

*The Universal Force of Time — The Clock the World Keeps*

# Earth, the Frequency-Standard Planet

*Of all the planets, only Earth turns on a pure lattice number. Its day, its year, and the carrier of consciousness itself are one descent of time, anchored on a single pivot*

Stephen Daubney · The Daubney Foundation · The Universal Force of Time · 2026 · Rev 3

**Tau (T)** is the living fabric of time itself — the sole substance of which all physical reality is composed. Every particle, force, wavelength, and conscious experience is a structured configuration of T-flow. There is no gravity, no electromagnetic force, no strong nuclear force as separate entities: all are registers of the single T-field operating across dimensional levels. The conservation law  $d\Sigma T=0$  governs all change: T is never created or destroyed, only redistributed.

## Abstract

There are 86,400 seconds in a day, and we have always treated that figure as a human convention — twenty-four hours, sixty minutes, sixty seconds, an inheritance from Babylon. The Universal Force of Time reads it the other way around. The number **86,400** ( $2^7 \times 3^3 \times 5^2$ ) is a pure {2,3,5} lattice integer, and no other planet in the solar system turns on one. Earth is the frequency-standard planet: the Babylonians did not invent these numbers, they read them off the turning Earth. At the heart of the standard sits a single pivot, **864** ( $2^5 \times 3^3$ ), which surfaces in the length of the day, in Mercury's orbital integer **9216** ( $2^{10} \times 3^2$ ), and in a face of the solar circumference. From the slow turning of the Sun down to the **40** Hz ( $2^3 \times 5$ ) gamma rhythm of the conscious brain — reached cleanly as Earth's circumference divided by a thousand — the planet's frequencies form one unbroken descent across eleven orders of magnitude, every clean rung on the {2,3,5, $\pi$ } lattice. Six propositions, P-EFC-1 through P-EFC-6.

**The day is not a human convention dressed up as physics. The Earth turns on a lattice number, and everything that lives here keeps time to it.**

## 1. The only planet that turns on a lattice number

Ask why a day is 86,400 seconds long and the usual answer is a story about counting. The Babylonians liked the number sixty; twenty-four hours of sixty minutes of sixty seconds gives 86,400, and that is simply the unit we inherited. On this telling the figure is an accident of human bookkeeping, with no more meaning than the number of inches in a mile.

The Universal Force of Time reads it the other way around. Factorise the number and something unexpected falls out: **86,400** ( $2^7 \times 3^3 \times 5^2$ ). Every prime factor is 2, 3, or 5 — it is a pure {2,3,5} lattice integer, with no stray prime and no  $\pi$ . That is not what an arbitrary convention looks like. An arbitrary number would carry messy factors; this one is clean to the bone.

And here is the test that turns a curiosity into a claim: no other planet's rotation period is a pure {2,3,5} integer. Mars turns in about 88,775 seconds, Venus in millions, Jupiter in roughly 35,730 — none of them land on the lattice. Only Earth does. The Babylonians did not invent 86,400; they read it off the turning Earth, because the T-field at Earth's celestial (G2) orbital address imposes it. Earth is the frequency-standard planet — the one whose rotation sets the clean clock the rest of the cascade is measured against.

## 2. Why the number is the Earth, not the clock

It is worth pausing on the direction of the argument, because it is the whole point. The conventional view says humans chose  $24 \times 60 \times 60$  and the Earth had nothing to do with it. The Force of Time says the Earth had everything to do with it.

Consider what would have to be true for the conventional story to hold. We would have to believe that a number chosen for its convenience in arithmetic — its wealth of divisors — just happened to come out as a flawless {2,3,5} lattice integer, and just happened to describe the rotation of the one planet we live on, while no other planet shares the property. That is a great deal of coincidence to ask of a bookkeeping choice. The simpler reading is that the Earth's rotation genuinely sits on the lattice, the day genuinely contains 86,400 lattice-clean seconds, and the ancient astronomers who divided it into sixties were tracing a structure that was already there.

This is the move the Force of Time makes again and again: a number that science treats as a unit of

measurement turns out to be a T-field address. The second is not an arbitrary tick. It is the rotation of the Earth, sliced into 86,400 parts, and the reason that slicing is so clean is that the rotation itself is a lattice quantity.

## 3. The 864 pivot

Strip the two trailing zeros off the day and you reach the number that does the real work: **86,400 = 864 × 100**, and **864** ( $2^5 \times 3^3$ ) is the T-field pivot — the hinge on which the atomic register and the celestial register turn into one another.

