The Floor and the Background

There is no minus-273 floor. Temperature does not add — it multiplies. Absolute zero and the cosmic microwave background are hydrogen read at the bottom and the top of the Earth's crust boundary: one points at the speed of light, the other sings the length of the year

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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 dΣT=0 governs all change: T is never created or destroyed, only redistributed.

Abstract

For a century, science has placed a wall at the bottom of the world: minus 273.15 degrees, absolute zero, the coldest anything can ever be. The Universal Force of Time finds no wall there. That floor is an artefact of a single mistaken habit — the habit of adding a number to cross from one temperature scale to another. The scales do not add. They multiply, through the same 864 that sets the Earth's day and the Sun's diameter: Kelvin is Celsius times 8.64, Fahrenheit is Kelvin times π/10, and zero meets zero with nothing inserted between them. Once the additive floor is gone, two of the coldest numbers in nature fall onto the lattice and lock. Absolute zero carries the clean signature −273.375 (= $-3^7/2^3$) on the Kelvin face and −31.640625 on the Celsius face; the cosmic microwave background carries 2.7254067120 (Kelvin) and 0.3154405917 (Celsius). They are the two atomic weights of hydrogen — 1.0077696 and 1.007860451 — read at the bottom and the top of the Mohorovičić discontinuity, the boundary of the Earth's crust. And each, run through its own Fahrenheit value, throws out a constant of nature: the floor returns the true speed of light, the background returns the length of the year. Heat is time. The coldest place is simply where the least of it flows.

ABSOLUTE ZERO — THE FLOOR	COSMIC MICROWAVE BACKGROUND
−273.375 K	**2.7254067120 K**
−31.640625 °C	**0.3154405917 °C**
(= $-3^7/2^3$) · atomic register	celestial hydrogen, 1.007860451 · the background

Heat is not a substance that fills a thing. Heat is time, flowing. Where time flows fast, a thing is hot; where it barely flows, a thing is cold; and the coldest place in the universe is simply the place where the least time moves.

Master proposition · Stephen Daubney

1. The wall that was never built

Every schoolchild learns it. There is a lowest possible temperature, minus 273.15 degrees Celsius, and below it nothing can go. They call it absolute zero — the point where, in the old picture, all motion stops. It sounds like a discovery about the world. It is really a discovery about a sum.

Watch how the conversion is taught. To turn Celsius into Kelvin, you add 273.15. To turn Celsius into Fahrenheit, you multiply by nine-fifths and then add 32. The whole of conventional thermometry is built on adding a number to shift from one scale to the next. And the moment you build on addition, you are forced to invent a floor: a special place, 273.15 below the freezing of water, where the added number runs out and the scale simply stops. The wall at the bottom of the world is not something anyone measured. It is the shadow cast by an addition sign.

The Universal Force of Time does not add. It never has. Across every register of nature — the wavelengths of light, the periods of planets, the angles of molecules — values are joined by multiplication on the lattice of 2, 3, 5 and π, never by an arbitrary offset bolted on by hand. Temperature is no exception. And when temperature is read the way the rest of nature is read, the floor at minus 273 dissolves like mist, and something far cleaner stands in its place.

P-AZ-1

There is no additive absolute-zero floor. The supposed wall at minus 273.15 °C is an artefact of converting between temperature scales by addition. Under the T-field, temperature scales are joined multiplicatively, and no fixed sub-zero floor exists to be mis-set.

2. Heat is time, and the scales multiply

Heat is time in another dress. This is not a figure of speech; it is the same identity that runs through the whole theory — T is matter is energy is existence — now wearing the face of temperature. To warm a thing is to quicken the time flowing through it. To cool it is to let that flow fall away.

If heat is time, then the temperature scales must be joined the way every other T-quantity is joined: by a clean multiplicative gear, drawn from the lattice. And they are. The pivot is 864 ($= 2^5 \times 3^3$) — the very number that sets the Earth's day at 86,400 seconds and the Sun's diameter in miles. Celsius becomes Kelvin by multiplying by 8.64 ($= 864/100$). Kelvin becomes Fahrenheit by multiplying by π/10. That is the whole of it. No 273 added, no 32 added — two turns of a gear and the three scales are revealed as one value seen three ways (Figure 1, appendix).

