a celestial body."

References:

- Michaud, A. (2013). *The Einstein-de Haas Effect*. Journal of Physical Mathematics. [Download Link](#)
- Sense Islam (2019). *Stephen Hawking's Theory Mentioned in The Quran 1400 Years Ago - String Theory*. [Video Reference](#)

Excursus: The Nomenclature of the Small

While the mechanical laws of the Einstein-de Haas effect govern the "Balance" of the heavens, we find a striking linguistic symmetry in the nomenclature of the infinitesimal. In a single chapter of the Quran (Surah An-Nisa), a specific sequence of terms provides a map that leads directly to the modern frontier of physics.

I present this not as a mechanical proof, but as a "sign"(Ayat) for those who give thought to the architecture of the small:

1.What is *Dharrah*?

"Indeed, Allah does not do injustice, [even] as much as an atom's weight..." (Surah An-Nisa 4:40)

The *Dharrah* represents the baseline of matter—the fundamental particle where mass and balance are accounted for with absolute precision. It is the scale where mathematical or moral imbalance is physically impossible.

2.What is *Fatil*?

"...And they will not be wronged [even as much as] a thread." (Surah An-Nisa 4:49)

Moving deeper than the particle, we find the *Fatil*—the "thread." In the laboratory of modern theory, this is the realm of **String Theory**. It suggests that the foundation of the universe is not a solid point, but a one-dimensional, vibrating thread of energy.

3.What is the "Knock" (*Naqira*)?

"...those will enter Paradise and will not be wronged, [even as much as] the speck on a date stone." (Surah An-Nisa 4:124)

Deep within the sub-atomic, what governs the behaviour of the thread? The *Naqira*—the "speck" or the "knock." In the language of physics, this is the **Frequency** or **Resonance**. It is the "striking" vibration of the string that determines its identity. Without this "knock," the thread remains silent; with it, matter and motion are born.

The encounter at the Frontier

Humanity travels vast distances through time, technology, and effort to acquire knowledge. Yet, when we finally reach the "frontier" of the infinitesimal, we find that we are simply confirming Allah's words, having laid out the nomenclature of the small in plain sight. We do not discover new truths; we simply and finally arrive at the "signs" that have been waiting for us at the end of our journey.

"And to Allah belongs whatever is in the heavens and whatever is on the earth. And ever is Allah, of all things, Encompassing." (Surah An-Nisa 4:126)