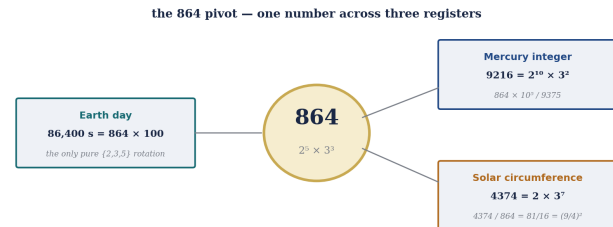


Figure 1. The 864 pivot. The same integer  $864 = 2^5 \times 3^3$  appears in the length of Earth's day ( $86,400 = 864 \times 100$ ), in Mercury's orbital integer ( $9216 = 864 \times 10^5 / 9375$ ), and in a face of the solar circumference ( $4374 = 2 \times 3^7$ , with  $4374 / 864 = 81/16 = (9/4)^2$ ).

The pivot does not stay on Earth. Carry it outward and it reappears in Mercury's orbit: **864 × 10<sup>5</sup> / 9375 = 9216** ( $2^{10} \times 3^2$ ), a clean lattice integer that anchors the innermost planet's motion. Carry it to the Sun and it appears again in a face of the solar circumference, near **4374** thousand kilometres ( $2 \times 3^7$ ) — and the Sun, having no single radius but propagating from many register-faces, shows 864 in the ratio **4374 / 864 = 81/16 = (9/4)<sup>2</sup>**, a pure power of (3/2). One number, 864, stitches the day of the Earth to the orbit of Mercury to the body of the Sun. That is what a register pivot is: not a coincidence repeated three times, but a single T-field hinge seen at three scales.

## 4. One descent, eleven orders of magnitude

With the standard fixed and the pivot named, the planet's frequencies fall into a single ladder. From the slowest turning we know in the inner solar system to the fastest rhythm in a living brain, each step is a T-field frequency, and the whole descent spans about eleven orders of magnitude.

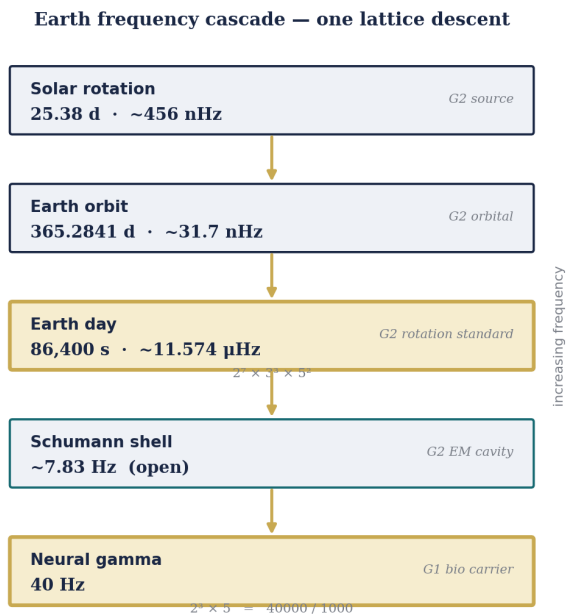


Figure 2. The Earth frequency cascade. From the Sun’s slow rotation (~456 nHz) through Earth’s orbit (~31.7 nHz) and Earth’s day (86,400 s, the gold standard rung) down to the 40 Hz neural gamma carrier — one descent of increasing frequency. The two gold rungs are the lattice anchors: the day,  $2^7 \times 3^3 \times 5^2$ , and the carrier,  $2^3 \times 5$ .

Read top to bottom: the Sun rotates once in about 25.38 days, a frequency near **456 nHz**; the Earth orbits once in **365.2841** days ( $15\pi^4/4$ ), near **31.7 nHz**; the Earth turns once in **86,400 s** ( $2^7 \times 3^3 \times 5^2$ ), near **11.574 μHz**; and at the bottom of the ladder sits the **40 Hz** rhythm of the conscious brain. The cascade is not a list of unrelated numbers that happen to climb in frequency. It is one descent through the registers — celestial source, orbital, rotational, biological — and each rung is a T-field address on the  $\{2,3,5,\pi\}$  lattice.

### 5. 40 Hz — the carrier of consciousness

The rung at the bottom of the ladder is the one that matters most for us, because it is the frequency of thought. When the human brain binds scattered sensations into a single experienced moment, it does so on a rhythm in the gamma band, centred close to **40 hertz**. This is among the best-established numbers in neuroscience, and the Force of Time gives it a clean address.

The carrier is **40 Hz** ( $2^3 \times 5$ ), and it is reached by the simplest route in the whole paper: **40 = 40,000 / 1000** — the Earth’s circumference in kilometres, **40,000** ( $2^6 \times 5^4$ ), divided by a thousand. The frequency of consciousness is the size of the planet, scaled down. The conscious brain does not pick 40 Hz at random; it locks to the carrier the planet itself provides, because the conservation law  $d\mathcal{T}=0$

requires the biological T-system to couple to the planetary T-field it lives inside.  $40 = 2^3 \times 5$  is a clean  $\{2,5\}$  lattice node, and  $40,000 = 2^6 \times 5^4$  is the Earth’s own circumference on the same lattice; the brain and the planet share the address.