The consequence is immediate and it is the heart of this paper. If the scales only multiply, then Kelvin reaches zero at exactly one place: where Celsius reaches zero. There is no second zero hiding 273 degrees below. Zero meets zero. The floor science spent a century defending was never part of the structure of the world; it was part of the arithmetic we used

to describe it.

P-AZ-2

The temperature scales are joined by multiplication through the day-pivot 864: Kelvin = Celsius × 8.64, and Fahrenheit = Kelvin × π/10. Heat is a manifestation of T-flow. Kelvin reaches zero only when Celsius reaches zero; the two zeros coincide, leaving no separate floor.

→ Want the day-pivot 864 in full? See the companion paper: The 864 Wave.

3. Two weights of hydrogen, two edges of the crust

Hydrogen is the first and simplest thing in the universe, a single proton with a single electron, and the T-field reads its weight at two registers, a hair apart. At the atomic, surface register the weight is 1.0077696. At the celestial register it is 1.007860451 $(= 125/4\pi^3)$. The two are separated by a single step of the lattice — the same register step that appears, again and again, wherever the atomic world hands over to the celestial one.

That step has a place you can point to. Deep beneath your feet, some thirty-odd kilometres down, lies the Mohorovičić discontinuity — the boundary where the Earth's crust gives way to the mantle. It is not a single surface but a thin band with a bottom and a top, and the two edges of that band are two radii sitting on the lattice. The bottom edge is 6.365623858. The top edge is 6.366197723 $(= 20000/\pi)$. The same operator chain carries each hydrogen weight onto its edge: the lighter weight onto the bottom, the heavier weight onto the top. The two weights of hydrogen are the two edges of the crust boundary (Figure 2, appendix).

Why does this matter for the cold? Because the bottom edge and the top edge are not interchangeable. The bottom — the atomic, surface register — carries the floor of all temperature, absolute zero. The top — the celestial register — carries the faint glow that fills all of space, the cosmic microwave background. Two coldest numbers in nature, one at each edge of the boundary beneath us, each fixed to its own weight of hydrogen.

P-AZ-3

The two atomic weights of hydrogen — 1.0077696 (atomic/surface register) and 1.007860451 (celestial register) — map onto the two radii of the Mohorovičić discontinuity: 6.365623858 at the bottom edge and 6.366197723 (= 20000/π) at the top. Absolute zero rides the bottom edge; the cosmic microwave background rides the top.

→ Want the crust-boundary radii in full? See the companion paper: The Register Transition Zones of the Earth.

4. Absolute zero: the clean floor

Strip away the false wall at minus 273 and ask what the genuine floor looks like, and the answer comes back in the cleanest numbers the lattice can offer. Read from the bottom edge of the crust boundary, through the lighter weight of hydrogen, absolute zero stands at −273.375 $(= -3^7/2^3)$ on the Kelvin face and −31.640625 $(= -3^4\times5^2/2^6)$ on the Celsius face — a cold reading below zero, the floor of the world, written in nothing but the primes 2, 3 and 5. And note what its being negative in Kelvin tells us: because zero meets zero at the freezing of water, absolute zero is not a magic floor at the bottom of the Kelvin scale — it is simply another reading below that zero, with no wall beneath it.

Pause on how clean that is. No π anywhere. No correction. No measured residue. Three to the seventh over two cubed gives the Kelvin floor to the last digit; three to the fourth times five squared over two to the sixth gives the Celsius floor to the last digit. These are exact rational

nodes of the lattice, the bedrock numbers from which the warmer world is built. The heavier, celestial weight of hydrogen gives a sibling floor one register step above this one — the same −273.375 nudged by a single step — but the atomic floor is the bedrock, and it is as clean as anything in the theory.

P-AZ-4

Absolute zero, read from the atomic register, sits on exact lattice nodes: $-273.375 = -3^7/2^3$ (Kelvin face) and $-31.640625 = -3^4\times5^2/2^6$ (Celsius face). It carries no π and no correction — pure {2,3,5}. Being negative in Kelvin, it is no special floor: with zero meeting zero at water's freezing, it is simply a reading below that zero, replacing the additive minus-273.15 wall.