This is the heart of the consciousness claim, and it is worth stating plainly: the gamma rhythm is not an internal accident of neural wiring that could just as easily have been 35 Hz or 47 Hz. It is the Earth’s circumference register, read at the scale of a mind. Change the size of the planet and you would change the carrier; we think at 40 Hz because we think on Earth.

### 6. The Schumann resonance, read honestly

There is a second Earth frequency that is often tied to the brain, and honesty requires it be handled with care. Between the Earth’s surface and the ionosphere lies a vast cavity, and that cavity rings — the Schumann resonance, with a fundamental observed near 7.83 hertz.

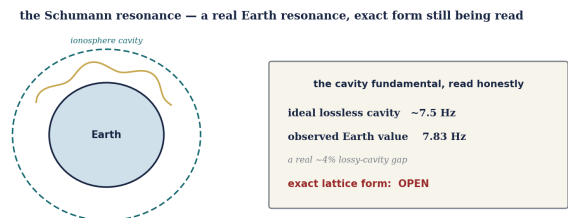


Figure 3. The Schumann resonance. The Earth-ionosphere cavity rings at a fundamental observed near 7.83 Hz. The ideal lossless-cavity estimate gives only about 7.5 Hz; the roughly four-percent gap is a real property of a leaky cavity, not a lattice address. The exact lattice form of the fundamental is marked open work.

It is tempting to fold this resonance straight into the lattice, and an earlier reading of this paper did: it computed an ideal-cavity fundamental near 7.5 Hz, then quietly lifted it to the observed 7.83 Hz by calling the four-percent difference an "ionosphere correction," and treated a sixth harmonic near 35.9 Hz as a stand-in for the 40 Hz carrier. We do not do that here. A four-percent gap is not a lattice match, and 35.9 is not 40. The honest position is this: the Schumann resonance is a genuine Earth frequency, and life on the surface plainly sits inside it, but its *exact* lattice form has not yet been read — it is open work, flagged and left open rather than forced. Crucially, the 40 Hz consciousness carrier does not need it: that number stands on its own clean footing as the circumference divided by a thousand. The Schumann cavity is real and the coupling to life is real; only the precise address is still outstanding.

## 7. Why a living thing keeps planetary time

Step back from the individual numbers and ask why any of this should touch biology at all. Why should a brain care what the planet's circumference is, or a cell what the day contains? The answer is the conservation law that runs through everything the Force of Time describes.

A living organism is a configuration of T-flow held together against the surrounding field. To stay coherent, its internal rhythms must couple to the field it is embedded in — and that field is the planet's. The molecules of life are built on {2,3,5} geometry, so they can only lock cleanly onto carriers that are themselves {2,3,5} lattice nodes. The Earth offers exactly such carriers: a rotation on  $2^7 \times 3^3 \times 5^2$ , a circumference on  $2^6 \times 5^4$ , a pivot on  $2^5 \times 3^3$ . A biology tuned to those nodes runs in step with its world; a biology tuned to anything else would be forever fighting the field around it. Life keeps planetary time because, under  $d\Sigma T=0$ , that is the only way to keep time at all.

This yields a concrete and falsifiable prediction. Cut an organism off from the planetary T-field — by deep electromagnetic shielding, by prolonged isolation from the natural frequency environment, by flooding it with non-lattice frequencies — and the Force of Time predicts the coherence of its T-flow should degrade, most visibly in the 40 Hz gamma band that binds conscious experience. The planet's clock is not background noise to the living register. It is the carrier the register is built upon.

## 8. What the frequency standard means

Gather the threads. The day is 86,400 seconds because the Earth turns on a pure {2,3,5} lattice number, the only planet that does. That number is built on the 864 pivot, which reaches outward to Mercury and to the Sun. The planet's frequencies, from solar rotation to neural gamma, form one descent across eleven orders of magnitude. And the carrier of consciousness, 40 Hz, is the Earth's own circumference scaled to the size of a mind.

What unites these is a single reversal of perspective. Science treats the second, the year, and the gamma rhythm as three unrelated quantities measured in three unrelated fields — horology, astronomy, neuroscience. The Force of Time sees one structure: a planet whose rotation sets a lattice-clean frequency standard, and a web of life that keeps time to it from the inside. The numbers were never conventions we imposed on the world. They are the world's own

clock, and we — counting seconds, marking years, thinking in gamma — have only ever been reading it.