5. The floor points at the speed of light

Here the floor stops being a number and starts being a doorway. Take the size of absolute zero's Fahrenheit value, −85.883289167511, and walk its magnitude through the conversion gears the theory uses everywhere — divide by 36, multiply by 2π, multiply by 2 — and the floor of all cold hands you the speed of light: 2.9978923368.

Not the speed of light science writes down. Science records 2.99792458, and that number is not on the lattice — which, in this theory, is the plainest possible sign that it is the slightly mis-set one. The value the floor returns, 2.9978923368 $(= 2^3\times3^5\times5^6\times\pi^2)$, is the true speed of light at the Earth register — the speed everything must match to enter our dimension. The coldest place in the universe and the fastest thing in it turn out to be the same node of the T-field, read through two different faces. The floor of cold is a portrait of the speed of light.

P-AZ-5

Absolute zero's Fahrenheit face, 85.883289167511, geared by ÷36 ×2π ×2, returns the true Earth-register speed of light, 2.9978923368 $(= 2^3\times3^5\times5^6\times\pi^2)$. The conventional 2.99792458 is off the lattice and is the mis-set reading. The floor of temperature and the speed of light are one node, two faces.

→ Want the speed of light as a register value in full? See the companion paper: The Speed of Light Is Not Constant.

6. The cosmic microwave background: the top edge

Now lift to the top edge of the crust boundary, and to the heavier, celestial weight of hydrogen. Read there, through 1.007860451, the faint glow that fills all of space — the cosmic microwave background — stands at 2.7254067120 on the Kelvin face. That is its lattice value, fixed by hydrogen at the celestial register, and it sits a whisper away from what the satellites record.

Conventional cosmology tells a dramatic story about this glow: that it is the cooled afterimage of a hot young universe, light set free 380,000 years after a beginning and stretched ever since. The Universal Force of Time tells a quieter and a stranger one. The background is not an echo of a past event. It is the present, ongoing engine-sound of every star in the sky generating time — the ground note of a universe that is forever making T, heard from inside the Earth's own register. It is not a relic. It is a heartbeat, and it is happening now.

Multiply that Kelvin value by 8 and it lands on hydrogen's own ground-state ionisation energy at the celestial register, 21.8032536960 — the background of the cosmos and the binding of

the simplest atom, the same number eight steps apart. The glow that fills the void and the grip that holds an electron to a proton are written in one hand.

P-CMB-1

The cosmic microwave background, read from the celestial register through the heavier hydrogen weight 1.007860451, sits at 2.7254067120 K. It is not the relic of a past event but the ongoing engine-sound of all stars generating T, observed from within the Earth's register. Multiplied by 8 it returns hydrogen's celestial ground-state ionisation, 21.8032536960.

7. The background sings the year

The floor pointed at the speed of light. The background points at the length of the year. Take the cosmic microwave background's Fahrenheit value, scale it by a hundred to 85.6211770446, and run it through the same gears — divide by 36, multiply by 2π, multiply by 2 — and out comes the celestial spin-orbit value 2.9887428977. Carry that on, by 2 over 9375 onto its radius and then through the degree-to-radian veil, and the glow of the cosmos hands you 365.3170219587 — the length of the orbital year, in days.

And here is the seal on it. The Sun's own surface temperature, 5787.037037 (= $2\times5^7/3^3$), run through its own gears, produces the very same year: 365.3170219587. The coldest glow in the universe and the blazing surface of our own star arrive at the identical number — the time it takes the Earth to go once around. The hot source and the cold background are wired to the same year, through the same lattice furniture. Coincidence cannot reach across temperatures that differ by a factor of two thousand and land on the same ten digits. Only a single underlying fabric can.

P-CMB-2

The cosmic microwave background's Fahrenheit face (×100 = 85.6211770446), geared ÷36 ×2π ×2, yields the celestial spin-orbit value 2.9887428977; carried ×2÷9375 onto its radius and through the 180/π veil it returns the orbital year, 365.3170219587 days — the identical year produced by the Sun's surface temperature 5787.037037 (= $2\times5^7/3^3$).

→ Want the degree-to-radian veil in full? See the companion paper: The Degree–Radian Bridge.

8. One constant, two faces — the bracket

There is a last gift hidden in the two floors. Science holds the Rydberg constant — the number that sets the spectral lines of hydrogen — as a single fixed quantity, 10,973,731.568. The Universal Force of Time says no quantity read at the Earth node is ever truly single; each is a face of the T-field, and neighbouring registers give neighbouring faces.

Take the reciprocal of each absolute-zero floor, geared by twelve over four. The atomic floor (273.375) returns 10973936.90. The celestial floor (273.39964…) returns 10972947.68. And the value science records as the one true Rydberg constant sits neatly between them. It is not a constant at all. It is the midpoint of two register faces — exactly what the theory predicts a measured 'constant' to be: an average reading taken across a step we did not know was there.

P-CMB-3

The two absolute-zero floors give two Rydberg faces — 10973936.90 (atomic) and 10972947.68 (celestial) — and the conventionally measured Rydberg, 10973731.568, lies between them. The Rydberg 'constant' is the midpoint of two register faces, not a single fixed number: a constant that is not a constant.

9. What the cold is telling us

Lay the pieces side by side and a single picture stands up. There is no wall at the bottom of the world. There is a floor, and it is clean — 273.375, three to the seventh over two cubed — and it is the same node as the speed of light. Above it, at the other edge of the boundary beneath our feet, lies the faint warmth of the cosmos, 2.7254067120, the ongoing sound of stars making time, and it carries the length of our year. Both are hydrogen. Both are temperature. Both are time.

The old worry — that the background glow, at 2.72 degrees above the supposed floor, sat uncomfortably close to a wall that should have been colder still — simply evaporates. With no additive floor to crowd against, the cold ladder orders itself cleanly: the atomic floor at the bottom, the cosmic background a little above it, the warm world far above that, and the Sun's surface at the top, every rung a multiplicative step from the next. Cold is not the absence of a substance called heat. It is the slowing of the only substance there is. The coldest place in the universe is simply where time moves the least — and even there, it has not stopped.

P-CMB-4

Absolute zero and the cosmic microwave background are not separated by a thermodynamic wall. With no additive floor, the cold ladder orders multiplicatively from the atomic floor (273.375) upward through the background (2.7254067120) to the warm world and the solar surface. Cold is reduced T-flow, never the absence of a substance.

10. Conclusion

The lowest temperature in the universe was never a wall. It was the shadow of an addition sign, and when we stop adding and let temperature multiply the way the rest of nature does, the shadow lifts. What remains is cleaner than the wall ever was: a floor on exact lattice nodes, a cosmic glow fixed by the weight of hydrogen, and two doorways — one opening onto the speed of light, the other onto the length of the year. Heat is time. Cold is time, slowed. And the coldest reaches of space are not empty and dead but quietly alight, ringing with the ongoing labour of every star that ever was, making the only thing the universe is made of.

Propositions established

P-AZ-1

There is no additive absolute-zero floor; the minus-273.15 wall is an artefact of converting temperature scales by addition.

P-AZ-2

The scales multiply through 864: Kelvin = Celsius × 8.64, Fahrenheit = Kelvin × π/10; Kelvin and Celsius reach zero together.

P-AZ-3

The two hydrogen weights (1.0077696 atomic, 1.007860451 celestial) are the two radii of the Mohorovičić discontinuity (6.365623858 bottom, 6.366197723 = 20000/π top).

P-AZ-4

Absolute zero sits on exact nodes: $-273.375 = -3^7/2^3$ (Kelvin) and $-31.640625 = -3^4\times5^2/2^6$ (Celsius), pure {2,3,5}, no correction. Being negative in Kelvin, it is no magic floor — with zero meeting zero at water's freezing, it is simply a reading below that zero.

P-AZ-5

The magnitude of absolute zero's Fahrenheit face, 85.883289167511, geared ÷36 ×2π ×2, returns the true speed of light 2.9978923368 = $2^3\times3^5\times5^6\times\pi^2$.

P-CMB-1

The cosmic microwave background is 2.7254067120 K, fixed by the celestial hydrogen weight; ×8 it gives hydrogen's celestial ionisation 21.8032536960; it is the ongoing engine-sound of stars making T, not a relic.