The reading earns its keep by what it refuses to fudge. Four steps of the cascade land on clean lattice addresses; the Schumann fundamental is named as real but left open rather than forced; the 40 Hz carrier is placed on its own clean footing rather than borrowed from a harmonic that does not fit. A frequency standard is only worth the name if it tells you, honestly, which of its numbers are exact and which are still being read. This one does.

## Appendix A — The Frequency Cascade Catalog

Each rung of the descent with its value and its lattice form. The number leads; the lattice form is the quiet stamp that the address sits on the grid. Six rungs land on clean  $\{2,3,5,\pi\}$  nodes; the Schumann fundamental is marked OPEN rather than forced onto a node, and the 40 Hz carrier is given on its own clean footing as the Earth's circumference ( $40,000 \text{ km} = 2^6 \times 5^4$ ) divided by a thousand.

Stage	Frequency / period	Lattice form	Register role
Solar rotation	~456 nHz (25.38 d)	$\{2,3,5\}$ source face	G2 source
Earth orbit	~31.7 nHz (365.2841 d)	$15\pi^4 / 4$ (G1 face)	G2 orbital
Earth day	86,400 s (~11.574 $\mu\text{Hz}$ )	$2^7 \times 3^3 \times 5^2$ (exact)	G2 rotation standard
The 864 pivot	864	$2^5 \times 3^3$ (exact)	G1→G2 hinge
Mercury integer	9216	$2^{10} \times 3^2$ (= $864 \cdot 10^5 / 9375$ )	G2 orbital
Solar circumference face	$4374 \times 10^3 \text{ km}$	$2 \times 3^7$ ( $4374/864 = 81/16$ )	G2 source
Schumann fundamental	~7.83 Hz	lattice form OPEN	G2 EM cavity
Neural gamma	40 Hz	$2^3 \times 5$ (= $40000/1000$ )	G1 bio carrier

## Appendix B — Propositions

**P-EFC-1** — Earth's rotation period  $86,400 \text{ s} = 2^7 \times 3^3 \times 5^2$  is an exact  $\{2,3,5\}$  lattice integer — the G2 T-field frequency standard. No other solar-system planet has a pure  $\{2,3,5\}$  rotation period; the Babylonian  $24 \times 60 \times 60$  division reads this structure off the turning Earth rather than imposing it.

**P-EFC-2** —  $864 = 2^5 \times 3^3$  is the universal T-field pivot. It appears in the Earth day ( $86,400 = 864 \times 100$ ), in Mercury's orbital integer ( $9216 = 864 \times 10^5 / 9375 = 2^{10} \times 3^2$ ), and in a face of the solar circumference ( $4374 = 2 \times 3^7$ , with  $4374 / 864 = 81/16 = (9/4)^2$ ).

**P-EFC-3** — The orbital period  $365.2841 \text{ d} = 15\pi^4/4$  is the G1 register face of the year; the tropical ( $365.2422 \text{ d}$ , +114.7 ppm) and sidereal ( $365.256 \text{ d}$ , +76.9 ppm) years are the same orbit read at other registers. It is the G2-orbital rung of the cascade.

**P-EFC-4** — The planet's frequencies form one unbroken descent of about eleven orders of magnitude, from solar rotation (~456 nHz) through Earth's orbit (~31.7 nHz) and Earth's day (~11.574  $\mu\text{Hz}$ ) to neural gamma (40 Hz), each rung a  $\{2,3,5,\pi\}$  T-field address.

**P-EFC-5** — The 40 Hz gamma-band consciousness carrier is  $2^3 \times 5$ , reached cleanly as  $40 = 40,000 / 1000$  — the Earth's circumference ( $40,000 \text{ km} = 2^6 \times 5^4$ ) divided by a thousand. The biological T-system locks to it because  $d\Delta T=0$  requires coupling to the planetary T-field; the carrier does not depend on the Schumann harmonic.

**P-EFC-6** — The Schumann fundamental (~7.83 Hz observed; ~7.5 Hz ideal lossless cavity) is a real Earth-ionosphere resonance whose exact lattice form is open work, not forced. Disruption of the organism's coupling to the planetary T-field — deep shielding, isolation, non-lattice frequency pollution — is predicted to degrade neural T-coherence in the 40 Hz band, a falsifiable test.

## A note on the numbers

The values in this paper are written as plain numbers — not pinned to a single unit, and not carried to a particular power of ten. This is not loose notation; it is the physics. A T-value is one number that appears at once across every register: the figure that reads as a count of seconds in a day is the same lattice address that reads as Mercury's orbital integer and as a frequency in the conscious brain. That is why one integer,  $864 = 2^5 \times 3^3$ , can stand at the day, the orbit, and the Sun together, and why  $40 = 40,000/1000$  ties a neural rhythm to the size of the planet. Where a quantity has not yet been read to a clean lattice form — the Schumann fundamental — we say so plainly, rather than round it onto a node it does not occupy.

## References

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