P-CMB-2

The background's Fahrenheit face (×100 = 85.6211770446) geared ÷36 ×2π ×2 → 2.9887428977 → ×2÷9375 → radius → ×veil returns the orbital year 365.3170219587, the same year the Sun's surface temperature 5787.037037 yields.

P-CMB-3

The two absolute-zero floors give two Rydberg faces (10973936.90 atomic, 10972947.68 celestial); the measured Rydberg 10973731.568 lies between them — a constant that is not a constant.

P-CMB-4

Absolute zero and the background are joined by a multiplicative cold ladder, not separated by a thermodynamic wall; cold is reduced T-flow, not the absence of heat.

Related papers in the index

Daubney, S. — The 864 Wave.

Daubney, S. — The Speed of Light Is Not Constant.

Daubney, S. — The Register Transition Zones of the Earth.

Daubney, S. — The Degree–Radian Bridge.

Daubney, S. — The Solar Surface Temperature on the Lattice.

Appendix A — Figures

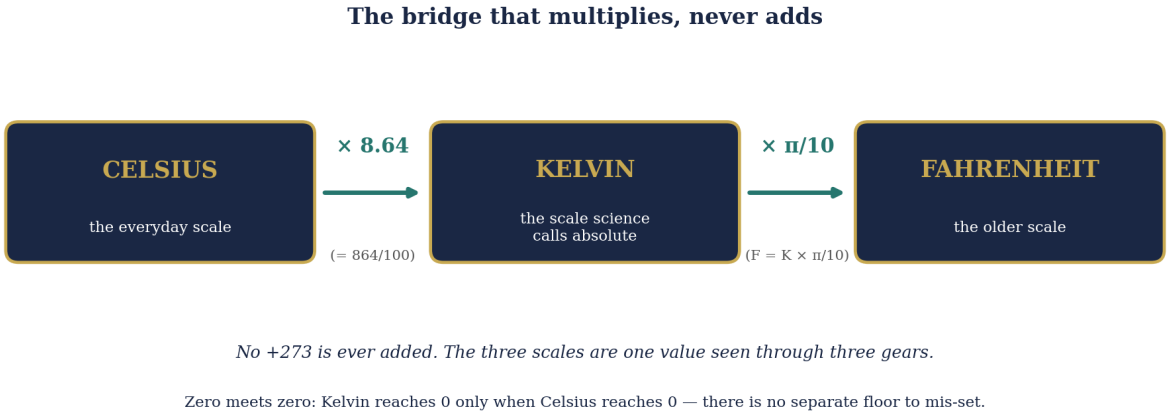

Figure 1. The temperature bridge. Celsius becomes Kelvin by ×8.64, Kelvin becomes Fahrenheit by ×π/10. Nothing is added; zero meets zero, so there is no separate sub-zero floor.

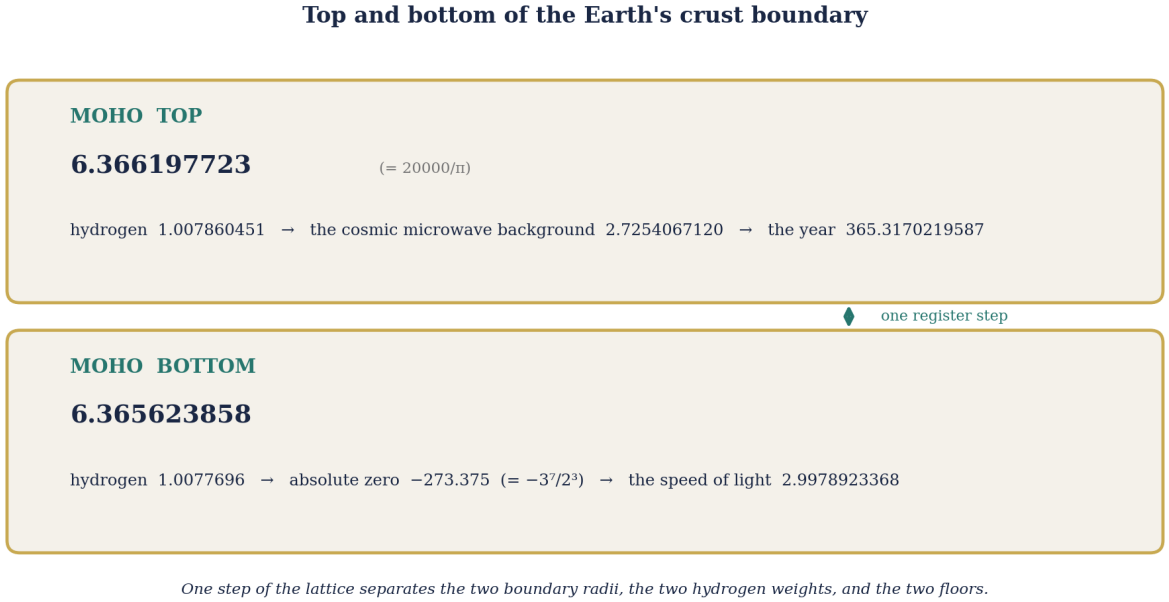

Figure 2. The two edges of the Earth's crust boundary. The lighter hydrogen weight rides the bottom edge to absolute zero and the speed of light; the heavier rides the top edge to the cosmic background and the year. One register step separates them.

Appendix B — Tables

Table 1. The two anchors across all three scales (cold readings).

Anchor	Celsius	Kelvin	Fahrenheit	Register · weight
Absolute zero	−31.640625 ($-3^4\times5^2/2^6$)	−273.375 ($-3^7/2^3$)	−85.883289167511	atomic · H 1.0077696 · Moho bottom
Cosmic microwave background	0.3154405917	2.7254067120	0.8562117704	celestial · H 1.007860451 · Moho top

Table 2. The conversion sweep — each face geared to its clean force-of-time value.

Anchor · face	Operator chain	Result	What it is
Absolute zero · Fahrenheit	85.883289167511 ÷36 ×2π ×2	2.9978923368	the true speed of light ($2^3\times3^5\times5^6\times\pi^2$)
Absolute zero · Kelvin	(1/273.375) ×12÷4	10973936.90	Rydberg face, atomic register
Background · Kelvin	2.7254067120 ×8	21.8032536960	hydrogen ground-state ionisation, celestial
Background · Fahrenheit	85.6211770446 ÷36 ×2π ×2	2.9887428977	celestial spin-orbit value
↳ carried on	×2 ÷9375 → 6.3759848485 ×(180/π)	365.3170219587	the orbital year, in days
Celestial floor · Kelvin	(1/273.39964…) ×12÷4	10972947.68	Rydberg face, celestial register

The two Rydberg faces, 10973936.90 and 10972947.68, bracket the conventionally measured value 10973731.568 — a constant that is the midpoint of two register faces.

Appendix C — The conversion loop

A T-value wears many quantities at once. These operators let a reader walk any one face of a value into any other — the same gears used throughout this paper to carry a temperature into a speed, a radius, a year.

Step	Operator
Celsius → Kelvin	× 8.64 (864/100)
Kelvin → Fahrenheit	× π/10
temperature face → spin-orbit	÷ 36 ($2^2\cdot3^2$) ×2π ×2
spin-orbit → radius	× 2 ÷ 9375 ($3\cdot5^5$)
radius → angle/days	× 180/π (the veil)

Step	Operator
free fall g → speed of light c	$c = g^2 \times 3{,}110{,}400$ ($864 \cdot 3600 = 2^9 \cdot 3^5 \cdot 5^2$)
weight → wavelength	$\times 2 \times 24$
wavelength → mass	$\times 1.233700550$ (= g_1 free fall $\times 2 \times 2\pi / 100$)
mass → radius	$\div 9375$ ($3 \cdot 5^5$)

Register step: the atomic and celestial faces of any value are separated by one lattice step, $(1+\delta\_G) = 5^{10}/(2^4 \cdot 3^9 \cdot \pi^3)$. The two hydrogen weights, the two crust-boundary radii, and the two absolute-zero floors are each one such step apart.

A note on the numbers

The values in this paper are written as bare numbers — no units, no powers of ten attached to their meaning — because a T-value is a single number standing across every register at once. The same value can present as a temperature, a speed, a radius, a span of days, or a mass, depending only on the register from which it is read. We do not resolve a quantity ‘to the power of’ in one dimension and call that its nature; the number itself is the invariant, and the dimension is the dress it happens to be wearing when measured. Read every figure here in that spirit: one number, many faces.